APPLICATION OUTSOURCING IN THE BANKING INDUSTRY – ITO MODEL

by

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APPLICATION OUTSOURCING IN BANKING INDUSTRY – ITO MODEL

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Information Technology Outsourcing (ITO) in terms of the replacement of the in-house production of IT activities by the use of third party suppliers had already started in the 1960s and has increased considerably. For 2013, the Gartner Group expected that the global ITO market would reach a volume of 288 bn US dollars. Until 2017, the market should grow on average about 5.4% yearly.

Despite the rich set of experiences companies have already had with ITO, the chances of success are seen as at best 50:50. Currently, the dramatic growth of ITO is accompanied by backsourcing of formerly outsourced IT functions or reports about dissatisfaction and problems with ITO. Scientists put ITO failures or problems down to a lack of modelling of all the possible factors affecting ITO success and demand a specific ITO theory as a basis for better explaining and predicting successes and failures in an IT sourcing context.

This thesis takes up this research gap. The aim of this thesis is to develop a novel ITO Model which aids organisations in planning and implementing ITO solutions by guiding them through the ITO process steps of preparation, selection, contract, transition, execution, and post-deal comprising a comprehensive picture of the weighted aspects relevant to ITO success and their interdependencies.

In order to achieve this aim, the following objectives were established for this thesis: raising the topical level of scientific knowledge of the last decades about success-influencing factors in the ITO field based on an extensive literature survey of 48 scientific articles deriving ITO success factors from empirical research work; structuring of this success factor knowledge by the development of two ITO taxonomies (taxonomy of success factors and taxonomy of success factor interdependencies); testing its practical applicability on the basis of 8 real long-running application outsourcing cases in the banking industry; further development of the success factor knowledge by identification of weightings and the temporal relevance of relevant success factors / success factor interdependencies within the ITO process. Design of the novel ITO Model based on the empirical knowledge gained by development of rules for relevant success factors and success factor interdependencies, by arrangement of these rules in temporal order within the ITO process and by assignment of these rules to four levels of environment.

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Signed.....

Date.....

CHAPTER 1

INTRODUCTION

1 Introduction

This chapter provides an introduction to the context of this research, by providing an overview of the main issues associated with the subject of study. Then the aims and objectives of the research are established, followed by the structure of the thesis containing a brief summary of each chapter.

1.1 Information Technology Outsourcing (ITO) – a long history and an unbroken trend

Information Technology Outsourcing (ITO) started in the 1960s (Lee et al., 2003) and has increasing dramatically since the KODAK-IBM outsourcing in 1989 (Clark Jr., 1995; Lee et al., 2003). The scale and growth rate of the information services (IS) market are significant (McLaughlin and Peppard, 2006). In 1990, the budget for information technology (IT) executives was about 12.6% of the resources to external providers (McMullen, 1990). By 2011, the Gartner Group expected that, across branches, the expenditure for IT service providers compared to the overall IT costs would rise from on average 35% to 80% in Germany (Kearney, 2007). If one looks at the turnover, the global ITO market is expected to reach a volume of 288 bn US dollars in 2013, and until 2017 the market should grow yearly about 5.4% on average (Gartner, 2013). The dramatic growth of ITO is evident.

In addition, Clark Jr. et al. (1995) described technological, management, industry and organisational forces which further support the decision to outsource IS in the long run. IS is defined (very broadly based in this context) as including “virtually all types of computer and communications technologies and all types of activities associated with the acquisition, development, implementation and management of these technologies”.

- The existence of technologies enables vendors to provide improved services ("service enablers"), e.g. the commodity-character of many IS often allows for economically purchasing them from vendors and the technical possibilities allow for separating the management, operation and delivery of many ISs.
- The existence of technologies induces companies to seek the services offered by vendors ("demand enhancers"), e.g. price/performance ratio decreases, the risk of a high rate of technological advancement existing and the increase of IS volume and complexity result in rising IS costs.
- High IS costs and the difficulty to quantify IS benefits combined with an increased concern for competitiveness and often large amounts of corporate debts force companies to reduce IS costs.
- Overcapacity, especially in outdated technologies, and a lack of human talent in evolving new technologies exists on the client side.
- The existence of vendors being able to handle most of the required IS and the phenomenon that vendors seek to gain massive amounts of human processing power, resources and expertise support the growth of the vendor side of the ITO industry.
- The increasing demand of outsourcing services accelerates demand growth and the growth of existing vendors.
- The formation of start ups on the vendor side enhances competition among vendors.
- Globalisation of business supports the use of IT in order to cope with increased competitiveness, volumes and distances, further accelerating ITO industry growth.

1.2 IT outsourcing versus IT backsourcing - the problem of success with ITO

The rapid growth of ITO must be seen alongside the emerging phenomenon of bringing previously outsourced activities back in-house (McLaughlin and Peppard, 2006; Veltri et al., 2008). Globally, abnormal terminations of ITO contracts more than doubled from

2003 (21%) to 2004 (51%) (Diamond Cluster, 2005); besides, problems and dissatisfaction with ITO were reported (Kern and Willcocks, 2001). Dibbern (2004) estimated that backsourcing will become a key trend. Looking at these opposite actions increasing IT outsourcing versus accumulating IT backsourcing - one arrives at the conclusion that reaching the expected benefits from ITO has not proved easy.

The chances to succeed with ITO are seen as at best 50:50 (Lacity and Willcocks, 1998; Gartner Group, 2002; Boonlert, 2005). In addition, one has to bear in mind that ITO is not a decision which can be easily reversed, as it is a major organisational change connected with a significant amount of investment and the establishment of new processes between ITO client and vendor. Wrong outsourcing decisions can even result in business failure (Venkatraman and Loh, 1992; Ngwenyama and Bryson, 1999). Thus, decicion makers want to know if ITO is a worthwhile path and how to do it successfully.

Empirical studies on ITO outcomes are scarce in general (Matiaske and Mellewigt, 2002; Mahnke et al., 2005), especially concerning long-term ITO outcomes (Dibbern et al., 2004). This is particularly the case for Germany (Fraunhofer IAO, 2005). Known ITO outcomes are mixed.

Scientists put ITO failures or problems down to a lack of model of all the possible factors affecting ITO success (Koh et al., 2004). Their opinions differ about the factors that distinguish between success and failure (Lacity and Willcocks, 2009c). And scientists demand a specific ITO theory as a basis for better explaining and predicting successes and failures in an IT sourcing context, instead of relying on general management theories which do not fit exactly with the IT sourcing context (Lacity and Willcocks, 2009b).

1.3 Aims and objectives of the research

The aim of the study is concerned with the issue of ITO success and, more specifically, the identification of the overall set of factors influencing long-term ITO success and related aspects, enabling the design and evaluation of a novel ITO Model: a handbook for ITO which aids organisations in planning and implementing ITO solutions by guiding them through the ITO process steps of preparation, selection, contract, transition, execution, post-deal comprising a comprehensive picture on weighted aspects relevant to ITO success and their interdependencies.

In order to achieve that aim, the main objectives of the research can be summarised as follows:

1. Investigate the importance of information technology outsourcing (ITO) as an integral part of a bank´s information management in past, present and future and the challenges that could influence its success. Critically review and summarise the state of the art in ITO success models.

2. Based on the initial investigation, conduct preliminary study into the determining factors for ITO success using case studies of 8 successful long-running ITO cases in five European banks and at the same time determine the weighting of relevant success factors and their temporal relevance to ITO project phases (preparation, selection, contract, transition, execution, post-deal).

3. Based on the results of the preliminary study, design the ITO success Model.

4. Evaluate the ITO success Model by obtaining expert opinion to support its external validity and to further substantiate its suitability for use in practice.

1.4 Report structure

The structure of the thesis is presented in Figure 1 (page 9) together with an overview of the research steps, the applied methodologies and the work results originating from it.

Chapter 1 outlines ITO as a phenomenon with a long history and a dramatic growth to the present day. It deals with the problems of success and limited experience with long-term ITO which motivate the PhD research objective: development of a novel ITO Model, a handbook for ITO which aims to aid banks in planning and implementing ITO solutions by guiding them through the ITO process steps of preparation, selection, contract, transition, execution, and post-deal comprising a comprehensive picture of the weighted aspects relevant for sustainable ITO success.

Chapter 2 contains the various definitions and types of ITO and the terms and definitions used in this thesis, explains the historical evolution of ITO, points out current and expected future trends and shows the embedding of ITO as one strategic alternative to accomplish the duties and responsibilities of information management in a company and its interrelation with business success. As the thesis focuses on the banking branch, Chapter 2 also explains the challenges banks are faced with currently and in the future and how these influence the requirements for information technology. Outsourcing is in general seen as a key to overcome these challenges. In addition, the specifics of ITO in the banking industry are pointed out.

Beside general scientific knowledge about ITO (motivations, risks, ITO process approaches), Chapter 3 illustrates known ITO outcomes, outcome measures and factors

influencing ITO success based on a literature review of 55 scientific articles[1]. The current ITO success factor knowledge and existing ITO models were assessed and their weaknesses were identified. Based on this, the author deduces the need for further research of long-term ITO outcomes and for the development of the novel ITO Model.

Chapter 4 describes the applied methodologies for the accomplishment of the PhD research objective and it presents 8 successful ITO cases of 5 well known European banks which are leveraged for an empirical validation of the preliminary ITO Model (see Chapter 5).

Chapter 5 presents the result of the first research step towards the development of the novel ITO Model: the preliminary ITO Model. Two taxonomies were developed which summarise and categorise the known ITO success factors and ITO success factor interdependencies. Chapter 5 contains, in addition, the results of the empirical validation of the preliminary ITO Model (research step 2). It is shown whether the preliminary ITO Model applies in the eight investigated ITO cases and how these results coincide with previous work results. For validated success factors, the weighting and temporal relevance within the ITO process phase's preparation, selection, contract, transition, execution and post-deal is presented. Finally, the propositions made at the beginning of the research are thoroughly assessed.

In Chapter 6 the third research step is described, the design of the ITO Model in three steps: formulation of understandable rules for validated success factors, sorting of these rules in chronological order according to their temporal relevance and assignment of the rules to four levels of environment.

[1] 48 of these 55 scientific articles contained influencing factors seen as relevant to ITO success.

Chapter 7 shows the results of the ITO Model validation and evaluation by obtaining expert opinion (research step 4). This further strengthens the external validity of the research results.

The final ITO Model is presented in Chapter 7.

The comparison of the ITO Model with existing models is done in Chapter 8. It is explained, why the ITO Model is better suited to explain ITO success.

In Chapter 9 the achievements of the research programme are presented, the central findings of the research are repeated and the implications for scientists and pracititioners are derived. It is assessed if ITO is a successful strategy for banks in future. And finally the limitations of the research are pointed out and implications for future research work are given.

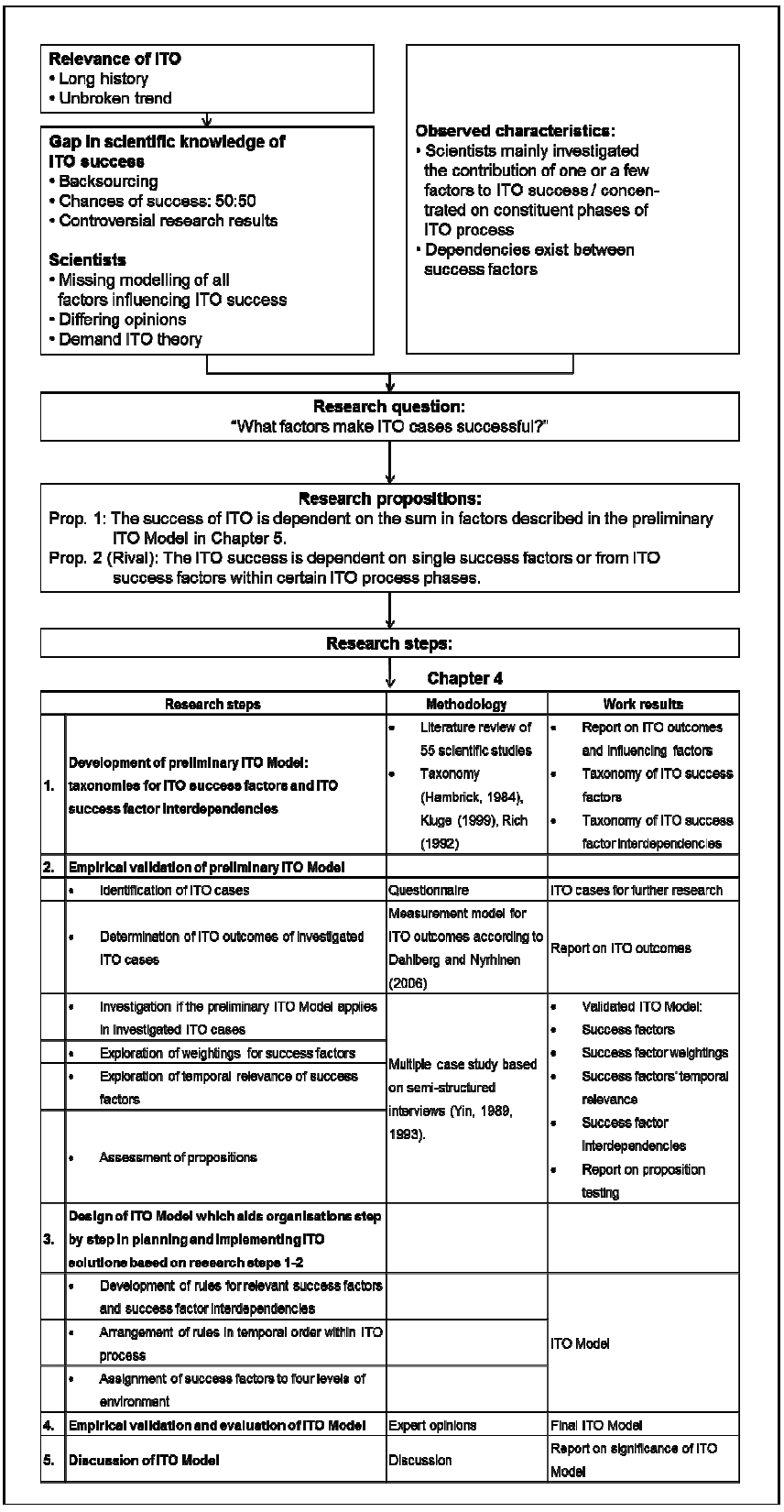


Figure 1: Structure of the thesis including research steps, applied methodologies and work results

Chapter 8 assesses the current concepts explaining ITO success and identifies their weaknesses. The novel ITO Model is emerging as more suitable to explain the determinants of sustainable ITO success.

Considering the outcome of the investigated ITO cases, Chapter 9.5 draws a conclusion as to whether ITO in general is a successful strategy for banks to cope with current and future challenges.

Finally, Chapter 9 presents the main conclusions from this research, highlighting the principle achievements and limitations of the work, along with implications for further research.

The thesis also includes a number of appendices, which contain a variety of additional information in support of the main discussion (including a list of published papers from the research programme).

CHAPTER 2

ITO CONCEPTS AND CHALLENGES IN THE BANKING INDUSTRY

2 ITO concepts and challenges in the banking industry

This chapter gives background information on the field of ITO research. First, the different definitions used for the terms "IT" and "ITO" are given, and the various types of ITO are explained in detail (see Chapter 2.1). Furthermore, an overview is given of the evolution of ITO from the 1960s to the present day and emerging ITO trends are explained (see Chapter 2.2). The importance of ITO for business success is pointed out and its embedment in the field of IT management is illustrated in Chapter 2.3. Finally, the specifics and challenges of ITO in the banking industry are presented in Chapter 2.4.

2.1 ITO - content theoretical aspects and explanations

ITO is defined variously in literature, thus the scientific results are often not directly comparable. "Outsourcing" in general can be seen as "using external resources" (Nagengast, 1997) or, more precisely, as a process undertaken by an organisation to contract-out or to sell the organisation's (IT) assets, staff and/or activities to a third party supplier who in exchange provides and manages (IT) assets and services for monetary return over an agreed period of time (Kern et al., 2002). This definition requires that the organisation considering outsourcing has the capability to perform the activities in-house (Gilley and Rasheed, 2000). New forms of the external supply of IT goods and services (e.g. SaaS - Software as a Service) qualify this definition as the good or service can be bought straight from the market without a foregoing execution of the task in-house (Jouanne-Diedrich, 2009). In this study, ITO will be defined very broadly as "the replacement of in-house production of a certain (IT) activity by the use of third party suppliers…from outside the company" (Franze, 1998). This does not include the use of external resources working under the client's direct control (contract programmers, analysts, consultants, etc.). This wide definition, on the other hand, requires a differentiation of outsourcing from purchasing. Therefore, the view of Dahlberg and Nyrhinen

(2006) will be adopted in this study: "If the operation(s) of an organisation requires that a certain activity is knowingly transferred to a third party, that is outsourcing". The difference is therefore reasoned with the necessity of the operation(s) for an organisation. Dahlberg and Nyrhinen (2006) use the firewall as an example. The purchase and operation of a firewall is essential for exploitation of the internet; the development of firewall applications does not belong to the tasks of the organisation, but to the procurement and application management. Thus a client organisation cannot outsource firewall application development (= purchase), but may outsource its procurement and application management.

The subject of ITO is often not clearly defined. Different subcategories are used (e.g. Venkatraman and Loh, 1992; Lacity and Willcocks, 2000; Mahnke et al., 2005). The subject under investigation in this study is limited for methodical reasons to a certain kind of IT function: application outsourcing (see Chapter 4). Thus, the definition of application outsourcing by Jouanne-Diedrich (2009) will be utilised: The subject of ITO in this study includes IT applications directly relevant for business (e.g. CRM system).

Different types of ITO can be distinguished. Dibbern (2004), for example, describes four fundamental parameters characterising the kind of outsourcing arrangement: degree, mode, ownership, time frame. Jouanne-Diedrich (2009) distinguishes between seven components of an IT-sourcing arrangement in an IT-Sourcing-Map: degree of external sourcing, number of vendors involved, financial dependence, time aspect, strategic aspect, degree of business relevance, location of service provider. Nicklisch et al. (2008) added the components: time frame of collaboration and delivery model for the context of IT near- and offshoring. Each of these authors tries to systemise the various

variants of ITO. Figure 2 summarises these variants, which need to be considered in the decision of how to organise ITO.

The bases for the illustration of the ITO variants or options in Figure 2 are selected dimensions of Jouanne-Diedrichs' (2009) IT-Sourcing-Map. In the case of the dimension "client/vendor combination" (= category "number of vendors" of Jouanne-Diedrich (2009)), the author referred to the more detailed explanation of Gallivan and Oh (1999). For the explanation of the dimension "delivery model" (= category "location" of Jouanne-Diedrich (2009)), the more detailed explanations of Nicklisch et al. (2008) were used. The time frame of the ITO contract was added to the IT-sourcing-map according to Dibbern et al. (2004)**.** A further dimension which was added is the "type of vendor". No common classification exists for the "type of vendor", thus the explanations of Cullen and Willcocks (2003) and Mitchell and Fitzgerald (1997) were integrated and used for this dimension.

The explanations of each element of the ITO options can be found in Table 1.

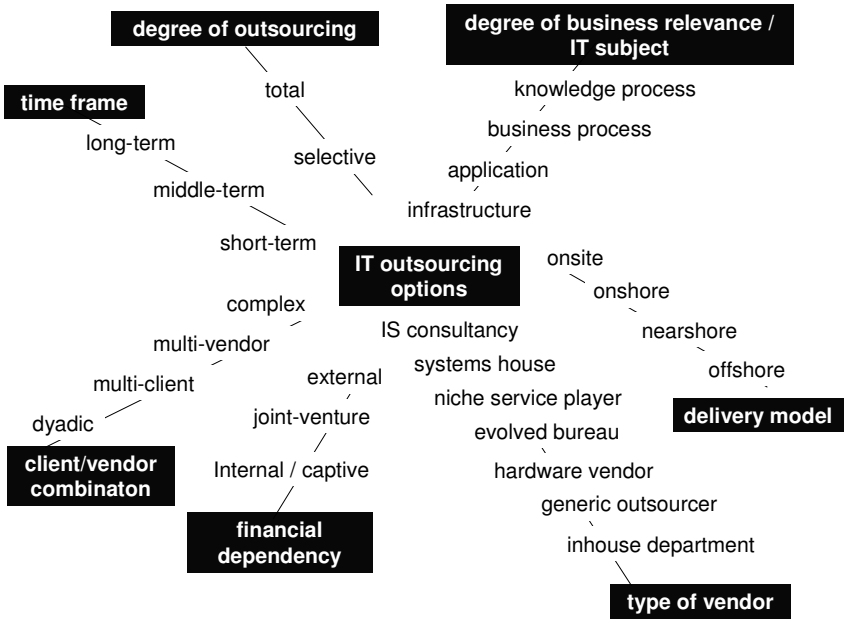


Figure 2: ITO options according to Jouanne-Diedrich (2009), Nicklisch et al. (2008), Dibbern et al. (2004), Cullen and Willcocks (2003), Mitchell and Fitzgerald (1997)

Client/Vendor combination	Number of parties involved, if a number of clients respectively vendors are available (Dibbern et al., 2004)
Dyadic	Outsourcing contract between one client and one vendor, satisfying all outsourcing needs (Gallivan and Oh, 1999).
Multi client	Outsourcing contract between multiple clients and one vendor ("buyer alliance") (Gallivan and Oh, 1999).
Multi-vendor	Outsourcing contract between one client and multiple vendors jointly negotiated and understood by all parties to the agreement. The client uses multiple vendors to achieve outsourcing objectives (Gallivan and Oh, 1999).
Complex	Outsourcing contract between multiple clients and multiple vendors (Gallivan and Oh, 1999).
Degree of business relevance/ IT subject	Relevance of the outsourced IT function for business (Jouanne-Diedrich, 2009)
Infrastructure	Outsourcing of technical basis systems (e.g. infrastructure, network services) (Jouanne-Diedrich, 2009).
Application	Outsourcing of often standard IT applications directly relevant for business (e.g. CRM or ERP-systems). If the vendor is offering applications via internet for a greater customer base, the vendor is called Application Service Provider (ASP) (Jouanne-Diedrich, 2009).
Business process	Outsourcing of complete business processes directly relevant to business (e.g. settlement of procurement, call-centre). The processes outsourced are often highly supported by IT (Jouanne-Diedrich, 2009).
Knowledge Process	Special form of business process outsourcing: outsourcing of complex highly specialised and knowledge intensive business processes (e.g. business intelligence) (Jouanne-Diedrich, 2009).
Degree of outsourcing	Scale of ITO (part or full range of IT functions) (Jouanne-Diedrich, 2009).
Selective	Outsourcing of selected IT functions which accounts for 20% to 80% of the IT budget (Lacity and Hirschheim, 1995; Jouanne-Diedrich, 2009).
Total	Outsourcing of a significant piece of IS work which accounts for more than 80% of the IT budget (Lacity and Hirschheim, 1995; Jouanne-Diedrich, 2009).
Delivery model	Location of service provision (Nicklisch et al., 2008)
Nearshore	Supply of goods and services from abroad, with service provision within own continent. Or prefix for the geographical position of the vendor or of a country from the user's point of view (Nicklisch et al., 2008).
Nearshore Delivery	Placing an order directly to a nearshore-vendor with a predominant service provision in the nearshore country (Nicklisch et al., 2008).
Offshore	Supply of goods and services from abroad, with service provision beyond own continent. Or prefix for the geographical position of the vendor or of a country from the user's point of view (Nicklisch et al., 2008).
Offshore Delivery	Placing an order directly to an offshore-vendor with a predominant service provision in the offshore country (Nicklisch et al., 2008).
Onshore	Supply of goods and services from inland (Nicklisch et al., 2008).
Onshore Delivery	Placing an order directly to a nearshore or offshore vendor. The domestic presence of the near- or offshore vendor or another vendor is taking over the coordination tasks between the client and the near- or offshore vendor. Hence, the user is shielded from the cultural and linguistic differences of the utilised near- or offshore resource (Nicklisch et al., 2008).
Onsite	Service provision by external personnel in the user's place of business (Nicklisch et al., 2008).
Onsite Delivery	The vendor is delegating a part of its personnel to the client (e.g. the project leader). Despite, direct interactions between the client and the vendor's location abroad is taking place (Nicklisch et al., 2008).
Financial dependency	Degree of the financial dependency of the vendor from the client (Jouanne-Diedrich, 2009).
Internal / Captive ITO	Outsourcing to a vendor belonging to the corporate group (e.g. subsidiary company). In contrast to an internal IT department, a market mechanism exists between the client and vendor as still legally independent companies are cooperating (Jouanne-Diedrich, 2009).
Joint-Venture	Client and vendor are founding a joint enterprise for the external execution of IT goods and services (Jouanne-Diedrich, 2009) or the client takes an equity stake on the vendor (Nicklisch et al., 2008).
External	Outsourcing to a financially independent vendor (Jouanne-Diedrich, 2009).
Time frame	Time dimension associated with ITO contracts. The definition of short, middle and long-term varies dependent on who defines the term (Dibbern et al., 2004) .The following explanations are examples of time frame categorisations found in literature, assigned by the author to the three cateogories.
Short	Shorter than 4 years (Lacity and Willcocks, 1998) Less than 3 years (Collins and Millen, 1995) Less than 4 years (Lee et al., 2004)
Middle	Longer than 4 years and shorter than 7 years (Lacity and Willcocks, 1998) More than 3 years, but less than 5 years (Collins and Millen, 1995) From 4 to < 7 years (Lee et al., 2004)
Long-term	Longer than seven years (Lacity and Willcocks, 1998) More than 5 years (Collins and Millen, 1995) 7 or more years (Lee et al., 2004) Longer than 5 years (Lee and Kim, 1999)

Table 1: Elements of ITO options according to Jouanne-Diedrich (2009), Nicklisch et al. (2008), Dibbern et al. (2004), Cullen and Willcocks (2003), Mitchell and Fitzgerald (1997)

Type of vendor	Categorisation of ITO vendors (Mitchell and Fitzgerald, 1997; Cullen and Willcocks, 2003)
Commercialised in-house departments	Simply selling excess capacity or becoming commercial providers (Cullen and Willcocks, 2003).
Generic Outsourcer	Companies, offering a range of outsourcing services, not just information systems (catering, cleaning, etc.). Regarding IT, they are often specialised in bundled outsourcing services in the field of hardware/infrastructure (Mitchell and Fitzgerald, 1997).
Hardware vendors	Companies specialised in the provision of IT hardware. ITO is here an attempt to expand the product range with outsourcing services in all IT functions to compensate for the falling margins on hardware sales (Mitchell and Fitzgerald, 1997; Cullen and Willcocks, 2003).
Evolved bureaux	Vendors evolved from data processing and time-sharing bureaux.
Niche Service Players	Companies specialised in certain industries (e.g. Ex-IS-departments (Mitchell and Fitzgerald, 1997)), services, technologies or applications, etc. (Cullen and Willcocks, 2003).
Systems houses	Companies specialised in custom system design, development and implementation. Systems houses are often medium-sized and have less global reach compared with IT consultancies/IT solutions providers (Mitchell and Fitzgerald, 1997).
IS Consultancies/ Solutions provider	Companies often operating worldwide which can provide solutions in all IT functions (e.g. software development, IT consultancy, system integration) and from strategic to operational levels (Mitchell and Fitzgerald, 1997; Cullen and Willcocks, 2003).

Table 1 (cont.): Elements of ITO options according to Jouanne-Diedrich (2009), Nicklisch et al. (2008), Dibbern et al. (2004), Cullen and Willcocks (2003), Mitchell and Fitzgerald (1997))

2.2 Evolution of ITO

2.2.1 History of origins

The ITO phenomenon already has a long history. Lee et al. (2003) described the evolution of ITO (see Figure 3).

Year	Outsourcing Focus	Outsourcing Approach
1960s	Hardware	Services and Facility Management
1970s	Software	Facility or Operation Management
1980s	Hardware and Software Standardisation	Customisation Management
1990s	Total Solution	Asset Management

Figure 3: ITO timeline according to Lee et al. (2003)

ITO originated during the 1960s and 1970s from professional services and facility management services, especially in the financial and operation support areas. In the 1960s external vendors were only utilised for time-sharing or processing services. At that time, companies relied on professional firms like service bureaus or systems houses for facilities management services, because computers were large and expensive. In the 1970s,

the first standard application packages occurred. The increasing demand for IT applications and a lack of adequate IT personnel forced companies to contract programming externally, which was the predominant form of ITO during the 1970s. From the end of the 1970s, the external provision of some processing services declined due to the arrival of minicomputers and PCs on the market. Outsourcing was not focused on by firms during the 1980s because IT-supported vertical integration became the trend. At that time, Hardware and Software standardisation were taking place and customisation management, building an IT infrastructure unique to each organisation, was the predominant form of utilising external resources. The KODAK-IBM outsourcing in 1989 is seen as the beginning of the current outsourcing revolution (Clark Jr., 1995) and the start of contracting ITO mega-deals (Dibbern et al., 2004). Other well known companies soon followed throughout the world: General Dynamics, Delta Airlines, Continental Bank, Xerox, McDonnell Douglas, Chevron, Dupont, JP Morgan, Bell South, Lufthansa, Deutsche Bank, the company Inland Revenue, Rolls Royce, BP, British Aerospace, KF Group, Canada Post, the government of South Australia, Telestra, LendLease, Commonwealth Bank of Australia, Swiss Bank, Bank di´ Roma (Dibbern et al., 2004). In the 1990s the interest in ITO increased for network and telecommunication management, systems integration, application development and systems operation. This was accompanied by a shift of IT personnel from the customer to the vendor, with some vendors purchasing customers' mainframe hardware and managing client services onsite (Lee et al., 2003).

Grover et al. (1996) described the differences in ITO between the 1970s and the 1990s:

1. The company size of the client companies was larger
2. The range and depth of outsourced services were greater
3. Beside the outsourcing of entire functions, companies chose constituent functions for outsourcing

4. Management responsibility and risks were accepted by vendors
5. Partnerships were formed between client and vendor

Dahlberg and Nyrhinen (2006) continued this list by describing the differences between the 1990s and nowadays:

6. Mulitple vendors instead of a single/main vendor are used
7. Companies change vendors more often
8. Client companies ensure rights to discontinue ITO contracts
9. Markets for some ITO services have matured
10. Professionalism of clients and vendors has increased

2.2.2 Current and future trends

Change in Focus

Nowadays, the focus of ITO has shifted from the achievement of short-term cost reductions to outsourcing for strategic reasons (Dibbern et al., 2004; Weinert and Meyer, 2005). Strategic reasons also played an important role in the investigated ITO cases in this thesis (see Chapter 4.2). On the one hand, IT departments nowadays are forced to downsize. As a result, a company needs to determine which IT functions they can perform best based on the existing internal skill set and to choose vendors to perform all other areas (Dibbern et al., 2004). On the other hand, ITO is used to create competitive advantage and business improvement and to fully exploit the benefits of IT by completion of missing internal capabilities and skills, realisation of the possible benefits of new IT, gaining access to knowledge and innovation of "best of breed" suppliers, breaking through radical innovations or innovative processes skills and technology and by enhancing flexibility in a rapidly changing marketplace. One of the most significant business trends and largest IT growth sectors is the outsourcing of complete business pro-

cesses for redesign and value increase across the whole value-chain. In addition, companies leverage outsourcing as well to transform business processes in order to facilitate major and rapid organisational change, to enable the launch of new strategies and to reshape organisational boundaries (Weinert and Meyer, 2005). This thesis focused on the investigation of application outsourcing cases to ensure the comparability of the research results, as the factors responsible for success are seen as dependent on the type of outsourcing (see Chapter 4.2). The test of the ITO Model for additional IT subjects, like complete business processes, is recommendable in future research in order to generalise the ITO Model for areas beyond application outsourcing (in the banking industry).

Application Service Providing (ASP) / Software as a Service (SaaS) / Utility Computing (UC) / Cloud Computing

Web and e-Business growth caused companies to use vendors for the provision of web-based applications to enable the access to the e-Business market (Dibbern et al., 2004). The era of e-commerce created new outsourcing ideas like ASP (Lee et al., 2003; Dibbern et al., 2004). ASPs buy, install, and manage enterprise applications at remote data centres and host them for customers via a broadband connection, usually over the internet. The customer rents the packaged software applications and related services and pays, therefore, monthly or per-user fees. ASP has the potential of realising ease of use, a faster time to market and maximising IT expertise and economies of scale (Lee et al., 2003). A related business model is to source software as a service (SaaS). “SaaS is a model in which software applications are deployed, managed, updated and supported on demand and are served to users centrally using servers that are internal or external to the enterprise. Applications are no longer installed locally on a user's desktop PC. Instead, upgrades, licensing and version control, metering, support and provisioning are all managed at the server level” (Greschler and Mangan, 2002). The availability of computing

services on demand is currently linked to the vision of computing as the 5th utility (beside water, electricity, gas and telephony). It is expected that advances in Information and Communications Technology Computing have already enabled us to provide the basic level of computing service necessary for the general community whenever the users require them at any time, like other utility services, without the need for allocation of IT infrastructure on the user side. Computer service users should pay the providers based on their usage. To deliver this vision, numerous concepts have been discussed so far (e.g. cluster computing, grid computing, service computing, market-oriented computing, cloud computing). One of the most recently discussed concepts is cloud computing which is expected to deliver computer services through next generation data centres that are built on computer and storage virtualisation technologies. The access to applications and data should be possible from a "cloud" anywhere in the world as needed by the users (Buyya et al., 2009). It has to be noted that the ITO Model in this thesis builds on application outsourcing cases already running for a long period for the sake of deriving the core factors responsible for long-term success. These data sets do not cover success factors probably unique to these new ITO trends, because this type of ITO contract has not run for a long period yet. If these new concepts stand the test of time, the investigation of critical success factors in these areas and a comparison with the ITO Model which will be derived in this study would call for further research. The ITO Model must be a living concept in practice to ensure that changing ITO trends are always reflected adequately.

Offshoring

Nowadays, companies increasingly outsource IT to one or more vendors located outside the first world (Dibbern et al., 2004; Aspray et al., 2006) in order to realise cost reduction by exploiting the cost differences between the first and developing worlds (Dibbern

et al., 2004). It is expected that approximately 50% of IT jobs will be offshored to India and other off- and nearshore destinations in the next 10 years as a further progression of moving white-collar work overseas (Dibbern et al., 2004). The ITO Model developed in this thesis includes success factors for nearshore application outsourcing cases in the banking industry running already for a long period (see Chapter 4.2). If the offshore delivery model stands the test of time, the investigation of critical success factors in these areas and a comparison with the ITO Model would call for further research. The ITO Model must be a living concept in practice to ensure that changing ITO trends are always reflected adequately.

Alliances / Equity Holding

Another trend is observable concerning the organisation of ITO in general. New entities like joint-ventures are being formed by the client and vendor. Some of these alliances have gained significant revenue streams (e.g. Systor AG, a joint venture between Swiss Bank and Perot Systems), some have run into financial problems and have been terminated (e.g. TransQuest, a joint venture between AT&T Solutions and Delta Airlines). Furthermore, a large number of equity holding deals have emerged; Swiss Bank, for example, took out a 24.9% equity holding in Perot Systems. Perot, in turn, took a 40% stake in the venture Systor AG (Dibbern et al., 2004). The data set underlying the ITO Model also contains one joint venture and equity holding deals (see Chapter 4.2). In particular, new and previously unreported success factors linked with the organisational form of a joint-venture could be uncovered in this thesis.

2.3 ITO and information management

2.3.1 Business success and the role of IT / ITO

Traditional views on IT saw IT components as an extensive overhead burden and IT activities were seen as non-core commodities, not critical for business success (Weinert and Meyer, 2005). As IT now supports nearly all the business functions and activities of the value-chain and as already complete business processes are operated entirely with IT, it has gained great importance for business success (Zarnekow et al., 2004; Weinert and Meyer, 2005).

The primary value of IT from a business point of view is to support the business processes and products as well as possible (Zarnekow et al., 2004). With the rising relevance of IT for business, the requirements regarding efficiency and effectiveness for IT use have risen as well. Current points of critique are the often a too low effectiveness reconciling IT and business strategy, a too low efficiency in the production of IT goods and services and the lack of transparency in cost structures (Zarnekow et al., 2004).

The alignment of business and IT strategy should be realised in two ways: a company must focus their information management to support business strategy. On the other hand, IT developments themselves can enable new, superior business strategies (Feeny and Willcocks, 1998; Zarnekow et al., 2004). Using IT for mass customisation, for example, transforms the operations function of many businesses and simultaneously achieves low unit costs and high customer specificity (Feeny and Willcocks, 1998). If information management has to support business strategy, each part of the production of IT goods and services, regardless of whether it is internally or externally performed, must support the obtaining of business objectives. Thus, if a company is considering the external production of IT goods and services, it has to ensure that the objectives bound-

ed with ITO comply with the overall business objectives of the company and that these objectives will be reached to support business success.

2.3.2 Embedding of ITO in information management

The information management of a company has to accomplish several IT tasks to ensure optimal support of its business processes and products. Different classifications exist in information management literature for IT duties and responsibilities. Krcmar (2011), for example, uses a three layer model and distinguishes between the "management of the information economy (supply, demand, application)", "management of information systems (data, processes, product life cycle)" and the "management of information communication technology (storage, processing, communication, technology bundles)"; in addition, he sees managerial functions (IT governance, strategy, IT processes, IT personnel, IT controlling, IT security) as cross-functional tasks. According to business economics, other authors use the classification: strategic, tactical and operational tasks. Strategic tasks have the objective to plan, monitor and govern the entire information infrastructure. The planning, monitoring and governance of components of the information infrastructure are tactical tasks, and the operational tasks are concerned with the supply and operation of the information infrastructure for an ongoing information supply (Heinrich, 2002).

Apart from the classification of IT tasks, a company can use internal and external resources for their accomplishment. Zarnekow et al. (2004), for example, developed a new theoretical model of integrated information management on the basis of the supply chain management model SCOR of the Supply Chain Council, arguing that internal or external IT suppliers and recipients are two elements of a value and supply chain for the production and use of IT goods and services (see Figure 4). Zarnekow et al. (2004) argue that one challenge IT suppliers are faced with in the future is that the role of the

internal IT department has changed from a pure executor of IT projects and operator of IT infrastructure to an internal service provider in a kind of contractual relationship similar to external markets. The business units take the role of the customers and buy IT goods and services from different internal and external IT suppliers. In addition, an internal IT department can theoretically offer their IT goods and services on the external market as well or it can use external IT suppliers to support the internal production of IT goods and services. Acquiring outside resources is seen as one of the most important strategic issues in IS management in the future (Clark Jr., 1992).

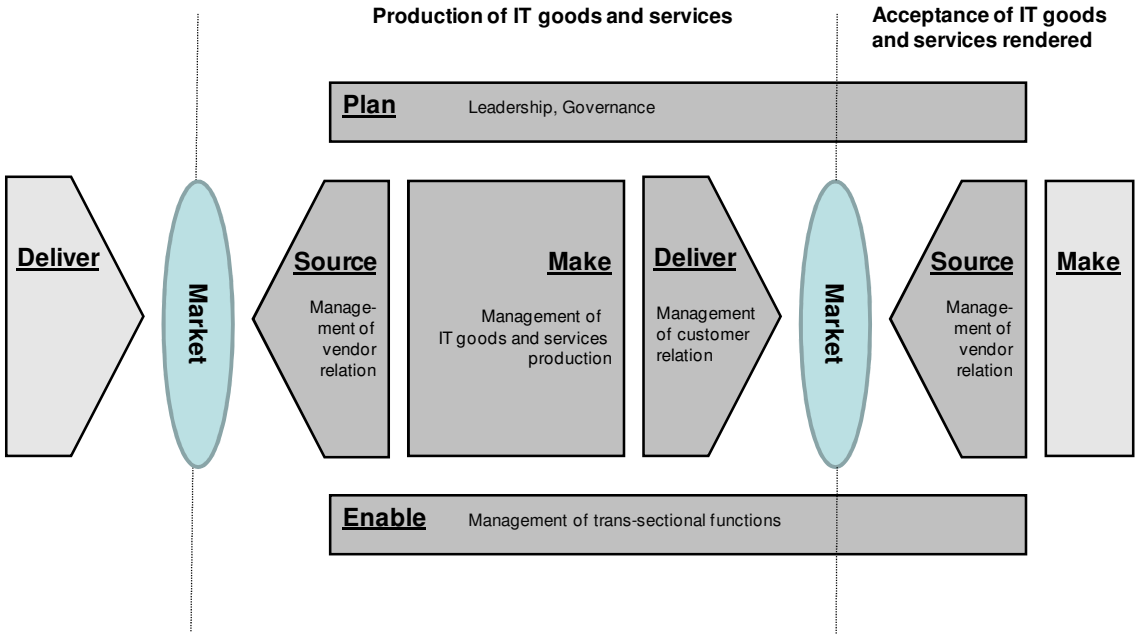


Figure 4: Integrated information management model according to Zarnekow et al. (2004)

Feeny and Willcocks (1998) also see the exploitation of the ITO market as part of the nine IS capabilities needed to consistently address three enduring challenges in the exploitation of IT in the future: Delivery of IS services at low cost and high quality, the design of the IT architecture and business – IT – alignment.

In summary, information management theorists see the acquisition of IT resources from outside the company as a core element of information management in the future. It is demonstrated as one key to solving enduring challenges. The challenge "business – IT –

alignment" requires the derivation of ITO objectives from business objectives and the attainment of these objectives. The financial crisis, for example, led to huge losses in many banks, forcing them to cut costs and to improve efficiency. ITO in this context must be able to contribute to these challenges. In other words, banks must currently ensure that ITO is either able to deliver the outsourced services at lower costs compared to an in-house IT production or that it does enable efficiency improvements. Other banks or other industries might have other business challenges to solve. A general challenge of IT management in the future will be to provide IT at lower costs and better quality (Feeny and Willcocks, 1998). The ability of ITO to fulfil these specific ITO objectives has yet to be proven (see Chapter 3.5). This leads to the assumption that ITO could not always be able to meet the objectives involved. Thus, further study is required on the long-term potential of ITO. If it proves true that ITO is not able to support all business objectives, ITO will need to be communicated as an IT strategy recommended only as a solution for the achievement of specific business goals; it could not be a universally valid concept for information management in the future.

2.4 ITO in the banking industry

2.4.1 Challenges for banks and the impact on information technology

Banks will be confronted in the future with a series of internal and external challenges whose accomplishment will have effects on information technology: the after-effects of the financial crisis, persistent competition intensity, progressing industrialisation.

The **global financial and economic crisis** has led, among other things, to a high worldwide property loss, to an increase in financing costs and, in the end, to a fall of the real economy. Consequently, the loan volume has sunk and a progressing consolidation on the bank side (Mang, 2010) can be observed (BankersCom, 2009). In Germany, this

is taking place primarily within the three columns of the German bank system (cooperative banks, public law banks and private banks), not overall (Mang, 2010). Moreover, the financial crisis has led to image loss for the bank economy (Mang, 2010) and to a big loss of trust on the investors' side (Fraunhofer IAO, 2009; Mang, 2010), which are matters that need to be met. Released by the state assistances and guarantees provided, the reinforced influence of politics on banks is to be expected as a result of the financial crisis too (Fraunhofer IAO, 2009; Mang, 2010). Besides the discussion about manager's salaries and grants of credit (Mang, 2010), in particular sharpened legal regulations are discussed, which should help to avoid the renewed appearance of such a crisis (Fraunhofer IAO, 2009). Higher equity capital standards and stricter specifications to the risk management of the banks are expected (Mang, 2010). The Basel Committee on Banking Supervision has already published two consultation documents in this context: "Strengthening the resilience of the banking sector" (BCBS a, 2010) and "International framework for liquidity risk measurement, standards and monitoring" (BCBS b, 2010). The effects of the proposals put to consultation on banks are currently examined by the Basel Committee within the scope of a quantitative impact study. The new regulatory demands need to be managed with IT support (Fraunhofer IAO, 2009; Mang, 2010). Therefore, particularly the expansion of the business intelligence solutions, which have been built up over recent years, will be necessary (Mang, 2010).

In order to counteract the rise in customer mistrust as well as to conform to the requirements of politics and the supervision authorities, it will also become important to provide transparency in the banking business in all distributive channels. Since 01.01.2010, for example, an extensive documentation of the consultation process is statutory. The IT has to provide applications therefore and has to organise data storage and data access (Mang, 2010).

Furthermore, the consolidation of banks will make the takeover of data necessary (Mang, 2010).

The financial crisis and economic crisis have also had effects on the **competitive situation of banks in the market**. The reinforced bank consolidation further raises the already high competitive intensity (Mang, 2010). Particularly in the German bank market, the 3-column structure has already generated a highly competitive situation and a strong margin of pressure during recent years (Fraunhofer IAO, 2009; Mang, 2010). In addition, bank customers are no longer willing to pay the fees for services once taken for granted, as for example payments (Kaib, 2003).

The European legislator and consumer protection agencies have raised this pressure further. The new EU directive for the foreign payment transactions, for example, fixes that for transfers in the EU space only the same fees may be raised as in the domestic payment transactions (Kaib, 2003). Because the potentials on the earnings side are increasingly shrinking, the banks are obliged to minimise the cost side and hence become increasingly under cost pressure. The tense competitive situation is further intensified by foreign banks beginning to enter the market (Fraunhofer IAO, 2009; Mang, 2010) or the distribution of bank products through non-banks, as for example by Discounter (Fraunhofer IAO, 2009). In addition, the customers increasingly lose their loyalty and instead show vagrancy behaviour with certain banking products in order to gain the best possible return for their money (Fraunhofer IAO, 2009). In order to cope with these challenges in competition, banks must position themselves as competitive in the market, promote customer loyalty and improve their Cost-Income Ratio.

Banks are already working on repositioning themselves in the banking market and often initiate strategy processes therefore. For example, the banking brand is planned to be integrated systematically in the target group communication. Besides, IT-driven innova-

tions on the customer interfaces should improve the earnings side of banks. A comprehensive modernisation of the banking branches, including new applications in client counselling and the extension of services sold over the internet, are seen as necessary (Fraunhofer IAO, 2009). The use of web 2.0 applications in sales is currently being discussed, for example (e.g., Blogs, Wikis, Communities, etc.) (Vocke, 2008). The reinforced use of the Internet as a distribution channel will make the application of biometrical data (e.g. picture, voice, and fingerprint) necessary to minimise security risks. Furthermore, IT solutions for innovative ways in competition around the customer and for the construction of specific customer knowledge will become necessary in the future. The challenge in the IT area lies here, in the development of suitable technologies for the obtaining, evaluation and management of data, to provide the customer advisers with the right knowledge at the right time (Mang, 2010). The overall aim must be to provide suitable instruments for decision support in sales which allow the real time estimation of risks, as well as to improve sales and customer service (Fraunhofer IAO, 2009; Mang, 2010). An excellent IT architecture is enabling at last the attainment of a greater customer knowledge making sales and customer service more actual and more productive (Mang, 2010). Additionally, structural adaptations are planned for the sales organisation, and innovations in products and service portfolio are seen as necessary, especially in commercial banks. Sales will concentrate on classical financial products and individually adapted products, which requires a reduction of product complexity (Fraunhofer IAO, 2009).

Also, for the improvement of the Cost-Income-Ratio, the IT will be taken into responsibility. The optimisation of internal cost structures as well as process optimisation by innovative information and communication technology have to be implemented. (Fraunhofer IAO, 2009).

Another subject which is currently becoming more significant in the banking industry is **sustainability**. In the economy, a uniform opinion exists about the dangers of global warming and the climate change which requires transparency and lasting management for all market participants. Already today, banks are starting to take care of the environment by checking the procurement chain for sustainability or by valuing energy efficiency (e.g. from information technology). This entails not only positive effects for the environment, but also for the image, cost structure and productiveness of the banks (Mang, 2010).

Beside external influences on banks with impacts on their information technology, banks also have to fight with **internal IT challenges**. The application landscape of banks has grown historically. It is very heterogeneous and hallmarked by a huge number of own-developed systems with complicated interfaces. This allows for a favourable system operation, but leads to high costs in system maintenance and further development, which is no longer possible without the support of external advisers and freelancers. This has resulted in high external costs and dependence on externals who could gain knowledge monopolies over many years. In addition, banks have worked together with a huge number of service providers in the past, which has made the realisation of scale effects impossible and led to high internal control costs. Banks want to master this situation, among other ways, with a consolidation of the service providers into a few strategic partnerships allowing for better prices and a better quality by standardisation of services and action models (Mang, 2010). Increasingly, the complexity of the application landscape is going to be tackled, e.g. by a reorganisation of the core banking systems (Fraunhofer IAO, 2009; Mang, 2010). In addition, an outdated infrastructure exists in many banks which is mostly not used to capacity, caused by differing business volumes. As a solution to this problem, the use of IT infrastructure "on demand" (e.g. Software as a Service, Cloud computing) is discussed with the aim of reducing costs. These con-

cepts allow for the obtaining of IT goods and services on demand and therefore achieve an optimum extent of utilisation and are marked by lower set-up costs and lower introduction times in comparison to in-house solutions (Mang, 2010).

To sum up, it is to be found that IT is highly involved in the challenges banks are faced with currently and in the future. Many IT changes need to be made within a short time, which overall will demand good IT test management (Mang, 2010).

2.4.2 ITO to cope with challenges in the banking industry

Public opinion has concluded that the necessary competitive advantages cannot be achieved with the given structures any more (Mang, 2010). The industrialisation of the bank sector is seen as a fundamental success factor for the accomplishment of this challenge (Kaib, 2003; Mang, 2010). An analogy to the automobile industry is drawn in this context. In the 90s, the automobile industry also encountered an increasing competitive pressure through the reinforced market presence of Asian car manufacturers. The basis for coping with the resulting efficiency problems could be created by a reduction of the manufacturing depth and by a reinforced purchase of product groups. With a view to the bank industry, the hypothesis is put forward that everything which is not perceived directly by the customer, and which does not serve differentiation in the market, can be bought externally at a reasonable price and with the use of scale effects (Kaib, 2003).

Industrialisation is not compulsoryly connected with the external production of goods and services, but is generally described - for example, by the Brockhaus Encyclopedia (1989) - as the spreading of standardised and highly productive methods in the production of goods and services in all economic areas. Industrial production allows for the production of a multiplicity of goods with a sufficient amount of quality. It is characterised by standardisation, specialisation, systematic re-use and automation and often organised in a factory system, which entails increased division of labour and specialisa-

tion of function (Encyclopedia Britannica, 1991). A definition more related to banking practice was given by Mang (2010): "An industrialised bank has a clear look on her unique selling points concerning product and brand politics, service and business model. Therefore, she uses standardised products, processes and systems which are adaptable to the operational business. In addition, such a future-oriented bank is marked by her ability to carry investments and risks of the change and by a culture of strategy implementation."

Within the scope of bank industrialisation, the following challenges are currently seen: process optimisation (Fraunhofer IAO, 2009), abolition of redundant capacities and processes (BankersCom, 2009), rationalisation of the product mix according to customer relevance for facilitation of controllability (Fraunhofer IAO, 2009; Mang, 2010), reduction of the number of core IT systems (Mang, 2010), improvement of internal planning and governance based on new management concepts (Fraunhofer IAO, 2009) and rationalisation of office capacities (Mang, 2010). Besides the bank-internal industrialisation aspects, external cooperation and the competence to manage this cooperation are also classified as significant (BankersCom, 2009; Fraunhofer IAO, 2009). "The current crisis could act as a trigger for increased outsourcing activities. Indeed, the degree of suffering seems to be still not big enough" (BankersCom, 2009).

Currently, the banking industry is already the second largest buyer of IT outsourcing services with rising demand (Caldwell et al., 2004; Kearney, 2007; Pütter, 2007).

2.4.3 Specifics of ITO in the banking industry

Banks are monitored by national regulatory authorities and outsourcing by banks must comply with existing banking supervision laws. In Germany, for example, the German Banking Act (§25a Abs. 2 KWG) and various circular letters of the Federal Banking

Supervisory Office (now the Federal Financial Supervisory Authority) which detail the more general German Banking Act, must be met. The German Banking Act describes the requirements for outsourcing, which should ensure that the outsourcing of operational activities does not impair the orderliness of such business or services, the managers' ability to manage and monitor those activities or the Federal Financial Supervisory Authority's right to audit and the ability to monitor the credit institution under its jurisdiction. This discretionary power must be ensured in the ITO contract and the outsourced areas must be incorporated in ongoing internal control mechanisms (Achenbach et al., 2004). Circular letter 11/2001 defines the requirements of the regulatory authorities in detail: outsourcing must be based on a clear and written contract, the functions to be outsourced must be defined clearly, the choice, instruction and control of the vendor has to be designed and exercised with reasonable care, internal audits, the annual auditing and supervision must be possible at any time, the adherence to and regular control of security requirements and data security must be ensured. Detailed specifications are given for data security, IT security and bank and business confidentiality, customer information and for outsourcing abroad. Additionally, circular letter 11/2001 defines the boundaries of outsourcing in banks. Generally, every field of activity in a bank can be outsourced, provided that the task concerns no central management functions like corporate planning, governance and control.

Not only are the regulatory issues related to ITO specific to the banking industry, but differences from other industries could exist as well concerning the economic efficiency of ITO decisions. The banking business in Germany, for example, is free of value added tax (VAT). But the IT goods and services banks obtain from ITO vendors are only VAT free if the respective IT good or service as a whole is discrete and fulfils the specific and essential function of a banking service (Kaiser, 2008). This implies that at least German banks need to consider VAT as an additional element of ITO expenditure beside the

margin of the vendor and incoming transaction costs. Considering that VAT amounts currently to 19% in Germany, it is obvious that this additional element of expenditure influences the business case calculations of an ITO project significantly.

2.5 Summary

This chapter showed the various terms and definitions used for the outsourcing of IT until now, which makes one-to-one comparisons of research results often challenging. The terms and definitions used in this study were pointed out, which comprise a broadly-based definition of "ITO" and a specific definition of "IT" in terms of application outsourcing. The various types of ITO were explained, which are classified by means of the following criteria: number of clients and vendors cooperating, financial dependence of client on vendor, type of vendor, delivery model, outsourced IT subject, degree of ITO and time frame of ITO contract.

Furthermore, the evolution of ITO was described, which allows us to see that ITO has changed in various aspects compared to its origins in the 1960s: companies of any size outsource IT, the degree has risen towards the outsourcing of complete business processes, the relationship between clients and vendors has changed towards a partnership approach, clients and vendors have gained professionalism by ITO experiences, multiple vendors have been used and the replacement of vendors has been practised, etc. Emerging trends in the field of ITO are: partial change of motivations for ITO from a cost to a strategic focus (e.g. corporate downsizing, completion of internal capabilities and skills, access to innovations, business improvement and change), sourcing software applications over the internet (e.g. SaaS), using vendors located outside the first world (near- and offshoring), and financial integration between clients and vendors (e.g. joint ventures, equity holding).

In addition, the importance of ITO for the business world and its embedding in information management discipline were presented. IT nowadays supports nearly all business functions and processes, enhancing its importance for business success. This requires the alignment of business and IT strategies in two ways: on the one hand, the primary goal of IT must be to support current and future business processes in the best way possible; on the other hand, IT can be used as an innovative source in terms of what business innovations IT can enable. The exploitation of external IT markets is seen as a core competence of information management in the future. But the universal validity of ITO as a successful information management concept still needs to be investigated. The question needs to be answered whether ITO is capable of supporting the achievement of specific business objectives.

ITO is connected (according to branch) with different challenges. In the banking industry, the financial crisis led to the reorganisation of the bank sector, changes in the power structure and further aggravated competition. Hence, banks must check their competitive strategies and business models. They must promote customer loyalty and improve their cost-income ratio. The quality, efficiency and effectiveness of the processes, cost reduction programmes and the implementation of sustainability must be promoted. Bank industrialisation, including outsourcing, is seen a major key to success.

For the information technology function this means the parallel conversion of a huge number of new demands: implementation of regulatory issues by enhancement of business intelligence solutions, development of solutions for the achievement of transparency in the banking business, takeover of data from banks to be integrated, innovative solutions in sales (e.g. client counselling software, internet sales channels like web 2.0, customer data management, real time decision support systems considering risks, sales

possibilities and a better customer service), adequate security solutions (e.g. biometrics), cost reduction, process improvements, achievement of IT sustainability, consolidation of legacy systems and vendors, modernisation of IT infrastructure and the professionalisation of test management.

Outsourcing in banks appears to be different compared to other industries concerning the regulatory issues which need to be met and profitability calculations.

CHAPTER 3

Existing research into the maturity and success of ITO

3 Existing research into the maturity and success of ITO

In order to capture the current body of scientific knowledge concerning ITO outcomes and influencing factors, an extensive literature survey was conducted. The starting point for this survey was articles summarising the scientific knowledge about ITO in general (Matiaske and Mellewigt, 2002; Dibbern et al., 2004; Mahnke et al., 2005; Gonzales et al., 2006). All the articles therein cited as reference for scientific papers focusing on ITO outcomes and influencing factors were reviewed. In addition, the survey was broadened by incorporating further articles based on reference works and looking at the manual indexes of the articles. All articles were considered which empirically investigated ITO outcomes and ITO success or failure factors, at least partly, in the banking industry. Finally, a total of 55^2 scientific articles published in IS and management journals since 1992 were incorporated into the literature survey. The underlying ITO contracts cover various cultures (US, Europe and Asia, predominantly from the US and UK), IT functions, research methodologies and a time period of almost two decades. The known ITO outcomes, their measures and influencing factors are presented in sub-chapters 3.5, 3.6 and 3.7. In addition, this chapter shows the current scientific opinion of how to proceed step-by-step when outsourcing IT (see sub-chapters 3.1 and 3.2), the motivations of companies to outsource IT (see sub-chapter 3.3) and related risks (see sub-chapter 3.4).

3.1 ITO process models

The procedural approach for the execution of ITO has already been described by several authors (Kleppler and Jones, 1998; General Accounting Office, 2001; Cullen et al., 2005; Lacity and Willcocks, 2009c). Two ITO process models are based on a rich data set of ITO experiences and will thus be presented in detail.

Lacity and Willcocks (2009c), for example, described 6 ITO process phases on a high level comprising of 26 activities with a strong focus on the ITO contract and the objectives per ITO process phase (see Table 2).

	Scoping Phase	**Evaluation Phase**	**Negotiation Phase**	**Transition Phase**	**Middle Phase**	**Mature Phase**
Activities	• Identify core IT capabilities • Identify IT activities for potential outsourcing using business, economic, and technical criteria	• Measure baseline services • Measure baseline costs • Create a request for proposal (RFP) • Develop evaluation criteria • Invite external and internal bids	• Conduct due diligence to verify RFP baseline claims • Negotiate service level agreements • Create responsibility matrixes • Price work units • Negotiate terms for employee transfer • Negotiate mechanisms for contractual change, including benchmarking, open book accounting, non-exclusivity clauses, and pricing schedules	• Distribute contract to IT users • Interpret the contract • Establish post-contract management infrastructure and processes • Implement consolidation, rationalisation, standardisation • Validate service scope, costs, levels and responsibilities for baseline services • Manage additional service requests • Foster realistic expectations of supplier performance • Publicly promote the contract	• Benchmark performance to (theoretically) reset prices • Realign the contract to reflect changes in technology and business • Involve the supplier in more value-added areas	• Re-calibrate investment criteria to reflect shorter time horizon for recouping investments • Determine if the relationship will be terminated or extended
Objectives	Create a strategic vision of IT sourcing	Identify the best source for IT activities	Negotiate a contract to ensure sourcing expectations are realised	Establish precedents for operational performance.	Achieve value-added above and beyond operational performance	Determine and plan for the fate of current sourcing options

Table 2: ITO process phases and activities according to Lacity and Willcocks (2009c)

Cullen et al. (2005) distinguish between four ITO process phases comprising of nine building blocks, related goals and 54 key activities (see Table 3).

[2] 48 of these 55 scientific articles contained influencing factors seen as relevant for ITO success.

Phase	Building Block	Key activity	Goal
Architect	**Investigate**	1. Gather insight via experts and experienced organisations 2. Determine and test goals/expectations 3. Collect intelligence on market conditions and potential suppliers 4. Investigate similar decisions and peer organisations	Veracity, not ideology
Architect	**Target**	5. Match goals to appropriate outsourcing model 6. Identify, based on objective criteria, suitable services to outsource 7. Prepare the 7 baseline and future state profile: service, cost, asset, staff, stakeholder, current contracts, and governance	Targeted and Defined scope
Architect	**Strategise**	8. Decide the rollout approach (big bang, phased, piecemeal) 9. Determine key rules (e.g. governing documents, asset ownership) 10. Design the detailed end-to-end lifecycle program/projects 11. Identify and source the lifecycle skills 12. Prepare the lifecycle communications strategy 13. Prepare the business case rules and the base case 14. Assess feasibility, risk and impact to the organisation	Informed, holistic strategies
Architect	**Design**	15. Prepare the commercial and operating blueprint 16. Develop the 4 balanced score metrics – service, financial, relationship and strategic 17. Draft the service level agreement – scope, metrics/incentives, reporting & governance 18. Draft the price framework (fixed, variable and cost plus items) 19. Draft the contract 20. Design the inter-party relationship (structure, roles, authorities, etc.) 21. Design the retained organisation (kept functions) 22. Design the contract management function (governance)	Well-designed future state
Engage	**Select**	23. Plan and detail the tender stages 24. Identify the right evaluation team – breath and depth 25. Determine the right evaluation criteria and strategy for each tender stage 26. Request the right, clear and comprehensive bid data for each tender stage 27. Facilitate the best responses (e.g. briefings, data room) 28. Use interactive evaluation techniques (e.g. interviews, site visits) 29. Select supplier based on value for money 30. Conduct the 5 due diligences on supplier: company, price, solution, contract, and customer references	Best value for money, sustainable solution and provider
Engage	**Negotiate**	31. Prepare negotiation strategy and prioritise negotiation items 32. Conduct effective negotiations	Complete contract
Operate	**Transition**	33. Finalise and mobilise all plans (e.g. communications, setup, acceptance, risk) 34. Resource the transition project 35. Manage the impact on staff (retained, transferring and departing) 36. Manage the transfers (e.g. staff, asset, third party contracts, work-in-progress) 37. Manage knowledge retention and transfer 38. Implement retained organisation and contract management 39. Engineer workflows, communication channels, authorities, etc. 40. Conduct acceptance, closeout and post-implementation review	Efficient and complete mobilisation
Operate	**Manage**	41. Invest in the relationship (plan, assess and improve) 42. Meaningful reporting and analyses 43. Regular communication and meetings 44. Diligent documentation and administration 45. Manage risks and plan contingencies 46. Manage issues, variations and disputes 47. Effect continuous improvement and streamlining 48. Evaluate and audit supplier (controls, performance, compliance) 49. Evaluate organisation both as a customer and contract manager	Ongoing results
Regenerate	**Refresh**	50. Assess next generation options (backsource, retain, handover) 51. Assess contract outcomes and lessons 52. Knowledge refreshment (e.g. market, technology, price, metrics) 53. Reassess requirements – re-scope, re-bundle and re-design 54. Determine the strategy and business case for each option	Refreshed strategy and options

Table 3: ITO process phases and activities according to Cullen et al. (2005)

The process approaches of theorists for the execution of IT outsourcing can be summarised in six process phases for ITO: preparation, selection, contract, transition, execution

and post-deal (Van Lier and Dohmen, 2007). Table 4 shows an explanation of these generic ITO process phases.

ITO process phase	Explanation
Preparation	Decision whether ITO should be chosen or not and how to organise ITO.
Selection	Detection of the best internal or external source for the provision of IT goods and services.
Contract	Contract negotiations with the chosen vendor.
Transition	Realisation of the actual transition of IT assets and staff and the establishment of related processes.
Execution	External execution of the IT functions by the vendor according to the contract and boosting of additional benefits.
Post-deal	Evaluation whether the contract will be extended, if the vendor will be switched or if the outsourced IT function will be brought back in-house.

Table 4: Generic process phases within an ITO project according to Van Lier and Dohmen (2007)

3.2 ITO maturity models

A maturity model is a method for assessing whether the processes used, and how they are used, are characteristic of the maturity of an organisation (Raffoul, 2002).

Many maturity models were applied to various fields in the past, such as systems security, helpdesk, project management, etc. Most of them refer either to Nolan's original stage model (Nolan, 1973) or to the Software Engineering Institute's (SEI) Capability Maturity Model (CMM) (Hofmann et al., 2007). Also in recent years maturity models for the ITO process have emerged, as for example the SEI's "Capability Maturity Model Integration (CMMI) for Outsourcing" (Hofmann et al., 2007) and Raffoul's "Outsourcing Management Maturity (OMM) Model" (Raffoul, 2002).

All these maturity models have in common that they are supposed to guide companies with best practices and process improvement measures to achieve better process results; in the case of ITO, to achieve better ITO outcomes.

This chapter describes the maturity models CMMI (Hofmann et al., 2007) and OMM (Raffoul, 2002).

The *"Capability Maturity Model Integration (CMMI)"* is a comprehensive framework developed by the Software Engineering Institute (SEI) of the Carnegie Mellon University in Pittsburgh to support the evaluation and improvement of processes with the objective of developing better products (Hofmann et al., 2007). By the integration of various former CMM-models into the CMMI-model, the application area was extended from pure software development to the development and maintenance of complete systems, products and services. The CMMI-framework was also adapted to reflect the acquisition of technology solutions: "CMMI for Outsourcing" was published. "CMMI for Outsourcing" illustrates best practices for acquirers for the effective outsourcing of software, systems and IT, and guides stepwise process improvement efforts. "CMMI for Outsourcing" describes six core competence process areas for successful acquirers (see Figure 5). A process area is a cluster of related practices that satisfies a set of goals which are considered to be best practises in that area. The specific practices are further characterised by typical work products and sub practices. For example, the "Solicitation and Supplier Agreement Development process area" has the goal of preparing for solicitation and supplier agreement by the practises: development of an acquisition strategy, qualification of potential suppliers and development of a solicitation package that includes requirements and proposal evaluation criteria. A typical work product would be a RFP (request for proposal). The succession model of "CMMI for Outsourcing" is the "CMMI for Acquisition (CMMI-ACQ)" Model (CMMI Product Team, 2010). The given processes of an organisation or project must be mapped to the CMMI process areas. All CMMI maturity models have in common that they determine "what" aspects to consider in order to achieve successful processes; this leaves open how these aspects are

operationally defined. For example, the CMMI model states that roles and related tasks and responsibilities need to be defined, but it does not determine how these roles are defined and which specific roles are needed.

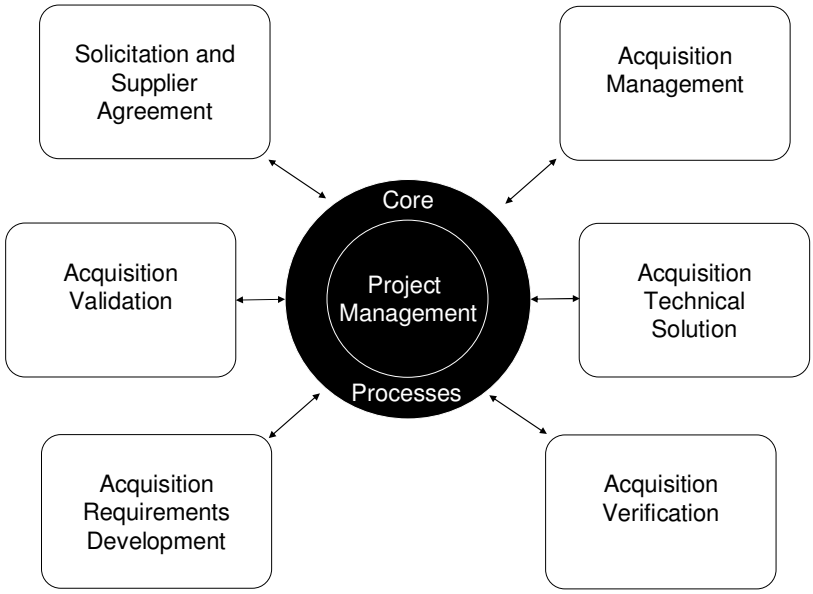


Figure 5: Core process areas of CMMI for Outsourcing according to Hofmann et al. (2007)

Solicitation and Supplier Agreement Development process area (SSAD)

The SSAD process area describes how to develop an acquisition strategy and align it with organisational goals. It further explains how to identify potential suppliers, develop, review and distribute a request for proposal, evaluate supplier responses, and negotiate and create standard contracts. This process area outlines both, the acquisition practises for one project and for establishing a supplier agreement for multiple projects. In the case of multiple projects, the solicitation package and supplier agreement would reflect the broader scope and an appropriate level of review would be required before the selection was made.

Acquisition Management process area (AM)

The purpose of the AM process area is to manage and satisfy supplier agreements. It involves practices to ensure that the supplier meets contractual requirements and that

these are adapted to changing surrounding conditions and supplier performance (e.g. ongoing communication, establishing and maintaining mutual understanding, resolving supplier agreement issues and disputes, revising and closing agreements). On the other hand, it is described how the acquirer has to fulfil its contractual obligations by specific practices like accepting delivery of acquired products, transitioning the product to the project and managing the payment to the supplier.

Acquisition Requirements Development process area (ARD)

The ARD process area explains how to identify, analyse and validate customer and contractual requirements as a basis for the selection and design of the product to be acquired. It outlines e.g. elicitation, analysis, validation and communication of customer needs, development of product requirements throughout the product life-cycle, establishment of customer and contractual requirements on the right level of detail for the solicitation package and supplier agreement. The fulfilment of stakeholders' intentions is ensured with the "Acquisition Validation process area".

Acquisition Validation process area (AVAL)

The purpose of the AVAL process area is to ensure that the acquired product or service meets the stakeholders' intentions and the customer requirements when placed in its intended environment. These validation activities are performed throughout the project life cycle to all aspects of the product, whenever possible using the product operating in its intended environment. The validation can be applied to acquirer work products (such as customer requirements) and supplier deliverables (for example prototypes, service documentation, user manuals and training materials). This process area focuses on how to identify the product or component to be validated, establish the validation environment, and develop the validation procedures and criteria aligned with product character-

istics and customer constraints and how to perform validation and analyse validation results.

Acquisition Technical Solution process area (ATS)

The ATS process area discusses how to develop technical constraints to satisfy the product requirements and how to analyse and verify the delivered technical solution of the supplier. The "Acquisition Verification process area" ensures that the acquired product, intermediate acquirer work products or supplier deliverables meet these contractual requirements.

Acquisition Verification process area (AVER)

The purpose of the AVER process area is to ensure that the acquired product, intermediate acquirer work products and supplier deliverables meet contractual requirements. This verification takes place throughout the acquisition, from the verification of requirements and plans, to the verification of evolving work products like design and test results up to the verification of the completed product. It includes the identification of the work products to be verified, the establishment of the verification environment and verification methods and procedures and criteria aligned with selected work products and requirements, the performance of the verification, analysis of verification results and the derivation of corrective actions.

Beside the six specific process areas unique to the outsourcing of software, systems and IT, the "CMMI model for Outsourcing" also includes 16 foundation processes common to all CMMI models. These 16 process areas cover project management, process management and support processes. They are also essential for an acquirer to possess.

In order to continually enhance an acquirer's ability (and its supplier's ability) to reliably meet its business objectives, "CMMI for Outsourcing" provides improvement approaches for the incremental obtaining of outsourcing process and technology excellence. This improvement path consists of four stages (maturity levels) of improvement development. To achieve the next higher maturity level, the previous process areas and capabilities need to be fulfilled and expanded. The achievement of each maturity level assures the adequate process infrastructure as a basis for the next maturity level. Table 5 characterises the predefined improvements path of "CMMI for Outsourcing".

CMMI stage of maturity levels		**Characterisation**	**CMMI process areas need to be fulfilled**
1	Initial	Organisations starting with process-oriented classification and improvement. The environment is characterised by chaotic behaviour, operating instructions on call, "fire brigade efforts", heroism, overtime work, etc.	---
2	Managed	Active guidance of projects by implementation and application of basic project management practises. Between projects, differences in applying these project management disciplines occur. Projects reach work results in time and in budget.	AM, SSAD
3	Defined	Standardisation of processes across the organisation, derived from acquisition strategy (e.g. consolidation of software, introduction of new technology). Standard processes are well characterised by standards, procedures, tools and methods and are described very rigorously (clearly states purpose, inputs, entry criteria, activities, roles, measures, verification steps, outputs, exit criteria). The standard processes can be tailored to a specific project or unit according to tailoring guidelines.	ARD, AVAL, ATS, AVER
4	Quantitatively managed	Operating methods and resulting output are measured, analysed and predictable with statistical methods and determination of causes. Measurable quality performance objectives critical to achieve customer needs and overall business performance of acquirer and supplier are set. Insight into supplier's work and products is gained by using quantitative data provided by suppliers as specified in the supplier agreement.	Up to now, not described
5	Optimised	The process is self-optimised. Continuous improvement of the acquirer's processes and technologies responsible for quality and process performance of acquirer and supplier based on quantitative measurement of variations inherent in process and alignment with suppliers. Sources for innovative ideas are customers, suppliers and the ability of intra-organisational learning and learning between organisations (e.g. innovation review programmes).	Up to now, not described

Table 5: CMMI stage of maturity levels according to Hofmann et al. (2007) and Wallmüller (2007)

The "*Outsourcing Management Maturity (OMM) Model"* was developed to guide outsourcing companies for the achievement of better ITO activities. The main goals of the OMM Model are to create an effective vendor management structure and measurable and enforceable SLAs, the implementation of formal processes and the improvement of the vendors' formal processes. An overview of the OMM Model and its maturity stages is given in Table 6.

Maturity level	Description
1: Vendor management fundamentals	Worst-case scenario: narrow contract management focus, misaligned expectations, absent reporting of SLAs, missing processes, no foundation for trust building and value creation. Vendors are changed constantly, but with limited success.
2: Defined service outcome	Remediation strategies to address vendor miscommunication are established, roles and responsibilities are redefined, and expectations to vendors are reset; A relationship management structure is established; SLAs for all outsourced IT service are established; SLA tracking process is established; Engagement management process for new IT services is established; Benchmarking strategies in outsourcing contracts are enforced.
3: Measurement	SLA targets are regularly reported; A balanced scorecard or a similar model is implemented by vendors; Change management processes are implemented; Escalation management processes are established; Business continuity processes are implemented; A benchmarking of outsourced IT services takes place at least once per year; Single points of failure are identified; Measures for business and IT objectives are aligned and regularly reported.
4: Trust	The security arrangements of vendors are in line with industry standards; Success has appeared in terms of reduced costs, improved service quality and increased responsiveness; Service level targets are met continuously; Processes for capacity management are established (yearly capacity plans, tracking of usage against forecasts, alignment of business and IT); Command and control processes of vendors are integrated and automated; Costs for benchmarking are reduced by use of third-party consultants valuing selected proposals; Delivery processes of vendors correspond to best practices; Single points of failure are addressed; The contribution of IT to business objectives is regularly reported.
5: Recognised business value	ITO objectives are met; SLA targets are continuously exceeded; A process maturity model is established; Vendors' prices are competitive and cost effective; Strategic business initiatives are supported by new technology; Vendor provides demanded new skills; The contribution of the ITO to business cost reduction and performance improvement strategies is quantified.

Table 6: OMM Model according to Raffoul (2002).

3.3 Motivations for ITO

The motivations of companies to outsource IT are categorised by Mahnke (2005) into financial (e.g. reducing cost, immediate cash, replacing capital outlays with periodic payments), technical (e.g. improving the quality of IT, gaining access to new and/or proprietary technology), strategic (e.g. focus on core competencies, facilitate M&A, time to market, specialized firms can more easily attract professionals in short supply) and political motives (e.g. dissatisfaction with internal IT department, IT as support function, pressure from vendors, desire to follow trends or imitate). Matiaske and Mellewigt (2002) state as well cost and financial advantages, the desire to concentrate on core business and performance enhancing as motivations for outsourcing; in addition, they mention the possibility for risk allocation on the vendor side. Dibbern (2004) considers the attributes (e.g. asset specificity) and evolution of the several IS functions, perceptions of the potential positive or negative consequences of ITO and experiences with ITO as further firm level aspects influencing the outsourcing decision. Beside determinants on the firm level, he also sees determinants on the industry/country/society levels (e.g. influence from peer companies, federal regulators and the media) and the individual level (e.g. the characteristics, motivations, preferences or attitudes of individual stakeholders and their relationship to each other) as ITO determinants. Firms usually outsource to achieve a combination of benefits (Kern et al., 2002).

The reasons why companies engage in ITO contracts are well known, but little evidence exists of how important these reasons are across industries and ITO types (Mahnke et al., 2005).

The European Central Bank published a more specific record of motivations in banks to outsource in general (see Table 7). The order of the motivations in Table 7 reflects the importance for banks.

Motives for outsourcing by banks
1. Cost reduction
2. Access to new technology/ better management
3. Focus on core competencies
4. Economies of scale
5. Free resources
6. Quality/Service
7. Generate change / flexibility

Table 7: Primary motives of banks for outsourcing according to the ECB (2004)

The primary motive for outsourcing in banks is cost reduction. Secondly, banks want to achieve access to better technology, infrastructure and a more professional service management, or they follow the strategy to focus their effort on core competencies and outsource different functions. Other banks see the benefit of scale economies in terms of synergies, diversification benefits or streamlining of services. The possibility of solving the problem of a lack of internal staff or know-how and the improvement of the extent and quality of services is also connected with outsourcing. Some banks use outsourcing to implement major organisational changes or to enhance flexibility throughout the organisation (e.g. participation as vendor in the outsourcing market for selected functions) (ECB, 2004).

3.4 Risks of ITO

Aubert et al. (1998) identified and classified the main risk factors that could lead to the undesirable consequences of an ITO arrangement: hidden costs, contractual difficulties, service debasement and loss of organisational competencies. These undesirable consequences were specified in a subsequent study (Aubert et al., 1999) as seven undesirable

outcome areas: unexpected transition and management costs, potential loss associated with a lock-in, costly contractual amendments, costly dispute and litigation, services debasement, cost escalation, loss of organisational competencies. Risk is hereby defined as the product of the probability of an undesirable outcome and the loss due to this undesirable outcome. Matiaske and Mellewigt (2002), in their summary of risks associated with ITO, came up with the same results, even though slightly different in detail. To protect companies from undesired outcomes, Dibbern (2004) suggests making a well-founded decision, negotiating a suitable contract and building a relationship with the vendor.

The Basel Committee on Banking Supervision (BCBS, 2004) published a more specific list of the risks banks are faced with when increasingly relying on outsourcing in general (see Table) and gave recommendations about how to mitigate these risks.

Risk	**Major concern**
Strategic Risk	• The third party may conduct activities on its own behalf which are inconsistent with the overall strategic goals of the regulated entity (bank). • Failure to implement appropriate oversight of the outsource provider. • Inadequate expertise to oversee the service provider.
Reputation Risk	• Poor service from third party. • Customer interaction is not consistent with the overall standards of the regulated entity (bank). • Third party practices not in line with stated practices (ethical or otherwise) of regulated entity (bank).
Compliance Risk	• Privacy laws are not complied with. • Consumer and prudential laws not adequately complied with. • Outsource provider has inadequate compliance systems and controls.
Operational Risk	• Technology failure. • Inadequate financial capacity to fulfil obligations and/or provide remedies. • Fraud or error. • Risk that firms find it difficult/costly to undertake inspections.
Exit Strategy Risk	• The risk that appropriate exit strategies are not in place. This could arise from over-reliance on one firm, the loss of relevant skills in the institutions itself preventing it bringing the activity back in-house and contracts which make a speedy exit prohibitively expensive. • Limited ability to return services to home country due to lack of staff or loss of intellectual history.

Table 8: Key risks of outsourcing in banks according to BCBS (2004)

Risk	Major concern
Counterpart Risk	• Inappropriate underwriting or credit assessments. • Quality of receivables may diminish.
Country Risk	• Political, social and legal climate may create added risk. • Business continuity planning is more complex.
Contractual Risk	• Ability to enforce contract. • For off-shoring, choice of law is important.
Access Risk	• Outsourcing arrangement hinders ability of regulated entity (bank) to provide timely data and other information to regulators. • Additional layer of difficulty in regulator understanding activities of the outsource provider.
Concentration and Systemic Risk	• Overall industry has significant exposure to outsource provider. This concentration risk has a number of facets including a lack of control of individual firms over provider and systemic risk to industry as a whole.

Table 8 (cont.): Key risks of outsourcing in banks according to BCBS (2004)

The Basel Committee on Banking Supervision (BCBS, 2004) recommends mitigating these risks by conceptualisation of comprehensive and clear outsourcing policies, establishment of effective risk management programmes, contingency planning (e.g. planning for disaster recovery and periodic testing of backup facilities) by the outsourcing firm, negotiation of an appropriate outsourcing contract (including the rights, responsibilities and expectations of all parties, confidentiality) and a thorough analysis of the financial and infrastructure resources of the service provider.

3.5 ITO outcomes

Previous studies about ITO show a lack of empirical research concerning the outcomes of ITO in general (Matiaske and Mellewigt, 2002; Mahnke et al., 2005), especially regarding the longer-term outcomes and implications (Dibbern et al., 2004). Very few ITO studies have focused to any extent on long-term results until now (Lacity and Hirschheim, 1993; Reponen, 1993; Collins and Millen (1995); Nagengast (1997); Saunders et al. (1997); Lacity and Willcocks, 2000; Kim and Chung (2003)). A lack of experienced data about ITO outcomes exists, especially in Germany (Fraunhofer IAO, 2005). The investigation of short and long term ITO impacts in general is seen as diffi-

cult, because the outcomes of most outsourcing contracts do not appear in public (Kass, 1990). A reason for this research gap could be the political aspect inherent in ITO decisions, e.g. companies could want to protect decision makers and their company from negative consequences in case of publicly reported problems with ITO or even ITO failures.

Reports about known ITO outcomes draw no consistent picture. Indeed the picture is often a contradictory one. In some cases the desired benefits were reached, in other cases benefits could not be realised, or not in the expected degree (for examples see Heinzl, 1993; McLellan, 1993; Willcocks and Fitzgerald, 1994; Collins and Millen, 1995; Lacity and Willcocks, 1995; Lacity et al., 1996; Saunders et al., 1997; Lacity and Willcocks, 1998; Lacity and Willcocks, 2000; Lacity and Willcocks, 2001; Cullen and Willcocks, 2003; Diamond Cluster, 2005). Even in the case of the same outsourced IT function no consistent picture exists. Organisations outsource the same IT function, but experience very different results (Lacity and Willcocks, 2009a). The study of Lacity and Willcocks (1998) for example shows this phenomenon very clearly: Some data centre outsourcing cases resulted in the expected outcome, other data centre outsourcing cases not, or the outcome was only mixed. Similar cases were presented for total outsourcing.

Besides this, evidence of growing dissatisfaction with ITO is observable. A Global IT outsourcing study (2005) found that the number of clients that had abnormally terminated an outsourcing contract had more than doubled to 51% in 2004 versus 21% in 2003. A study on outsourcing strategies (Landis et al., 2005) identified that 74% of a sample of fifty problem contracts failed and 64% of firms in the study backsourced services. McLaughlin and Peppard (2006) and Veltri et al. (2008) identified recent backsourcing decisions and the rationale behind those decisions. Even if an outsourcing contract is not

terminated, reports about dissatisfaction and problems with ITO can be found in the literature (Kern and Willcocks, 2001). Scientists rate the chances of success at around 50:50 (Lacity and Willcocks, 1998; Gartner Group, 2002; Boonlert, 2005).

Success (Dibbern et al., 2004; Mahnke et al., 2005) and factors impacting success (Poppo and Zenger, 1998) are seen as dependent on the kind of activities outsourced, but previous research reports in general often do not analyse the ITO results in connection with the underlying IT function (for exceptions see Lacity and Hirschheim (1993) and Grover et al. (1996)).

3.6 ITO success measures

Dibbern (2004) extracted three measures for ITO outcomes in his analysis of ITO literature: satisfaction, realisation of expectations and performance. Mahnke (2005) found that the measure "performance" is often used for ITO outcome; he distinguished technology performance, financial performance and non-financial performance. The literature survey within this study found the same prevailing success categories. In addition, a fourth category, impact of ITO, was added (see Table 9).

Success measure	Explanation	Examples
Satisfaction (qualitative)	Perception of success with e.g. ITO arrangement; economic, technological, strategic and overall satisfaction; benefits; relationship, etc.	Grover et al. (1996), Saunders et al. (1997)
Expectations and their realisation (qualitative)	Perception of the degree to which various anticipated benefits of ITO occurred.	Lacity et al. (1996), Lacity and Willcocks (2001)
Performance (qualitative)	Qualitative performance was used in terms of e.g. ▪ non-financial (e.g. process/product innovations) ▪ exchange (e.g. quality of output or service, responsiveness) ▪ function (e.g. functionality of disaster backup centre) and ▪ overall performance and effectiveness (e.g. timeliness of information, etc.).	McLellan (1993), Gilley and Rasheed (2000)
Performance (quantitative)	Quantitative performance was measured by e.g. ▪ stock market quotation/price reaction/returns ▪ operating figures (e.g. asset base, cost-income-ratio, return on assets, return on sales, profitability) ▪ entering new markets ▪ introducing new products ▪ efficiency (financial impact on IT expenditures as percentage change from previous internal operations)	McLellan (1993), Gilley and Rasheed (2000), Koh et al. (2007), Fritsch and Wahrenburg (2008)
Impact (qualitative)	Qualitative assessment of general effects of ITO on industry, organisation, employees, costs, service, technology, IT checkability, co-work processes, culture, etc.	Gerigk (1997), Lacity and Hirschheim (1993)

Table 9: ITO success measures applied in scientific studies

The empirical studies reviewed in this literature survey operationalised ITO success as a dependent variable to examine different research questions dependent on the actual ITO outcome.

On the other hand, with the studies of Dahlberg and Nyrhinen (2006) and Fuß and Jäger (2005) the primary goal of these researchers was to develop an instrument to measure the success of ITO. The instrument of Dahlberg and Nyrhinen (2006) distinguishes between organisation specific strategic, economic, technical and social success factors and overall satisfaction and qualitatively measures the difference between realised benefits and objectives set for each measured item. The instrument of Fuß and Jäger (2005) combines qualitative and quantitative measures to evaluate the economic and strategic ITO success based on the combination of empirically validated measurement models of previous ITO studies.

In summary, the measurement of success varied in previous studies and is predominantly based on perceptions (Matiaske and Mellewigt, 2002; Dibbern et al., 2004; Mahnke et al., 2005). Objective, quantitative success measures are missing in the outsourcing research (Matiaske and Mellewigt, 2002), except general performance measures on the firm level, stock market reactions and measuring the relative change of IT expenditure in sparse studies. But one has to bear in mind that the measurement of the business value of IT in general is difficult to demonstrate (Willcocks et al., 1995b), just as the value of ITO seems to be difficult to demonstrate. The measurement of the value of the IS outsourcing versus its cost has not proved easy (Hirschheim and Smithson, 1988) as conventional methods for evaluating asset profitability cannot be applied (Willcocks et al., 1996). In spite of several proposed instruments, there seems to be no consensus on how to measure the success of ITO (Kim and Chung, 2003).

3.7 Influencing factors for ITO success or failure

ITO is seen as a very complex phenomenon dependent on different and yet not clearly identified variables (Matiaske and Mellewigt, 2002).

According to scientists, the reason why success with ITO has not been reached in every case so far is because "research to date has not modelled all possible factors affecting ITO success" (Koh et al., 2004).

There is still an ongoing debate among researchers about the factors which distinguish successes from failures (Lacity and Willcocks, 2009c).

Two different kinds of ITO success factor analysis can be observed in the literature. Some of the scientists examine the factors of influence for ITO success on the basis of empirical studies; others try to derive ITO success factors from existing theories.

3.7.1 Constituent success factors from empirical studies

Scientists have mainly investigated the contribution of one or a few factors to ITO success in their studies (Grover et al., 1996; Lee and Kim, 1999) or else concentrated on the constituent phases of the ITO process (e.g. Lacity and Hirschheim (1993) focused on the contracting phase; Cullen and Willcocks (2003), Koh et al. (2004) and Pei et al. (2007) focused on the execution phase).

A comprehensive picture of the factors relevant to achieving ITO success throughout the ITO process and their interdependencies is missing from an empirical point of view. This is a major research gap. Recent research has even acknowledged that certain success factors complement each other, requiring this comprehensive picture. Saunders et al. (1997), for example, describe how the contract is the context in which the relation-

ship exists and defines the kind of interactions between client and vendor. Lee at al. (2004) and Marcolin and McLellan (1998) emphasise that companies must implement congruent outsourcing strategies (e.g. reconcilement of the nature of the contract, type of relationship management, ITO objectives) to succeed with ITO.

In order to generate the missing comprehensive picture on factors influencing success, 48 scientific publications were reviewed empirically investigating ITO outcomes to extract the known factors affecting ITO success and interdependencies. As this thesis focuses on the banking industry because of specific reasons (please refer to Chapter 4), all the reviewed publications based their findings at least partly on the investigation of ITO contracts of banks. Using qualitative content analysis, a total of 10 success factor categories were derived from 48 scientific publications[3] (see Chapter 5.1.1). The analysis of the articles yielded for the most part to the same success and failure factors, thus it can be said to have extracted the core influencing factors from the literature.

3.7.2 Success factors from management theories

Gottschalk and Solli-Saether (2005) took a different perspective on success factor research in their studies. They took 11 management theories[4] and extracted the recommendations of these theories for the realisation of successful outsourcing arrangements in general. They applied these recommendations to the context of ITO and formulated the following success factors based on management theories (see Table 10).

[3] (Cheon Myun Jong, 1992; Heinzl, 1993; Huber, 1993; Lacity and Hirschheim, 1993; McLellan, 1993; Willcocks and Fitzgerald, 1993; Heckman and King, 1994; Willcocks and Fitzgerald, 1994; Collins and Millen, 1995; De Looff, 1995; Loh and Venkatraman, 1995; Willcocks et al., 1995a; Willcocks et al., 1995b; Grover et al., 1996; Lacity et al., 1996; Gerigk, 1997; Nagengast, 1997; Saunders et al., 1997; Aubert et al., 1998; Feeny and Willcocks, 1998; Lacity and Willcocks, 1998; Marcolin and McLellan, 1998; Poppo and Zenger, 1998; Aubert et al., 1999; Lee and Kim, 1999; Gilley and Rasheed, 2000; Hirschheim and Lacity, 2000; Lacity and Willcocks, 2001; Lee, 2001; Kern et al., 2002; Cullen and Willcocks, 2003; Kim and Chung, 2003; Koh et al., 2004; Lee et al., 2004; Cullen et al., 2005; Diamond Cluster, 2005; Landis et al., 2005; Agrawal et al., 2006; Bertschek et al., 2006; McLaughlin and Peppard, 2006; Koh et al., 2007; Pei et al., 2007; Van Lier and Dohmen, 2007; Fritsch et al., 2008; Veltri et al., 2008; Kern and Willcocks, 2009; Poppo and Lacity, 2009; Lacity and Willcocks, 2009d)

[4] Theory of core competencies, resource-based theory, neo-classical economic theory, transaction cost theory, contractual theory, agency theory, partnership and alliance theory, relational exchange theory, stakeholder theory, social exchange theory and theory of firm boundaries.

Success factor	Success factor explanation	Theory
Core competence management	The organisation has to define its IT needs and manage IT services from the vendor.	Theory of core competencies
Vendor resource Exploitation	The organisation has to integrate and exploit strategic IT resources from the vendor together with its own resources to produce competitive goods and services.	Resource-based theory
Transaction cost Reduction	The organisation has to minimise 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 dependency on other transactions.	Transaction cost theory
Contract completeness	The organisation must have a complete IT outsourcing contract. The contract should prevent opportunistic behaviour in an efficient collaborative environment with balance of power between client and vendor.	Contractual theory
Production cost reduction	The organisation has to integrate and exploit IT services from the vendor in a cost effective way to produce competitive goods and services.	Neoclassical economic theory
Alliance exploitation	The organisation has to develop experience with alliances, develop alliance managers and develop the ability to identify potential vendors.	Partnership and alliance theory
Relationship exploitation	The organisation has to develop and ensure common norms that are relevant to both parties.	Relational exchange theory
Social exchange exploitation	The organisation has to enable social and economic outcomes in the exchange between the vendor and itself such that these outcomes outperform those obtainable in alternative exchanges.	Social exchange theory
Vendor behaviour control	The organisation has to make it easy and inexpensive for it to find out what the vendor is actually doing. In addition, both outcome-based and behaviour-based incentives can be used to reduce and prevent opportunistic vendor behaviour.	Agency theory
Demarcation of labour	The organisation has to implement a strict and rigid division of labour between the vendor and itself.	Theory of firm boundaries
Stakeholder management	The organisation must create efficient and effective communication with and between stakeholders to ensure continued support from all stakeholders, to balance their interests and to make the IT outsourcing arrangement so that all stakeholders achieve their goals.	Stakeholder theory

Table 10: Success factors for ITO derived from management theories according to Gottschalk and Solli-Saether (2005)

Based on three case studies, Gottschalk and Solli-Saether (2005) identified that the success of outsourcing relationships depends mainly on core competence management and stakeholder management and thus recommended focusing future research on one or two management theories and investigating existing theory contradictions.

This study does not follow the approach of Gottschalk and Solli-Saether (2005), because the applied general management theories might not cover all the success factors relevant to the specific ITO context. And it might be more beneficial to develop a specific ITO theory entirely explaining the ITO phenomenon instead of dealing with logical inconsistencies by application of multiple management theories. Lacity and Willcocks (2009b), for example, describe differing predictions for success between Transaction Cost Economics (TCE) theory and Principal Agency theory (PAT). Lacity and Willcocks (2009b) analysed the success or failure of 61 ITO decisions in 40 US and UK organisations to determine whether the right transaction types using the right contracts were outsourced or insourced and fit to the right ITO outcome as predicted from the TCE theory. They found that 87.5% of the cases did not match with the recommendations of TCE. They argued that TCE proponents could try to explain these anomalies by exceptional basic conditions like high uncertainty, language ambiguities, small number of suppliers, etc; TCE opponents could challenge TCE theory by showing that the unique nature of IT might violate major TCE assumptions. In this context, they argued that, instead of explaining exceptions to a general administrative, economic, or organisational theory, a theoretical framework could be developed that addresses specific IT sourcing decisions and outcomes, which can help to better predict successes and failures in an IT sourcing context. They propose taking two major critical success factors they identified in their research, selective outsourcing and short-term, detailed ITO contracts, as a starting point for the development of such a theory. The preliminary ITO Model (see Chapter 5.1) developed by the author contains these two critical success factors and other factors found by numerous scientific authors to be critically influencing ITO success in real-life contexts.

3.8 Summary

This chapter illustrated the current scientific knowledge about ITO. In particular, it pointed out: motivations for and risks of ITO, recommended ITO process approaches, current ITO outcomes, outcome measurements and the known factors responsible for ITO success.

Companies outsource for financial (e.g. reducing costs), technical (e.g. access to innovative technology), strategic (e.g. focus on core competencies) and political reasons (e.g. dissatisfaction with internal IT). Often a combination of objectives should be achieved. Cost reduction is still one of the primary motives for ITO.

ITO involves various risks which need to be mitigated: dependency on vendor, unexpected costs, costly contractual amendments, costly disputes or litigation, cost escalation, service debasement, loss of organisational competencies, etc.

The procedural approach recommended by ITO theorists for the conduction of ITO can be summarised in six process phases: preparation, selection, contracting, transition, execution and post-deal.

The empirical knowledge about ITO outcomes in general is small, especially regarding longer-term outcomes; the contract duration of most of the ITO ventures underlying the existing studies was not stated or short term. The evaluation of known ITO outcomes brought controversial results: organisations outsource the same IT function but experience very different results.

The measure for ITO success is not commonly defined, thus the comparability of current research results is limited. The following measures have been applied up till now: satisfaction, expectations and their realisation, performance and impact in general.

Concerning the factors that distinguish between success and failure in an IT sourcing context, no consensus exists between researchers (Lacity and Willcocks, 2009c); a comprehensive picture of factors influencing ITO success is still missing (Koh et al., 2004). IT academics call for a specific ITO theory as a basis to clearly explain important issues for ITO success instead of relying on general management theories which do not fit the ITO context exactly.

Based on the current body of knowledge, it is impossible to testify objectively if and under what circumstances ITO generates sustainable benefits. Further study is required on the longer-term outcomes of ITO and influencing factors. This knowledge gap will be taken up in this thesis.

3.9 The need for an ITO Model

Despite the fact that decades of practical experience exist worldwide with ITO, the problem of success is far from being solved. At the beginning of the 21st century, the probability of ITO success is still estimated no higher than 50:50. In addition, more and more backsourcing cases, dissatisfaction and problems with ITO are reported. Existing research about known ITO outcomes draws no consistent picture and often a contradictory one. In some cases the desired benefits were reached, in other cases benefits could not, or not in the expected degree, be realised (see Chapter 3.5). The existing ITO concepts are obviously not suitable enough to fully explain the ideal path towards the achievement of success with ITO.

According to existing research (see Chapter 3.7.2) the application of general management theories is not suitable for explaining ITO success, as too many deviations from these theories exist in the IT sourcing context. The development of a specific ITO theory explaining ITO success is therefore productive. This requires the empirical investigation of the ITO phenomenon.

Existing empirical success factor research mainly investigates the contribution of one or a few factors to ITO success or else concentrates on the constituent phases of the ITO process. This is a major drawback as, on the one hand, recent research has shown that certain success factors are dependent on each other (see Chapter 3.7.1). On the other hand, the empirical knowledge ascertained so far about ITO success and its factors of influence seems to be insufficient, because in spite of the long-standing experience a high failure rate for such projects is still registered. Both aspects require the detection of the basic totality of all factors influencing ITO success and the test of this comprehensive picture on practice cases to ascertain its practical suitability. Also, in scientific circles the dominant opinion is that the success factor knowledge ascertained so far does not cover all aspects yet and the opinion of researchers differs regarding the relevance of certain success factors (see chapters 1.2 and 3.5). This research gap is taken up by this thesis. 48 scientific publications empirically investigating ITO outcomes worldwide were reviewed to extract the known factors affecting ITO success and interdependencies. All the reviewed publications based their findings at least partly on the investigation of the ITO contracts of banks. The analysis of the articles resulted predominantly in the same success and failure factors, thus it can be acted on the assumption to have extracted the core influencing factors from the literature. This knowledge about success factors and success factor dependencies was the basis for the development of the preliminary ITO Model underlying the definitive ITO Model (see Chapter 5.1).

Previous studies of ITO show a lack of empirical research concerning the outcomes of ITO in general. So far, very view ITO studies have focused to any extent on the long-term results. A lack of experienced data about ITO outcomes exists, especially in Germany (see Chapter 3.5). This study takes up this research gap as the ITO Model is based on the empirical investigation of 8 application outsourcing cases of 5 European banks which were predominantly running between 5 and 17 years at the time of investigation.

Furthermore, the weighting of relevant success factors and their temporal relevance within the preparation, selection, contracting, transition, execution and post-deal phases of the ITO project were examined, which was missing in previous success factor research.

Success and the factors impacting success are seen as dependent on the kind of activities outsourced. But previous research reports in general do not predominantly analyse the ITO results in connection with the underlying IT function (see Chapter 3.5). This thesis focuses on application outsourcing cases to ensure the comparability of the research results and considers the whole range of aspects defining the type of ITO (see Figure 2, page 14; for example, ITO degree, financial dependency between client and vendor) in the discussion about the relevance of success factors. Hereby, success factors previously not reported and linked with the organisational form of a joint venture could be determined amongst others.

The existing ITO process models and ITO maturity models (see Chapters 3.1 and 3.2) do not contain all the success relevant aspects and hence are not suitable for explaining ITO success.

The ITO process models described in Chapter 3.1 are step by step descriptions of duties to be carried out from the beginning to the end of an ITO project. The literature review on factors influencing success underlying the preliminary ITO Model showed that not only are certain duties vital for ITO success, but also additional aspects - e.g. capabilities, behaviour patterns (in particular: communication, relationship building), organisational aspects (needed roles, project management aspects, etc.), basic internal and external conditions (corporate culture, corporate terms), aspects within the scope of the decision for or against an ITO respectively for the kind of ITO to be outsourced - which are missing in the ITO process models.

The ITO maturity models presented in Chapter 3.2 claim to illustrate best practices for the effective outsourcing of software, systems and IT, and to guide stepwise process improvement efforts with the aim of achieving business success with better IT products produced by external vendors. To fulfil this goal, these models must be guaranteed to contain all the factors responsible for the achievement of success with ITO. If one compares the comprehensive picture of known success factor research underlying the preliminary ITO Model it becomes obvious, again, that the ITO maturity models do not contain all the success relevant aspects. The maturity models seem to be also primarily duty-oriented, in the sense of which tasks to perform and when during the ITO process. The preliminary ITO Model shows that not only duties, but also other aspects, are success relevant, which is partly missing in the ITO maturity models (e.g. the capabilities of client and vendor, consideration of the basic internal and external conditions, specific roles which need to be defined, decision recommendations regarding the choice of the type of ITO, and the time of consideration of success factors within the ITO process).

To sum up, the evidence of successful long-running application outsourcing cases, the empirically validated and evaluated ITO Model which constitutes a comprehensive pic-

ture of the determining factors for application outsourcing success in the banking industry, their weighting and temporal relevance within the ITO process, uncovering the success factors linked with the organisational form of a joint-venture and the type of ITO (e.g. ITO degree, internal/joint venture/external ITO) as trigger for the relevance of certain success factors are the novel contributions of this thesis.

CHAPTER 4

Research methodology

4 Research methodology

4.1 Preliminary ITO Model

Scientists have mainly investigated the contribution of one or a few factors to ITO success in their studies or else have concentrated on the constituent phases of the ITO process (for details see Chapter 3.7.1). In order to generate a comprehensive picture of the known factors influencing success, 48 scientific publications were reviewed dealing with ITO outcomes to extract these factors and the interdependencies between them from an empirical point of view. Therefore, qualitative content analysis was applied.

In the next step, success factors and success factor interdependencies were summarised into categories with regard to contents which constitute success factor taxonomies (for details see Chapter 5.1.1). Empirically derived taxonomies are one kind of typology used by scientists which must be distinguished from theoretically developed typologies (Hambrick, 1984, p. 28). Typologies in general are used to break down a large number of items into a smaller number of categories by identifying commonalities between them. All items falling into one type should be as similar as possible (internal homogeneity) and should be as different as possible from other types in the typology (external heterogeneity) (Kluge, 1999, pp. 31-34). Typologies and taxonomies can serve as "a basis of theory development and hypothesis testing" (Rich, 1992, p. 758).

The detailed explanation of each known ITO success factor and ITO success factor dependency structured according to the developed ITO taxonomies and the sparse knowledge about the success factors' relevance for long-term ITO success and their

strength or importance in summary constitutes the preliminary ITO Model (for details see Chapter 5.1).

Initially, the development of the preliminary ITO Model was based on the professional experiences of the researcher in the area of IT outsourcing. As an employee of the IT governance department in one of the participating banks, she contributed in the development of processes between the bank and external IT vendors and beared responsibility for the internal control system (risk, security, contract and performance management) of an application outsourcing (participant observer for case E). Hence, a generally right application of the used concepts, definitions and categories in the ITO Model can be assumed. The first ideas to the preliminary ITO Model were discussed with a group of researchers, management consultants and doctoral candidate's colleagues at the Doctoral Consortium of the WI2009 conference in Vienna during presentation of a paper. In a pre-test phase according to Straub (1989), the final preliminary ITO Model was reviewed by PhD supervisors, professors from the IT area, and was tested and discussed with colleagues at work to ensure a right conceptual design and practical applicability of the preliminary ITO Model. A last check of the preliminary ITO Model took place within the empirical validation. The initial case study was conducted as a pilot study in which the preliminary ITO Model was confirmed, no change need resulted (see also chapter 4.4).

The practical relevance of the preliminary ITO Model was empirically tested in this thesis by investigation of whether its aspects apply to 8 successful long-running ITO cases of 5 European banks.

4.2 Identification of ITO cases for investigation

This PhD research will focus on the banking industry, because the strategic importance of information systems in banking is widely substantiated (Office of Technology Assessment, 1987; OECD, 1992). Banks rely heavily on IT as the information infrastructure is the mechanism that enables their organisations to exist (Wilder, 1989). The products banks are selling to customers are not tangible; they consist almost solely of information in the form of datasets (e.g. current account, loan account, savings account, deposit account) which are, if at all, printed out in account application forms. Not only is the arrangement of the banking product itself crucial for a bank to stay competitive in the market, but rapid information processing (e.g. period of time from the application for a loan until its disburse), the provision of real time market data (e.g. stock prices), the real time connection to markets (e.g. stock markets) or extensive, structured information about each customer, ideally quick and easily accessible for customer consultants in a single database (customer relationship management – CRM; Data Mining) are all decisive for customer acquisition and loyalty, to name just a few. Furthermore, the new distribution channel of the internet serves as a technological platform for worldwide data exchange and thus even increases the dependence of banks on information, as banking products can already be bought online via the internet without personal customer contact. As banks depend heavily on IT in their business, this branch can serve as an object of study for addressing questions concerning the longer term evolution of the IT branch in general and ITO in particular.

Five European banks agreed to participate in this research. The enterprises varied in size from small to large banks with 19,000 m – 360 bn in assets. The business model of the banks ranges from a pure retail orientation to mixed models and pure wholesale orientation. The central business districts of the banks are in the following European countries: Germany, Austria, Italy, France, Central and South-Eastern Europe. Figure 6 shows the

places of business and Table 11 (page 70) the general data of the participating banks. The general data contain the business model, the central business district, the operating profit, the total assets, the number of employees in total, the number of IT employees, the overall IT budget, the expenditures for ITO in total and the percentage of existing ITOs measured by the value of ITO contracts compared to the overall IT budget per bank.

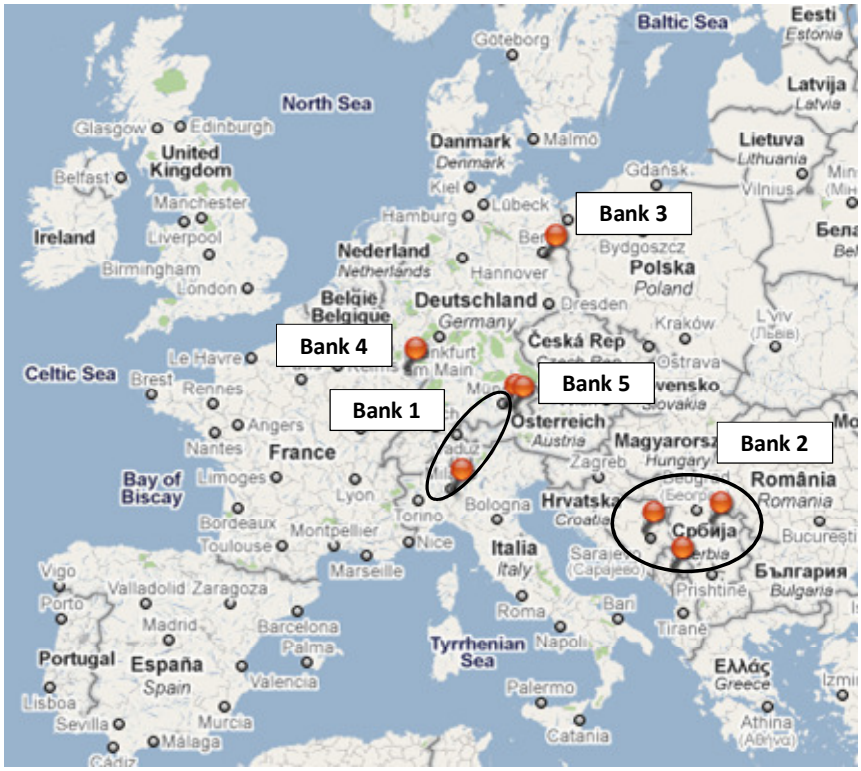


Figure 6: Participating banks' places of business

First, each bank was asked to list all its ITO contracts in a written questionnaire. For each ITO contract, the respondents were asked to indicate the type of IT function outsourced by selection of the appropriate element of the ITO options illustrated in Figure 2 (page 14). To avoid conceptual misunderstandings, a written explanation of all possible ITO options and their elements was provided in the form of a glossary. Additionally the companies were asked to provide basic data about the ITO contract (date conclusion of the contract, overall contract duration, years into contract, value of contract) and their

company (% of IT functions outsourced, number of overall and IT employees, total assets, operating profit).

For the accomplishment of research objective 3 (see Figure 1, page 9), eight ITO contracts were selected from this database with a current ITO contract duration between 2 and 17 years. Seven of the eight selected ITO contracts run already > 5 years. The main focus on ITO contracts with long contract duration was made to be able to identify the factors responsible for long-term and lasting ITO success. In order to provide a complete picture of ITO success factors and in order to identify probably existing differences of the ITO success factor relevance originating from different contract durations, one ITO contract was included which is two years into contract.

As success is seen as dependent on the kind of IT function outsourced (Dibbern et al., 2004; Mahnke et al., 2005), all selected ITO contracts had the same kind of IT function as a basis to ensure the comparability of the research results. The ITO contracts studied were all application oriented (see Figure 2: IT subject, page 14). Table 12 (page 71) shows the type of the investigated ITO contracts which is defined by the chosen ITO options (see Figure 2, page 14).

It has to be noted that this research design might not cover success factors probably unique to new ITO trends, like for example cloud computing (see Chapter 2.2.2), because this type of ITO contract has not been running for long. If these new concepts stand the test of time, the investigation of critical success factors in these areas and a comparison with the ITO Model which will be derived in this study would be a need for further research. The ITO Model must be a living concept in practice to ensure that changing ITO trends are always reflected adequately.

	Business model (main focus)	Central business district	Operating profit 2009 EUR	Total assets 2009 EUR	Number Employees total 2009	Number Employees IT 2009	IT budget 2009 EUR	ITO contracts 2009 EUR	% ITO*
Bank 1	• Central bank; • Medium-sized businesses; • Specialist financing; • Home loans.	• Germany	ca.– 2.000 m	ca. 300.000 m	ca. 4.500	ca. 400	ca. 180 m	ca. 95 m	ca. 53%
Bank 2	• International Leasing; • Retail/Private banking; • Corporate banking.	• Austria • Italy • South-Eastern Europe	ca. -1.400 m	ca. 41.100 m	ca. 7700	ca. 35	ca. 62 m	n.s.	ca. 45%
Bank 3	• Direct retail banking; • Asset • management; • Project financing.	• Germany	ca. 130 m	ca. 51.000 m	ca. 1200	0	ca. 36 m	ca. 36 m	100%
Bank 4	• Central bank • Medium-sized Businesses	• Germany • France	ca. 17 m	ca. 19.000 m	ca. 500	24	ca. 13 m	n.s.	n.s.
Bank 5	• Private and Business customers • Wealth management • Corporate and Investment Banking	• Italy • Germany • Austria • Central and Eastern Europe	ca. 3500 m	ca. 360 bn	ca. 21000	0	Not specified	n.s.	n.s.

* Value of ITO contracts 2009 EUR compared to overall IT budget 2009 EUR

Table 11: General data about the participating banks

Typification criteria:	Possible Values:	Application A:	Application B:	Application C:	Application D:	Application E:	Application F:	Application G:	Application H:
Type of application		Core Banking Application	Core Banking Application	Rating Application	Customer Relationship Management Application	Standard Application (personnel accounting, inventory)	Core Banking Application	Diverse Banking Applications	Diverse Banking Applications
Annual costs (2009)		n.s.	n.s.	ca. 2,5 Mio. €	ca. 2 Mio. €	ca. 3 Mio. €	ca. 300–400 T€	n.s.	ca. 5 Mio. €
Contract duration	Years	Unlimited; Cancellation period: 2 years	Unlimited; Cancellation period: 3 years	5 years with unlimited prolongation; Cancellation period: 1 year	Contract 1: Unlimited; Cancellation period: 1 year Contract 2 (new vendor): Unlimited; Cancellation period: 3 months	Unlimited; Cancellation period: 1 year	Contract 1: 10 years; Contract 2 (prolongation): 7 years; shorter period because of a planned strategic redirection of the bank's IT entity.	Unlimited; Cancellation period	Unlimited; Cancellation period: 6 months to end of the year
Years into contract	Years	ca. 16	ca. 17	ca. 6,5	Contract 1: ca. 4 Contract 2: ca. 0,5	ca. 4,5	ca. 14	ca. 2	ca. 7
Client/Vendor Combination	• 1 client / 1 vendor • Multiple clients / 1 vendor • 1 client / Multiple vendors • Multiple clients / Multiple vendors	• 1 client / 1 vendor The contract is held by the parent bank	ITO contract: • 1 client / 1 vendor	ITO contract: • 1 client / 1 vendor Partnership agreement: • Multiple clients / 1 vendor	Contracts 1/2: • 1 client / 1 vendor	• 1 client / 1 vendor	• 1 client / 1 vendor	• 1 client / 1 vendor	• 1 client / 1 vendor
Financial Dependency	• Internal • Joint-venture • External	• External	• External (until 06/2008 equity holding)	• Joint Venture	Contract 1: • External with equity holding Contract 2: • External	• External (until 12/2010 equity holding)	• Internal	• Internal	• Internal

Table 12: Type of investigated ITO contracts

4.3 Determination of ITO outcome of investigated ITO cases

The assessment of success or failure and their influencing factors is heavily dependent on how success is defined and measured (Gable 1996). In this study, it is assumed that ITO is an IT strategy bounded with specified objectives and that the goal of the outsourcing transaction(s) is the achievement of these objectives. This definition is widely used (see Chapter 3.6) and can be attributed to the nature of strategy. Strategy in general is defined as the creation of a unique and valuable competitive position (Porter, 1996). The management of an organisation has the responsibility to ensure well-fitting human and technological resources in the activities of an organisation with the objective of achieving the best possible outcome (Porter, 1996). According to the resource-based view (RBV) of strategy, external resources need to be identified to complement internal resources (Aldrich, 1976). Thus, IT (internally or externally performed) must also be capable of supporting the strategy and goals of the organisation ("business – IT – alignment") and is therefore connected with the achievement of specific (IT / ITO) objectives. Depending on the organisation's business goals, the objectives connected with ITO can differ between organisations. Thus, the measurement model applied in this empirical study needs to cover organisation-specific ITO objectives. The measurement model of Dahlberg and Nyrhinen (2006) fulfils these preconditions and thus will be applied in this study. The measurement model of Dahlberg and Nyrhinen (2006) measures ITO success qualitatively by evaluation of objectives set versus objective achievements by a 7-point-Likert scale for each objective and overall. Dahlberg and Nyrhinen (2006) assigned their generic list of ITO objectives to four categories ("factors") of objectives: strategic, economic, technological and social. The measurement system allows the determination of the importance of a particular ITO objective and how well it was achieved. Dahlberg and Nyrhinen (2006) suggested to use, validate and further develop their instrument in future empirical studies. As Dahlberg and Nyrhinen

(2006) based their measurement model on industries other than the banking industry, it was adapted to the banking context. Banking industry specific ITO objectives were investigated (see Chapter 3.3) and added to the predefined list of ITO objectives from Dahlberg and Nyrhinen (2006) in the respective factor category. The interviewees could also state additional bank-specific ITO objectives in each factor category if none of the predefined ITO objectives applied in the investigated case. Beside the specific ITO objectives, the measurement model also measures the overall success of the ITO in the same way. The interpretation of the Likert scale was adopted from Dahlberg and Nyrhinen (2006): By an assessment of "7" the ITO objectives were fully reached ("totally agree"), by an assessment of "1" the ITO objectives were not reached ("totally disagree"). By assessments between "1" and "7" the ITO objectives were partially reached to a rising extent. In order to receive an unequivocal assessment of the examined ITO cases concerning "success" or "failure" from the interviewees, the measurement system of Dahlberg and Nyrhinen (2006) was expanded by definition that an overall assessment of the ITO case > 4 is valued as "success". In summary, by using this measurement model it is possible to qualitatively measure organisation-specific ITO objectives, the importance of each objective and the objectives' achievement. Table 13 shows the applied measurement model in overview.

The measurement model of Dahlberg and Nyrhinen (2006) measures ITO success qualitatively and thus does not respond directly to the need of objective and comparable measures. But it has to be noted that some ITO objectives can hardly be measured objectively (e.g. access to better IT management, quality of service) and the concept of satisfaction is often applied to measure ITO success (see Chapter 3.6) in scientific research. Satisfaction as a measure for ITO success is regarded as suitable, because satisfaction is the best surrogate for capturing both the cognitive and affective components of human actions (Grover et al., 1996).

ITO objective(s)	Our objective was to*2							Objective reached*2						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Strategic														
Focus on core competencies														
Improve the capability of IT to support the needs of business operations														
Improve the management of technology and human resources (e.g. exoneration of resources for other important projects, better ways to manage/work)														
Scale economics (synergies, streamlining of services, diversification benefits)														
Increase the number of IT based innovations														
Reduce the number of IT staff														
Generate a momentum for change/flexibility (e.g. potential for participating as a vendor in the ITO market)														
Other:														
Economic														
Reduce IT expenditure														
Improve control over IT expenditure														
Improve financial freedom and flexibility (capital release, flexibility in budgeting and investments)														
Other:														
Technological														
Ensure the availability of necessary or new technology														
Ensure the availability of necessary or new IT staff or skills														
Standardised IT environment (hardware, software, processes)														
A well functioning IT environment														
Other:														
Social														
Improve the quality of service (safe, reliable service corresponding to needs, capable of adapting to individual requirements)														
Improve the availability of services (e.g. 7d/24h)														
Improve user satisfaction														
Other:														
Overall														
We are satisfied with our overall benefits from ITO														

*1: totally disagree, 7: totally agree

Table 13: Measuring instrument for the measurement of ITO success according to Dahlberg and Nyrhinen (2006) adapted to the banking context

4.4 Validation of the preliminary ITO Model

The known factors influencing ITO success and success factor interdependencies were validated by using multiple case study methodology (see Chapter 5). For each ITO case it was investigated whether the success factors respectively success factor interdependencies of the preliminary ITO Model apply. For the success factors which emerged as relevant the strength or importance and its temporal relevance within the ITO process was determined additionally.

Multiple case studies

Case study methodology was applied since a "why" and "how" and question will be investigated (Why and how were certain ITO projects successful?), since the investiga-

tor has little control over events, and since a contemporary phenomenon is investigated within a real-life context (Yin, 1989). Especially in information systems research, a case study approach is recommended because it facilitates an understanding of the nature and complexity of the processes taking place and thus learning about the state of the scientific knowledge and developing theories from practice. The trial-and-error process practitioners are engaged with is essential for knowledge to accrue. Case studies can be used in all phases of knowledge formation: exploration, hypothesis generation and testing. For description, theory building and theory testing multiple case designs are recommended (Benbasat et al., 1987). Thus, in order to validate the known success factors and the success factor interdependencies described in Chapter 5.1, and to determine their weightings and temporal relevance, a multiple case study was conducted for not only confirming the existing items, but also to conceptually develop the items, rejecting them and/or identifying missing items.

Yin (1993) distinguishes between six different types of case studies which are dependent on the number of cases (single or multiple cases) and if the case study is exploratory, descriptive or explanatory. From these types, a multiple explanatory case study was chosen. This study is explanatory because cause-effect relationships are explored within this study – explaining which causes (success factors) produce which effects (ITO success). Multiple cases are investigated, because the evidence from multiple cases is considered more compulsory, which makes the research results more robust (Yin, 1989).

In bank 1, four applications outsourcing cases, and in banks 2 – 5 one application outsourcing case per bank were investigated (see Figure 7).

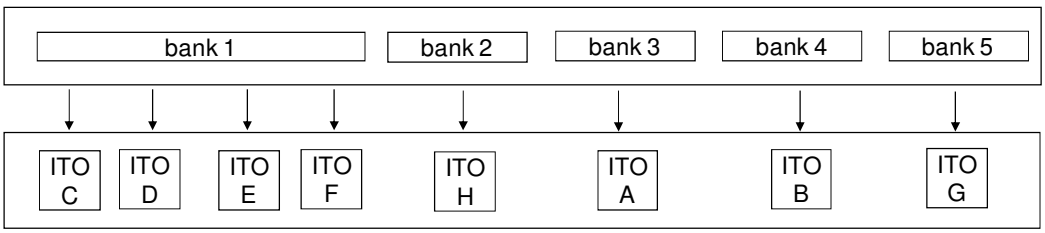


Figure 7: Case study portfolio

Yin (1989) describes the five necessary components of a research design when using case study methodology, which is the logical sequence that connects the empirical data to the research questions and to its conclusions: the study´s questions, its propositions (if any), its unit(s) of analysis, the logic linking the data to the propositions and the criteria for interpreting the findings:

- **Study question:** The main question underlying this study is:

  "What factors make ITO cases successful?"

- **Study propositions:** This study makes the following propositions:
  - Proposition 1: The success of ITO is dependent on the sum of factors described in the preliminary ITO Model in Chapter 5.1.
  - Proposition 2 (Rival): The ITO success is dependent on the single success factors or on ITO success factors within certain ITO process phases.

  Proposition 2 was established based on knowledge gained from the literature study at the head of this research. The prevailing part of the previous success factor studies investigated single success factors or success factors within separated part processes of the ITO process (see Chapter 3.7). The present ITO knowledge is not sufficient, to fully explain ITO success and the determining factors (see Chapter 3.9). Hence, proposition 1 was established as the leading proposition in this study. Proposition 1 claims that ITO success can only be explained by consideration of all determining factors of ITO success, by validation of these on the basis of long-term successful ITO cases and by detection of missing success factors.

- **Unit of analysis:** The unit of analysis is to be equated with the extent of a "case" which is an application outsourcing project in this study. This means that infrastructure ITOs and business process ITOs are not investigated in this study. The focus on one IT subject allows for the comparability of the research results. Furthermore, the majority of the application outsourcing cases studied should already be long running (> 5 years) in order to be able to identify the success-critical factors for long-term success. One case should investigate a short-running application outsourcing to determine probably existing differences in the success factors' relevance depending on the term of the ITO. Other limitations in ITO options (for details see Figure 2, page 14) were not given for the choice of the ITO project to be studied.
- **Linking data to propositions and criteria for interpreting the findings:** By "pattern-matching," several pieces of information from a particular case were related to the theoretical propositions described in Chapter 5.1, as suggested by Yin (1989). The pattern-matching technique is related to the dependent (ITO success) and independent variable (success factors) in this study (Yin, 1989). Yin (1989) suggests comparing at least two rival propositions when interpreting the final findings. Within this study this is done by comparing propositions 1 and 2. The measurements applied in this study leading to the research conclusions are shown in Table 14.

A precondition for the definition of the described components of the research design is the development of a preliminary "theory" related to the research question prior to the conduct of the study. This is seen as the most critical component in doing case study research as it serves for generalising the subsequent results (see the explanations to external validity below) (Yin, 1993). The "theory" in this context should not be seen as equal with the formality of grand theories in social science, nor is the investigator expected to be a masterful theoretician. Rather, "theory" means the design of research

steps according to some relationship to the literature, policy issues, or other substantive source (Yin, 1993) in order to have a sufficient blueprint for the case study. This also helps to contribute to a cumulative body of knowledge and to avoid producing isolated empirical inquiries (Yin, 1993). The success factors and success factor interdependencies extracted from a large literature review of 48 scientific studies embody the "theory" in this study (for details see Chapter 5.1: preliminary ITO Model).

• **ITO outcome**	Comparison of ITO objectives set versus ITO objectives achievement by a 7-point-Likert scale for each objective and overall. By an assessment of "7" the ITO objectives were fully reached (ITO success), by an assessment of "1" the ITO objectives were not reached (ITO failure). By assessments between "1" and "7" the ITO objectives were partially reached, with rising extent from "2" to "6". ITO projects with assessments > 4 (mean value) were classified as successful in this study. See Chapter 4.3 for details.
• **Relevance of success factors**	The relevance of a predefined list of success factors was measured by the following measurement categories: • Yes: The success factor was relevant for the achievement of ITO success • No: The success factor was considered and is rated as not relevant for the achievement of ITO success • Not assessable: The relevance of the success factor for the achievement of ITO success was not assessable. In addition, the interview partners were asked to describe when required additional success factors, which were evaluated in the same way.
• **Success factor weightings**	The weighting of relevant success factors was measured by the following measurement categories: • Mandatory: The success factor was rated as mandatory • Partly necessary: The success factor was rated as partly necessary which means that its relevance depends on the existence of certain basic conditions • Nice to have: The success factor was rated as "nice to have" which means that it has a positive effect on ITO success but is not necessarily relevant
• **Temporal relevance of success factors**	The temporal relevance of relevant success factors was measured by the assignment to the typical ITO process phases: preparation, selection, contract, transition, and execution, post-deal. For an explanation of each ITO process phase see Chapter 3.1.
• **Relevance of success factor interdependencies**	The relevance of a predefined list of success factor interdependencies was measured by the following measurement categories: • Yes: The success factor dependence existed and is rated as relevant for the achievement of ITO success • No: The success factor dependence existed and is rated as not relevant for the achievement of ITO success • Not assessable: The existence and relevance of the success factor dependence for the achievement of ITO success was not assessable. In addition, the interview partners were asked describe when required additional success factor interdependencies, which were evaluated in the same way.

Table 14: Applied measurements in the multiple case study

Validity and reliability assessments of the applied multiple case study methodology

In order to maximise the quality of the data, the study followed the guidelines on validity and reliability assessments recommended by Yin (1989) as shown in Table 15. Construct validity, internal validity, external validity and reliability must be ensured. Table

15 gives an overview of how the quality of the data and thus scientific rigour is ensured in this study.

Criterion of research quality	Applied research strategy

Construct validity
Establishment of correct operational measures for the concepts being studied.
	• ITO success was measured by the comparison of ITO objectives set versus ITO objectives achievement based on the measurement model for ITO success of Dahlberg and Nyrhinen (2006) adapted to the banking context. The predetermined ITO objectives are based on a literature survey on the general motivations which bring banks to outsource (see Chapter 3.3). Additional ITO objectives could be mentioned during the study (see Chapter 4.4 for details). This measurement model ensures a company specific evaluation of ITO success.
	• The preliminary ITO Model (known ITO success factors and success factor interdependencies) were identified based on an extensive literature review of 48 empirical studies. Additional ITO success factors and success factor interdependencies could be determined during the multiple case studies.
	• Multiple sources of evidence were used to ensure the construct validity of the multiple case study research of eight ITO cases in five European banks:
	  • Open-ended interviews on the basis of a semi-structured interview field manual rigorously following the same interview procedure.
	  • Written documentation as evidence for statements in the interviews.
	  • In-depth knowledge of the interviewer about one investigated ITO case as participant observer.
	• All interview participants proofread and confirmed the interview protocol.
	• Establishment of a chain of evidence by explicitly linking the success factors and success factor interdependencies extracted from the literature (preliminary ITO Model) to the data collected and the conclusions drawn.

Reliability Repeatability of results.	• The procedure for conducting the interviews and the case results is documented. • A case study database with the interview protocols, the confirmation of the interview protocols, the case study description and the written documentations exists.
Internal validity Relevant for causal or explanatory studies where event x led to event y. Certain conditions are shown to lead to other conditions, as distinguished from spurious relationships.	• The preliminary ITO Model (known ITO success factors and success factor interdependencies) were identified based on an extensive literature review of 48 empirical studies. Additional ITO success factors and success factor interdependencies could be determined during the multiple case studies. • Application of pattern-matching technique. Hereby, the data obtained from the case analysis were related to the preliminary ITO Model described in Chapter 5.1 as a basis for the research findings.

External validity
Ability to generalise the findings of a study.
	• Analytical generalisation occurs within the applied multiple case studies. The preliminary ITO Model established before conduct of the study, which embodies the success factors and success factor interdependencies extracted from a large literature survey of 48 studies, was tested through literal and theoretical replications of the findings in the multiple case studies.
	• Obtaining of expert opinions on the ITO Model from four consultants of three leading ITO advisory companies.
	  • Open-ended interviews following the same interview procedure.
	  • All interview participants proofread and confirmed the interview protocol.

Table 15: Scientific rigour and multiple case study research (Yin, 1989)

Construct validity

Construct validity means the establishment of correct operational measures for the concepts being studied (Yin, 1989). The operationalisation of ITO success and ITO success factors was based on established measures from the literature (see Chapter 3.6 and Chapter 5). According to Yin (1989), construct validity was improved by using multiple sources of evidence, by establishing a chain of evidence, by proofreading of the interview protocol and research results by the case study participants.

The data were collected by semi-structured interviews with IT managers who made the decision to outsource the respective IT function respectively are currently responsible for the investigated ITO case. Table 16 lists the business functions of the study participants per case: General Manager, division leader IT, subsidiary leader IT, heads of IT departments, and heads of vendor management departments.

Case	Business function of study participant
A	General Manager
B	Division leader IT
C	Head of IT department
D	Head of IT department
E	Head of IT department
F	Subsidiary leader IT
G	Head of vendor management department
H	Head of vendor management department

Table 16: Business function of multiple case study participants

The hierarchy level of the management was chosen, because ITO success is defined strategically in this study (see Chapter 4.3). It is acted on the assumption that the management, rather than the operational level, of the client company is informed about the business objectives of the company and thus about the objectives connected with ITO which need to be derived from the business objectives (see Chapter 2.3). Operational units were integrated by the interview partners when required. The interviews were

done either face-to-face or via telephone, were open-ended and lasted between one and a half and three hours with the average being two hours long.

Systematic interviewing and analytical methods helped to establish a chain of evidence. A semi-structured interview field manual was developed in the preliminary work (see Appendix B). The interview field manual was proofread by two supervising professors. Prior to the interviews, the interviewees were informed in detail about the data to be gathered and how the interview would be conducted in order to ensure a good coverage of the research questions and an excellent use of the time spent on the interviews (Benbasat et al., 1987). The interview field manual was provided beforehand. The comprehensibility of the interview field manual was further tested during the first interview. No need to change originated from the first interview. Hence, the interview field manual was used in this form for all subsequent interviews. All interviews followed the same procedure. During the interview, the interviewer thoroughly compared the wording and meaning of the expressed viewpoints of the interviewees with the terms and meanings used in the preliminary ITO Model in order to avoid ambiguity due to the terms and definitions used. Beside the questions regarding the pre-formulated success factors and success factor interdependencies, the interview field manual gave the opportunity to add missing aspects. Several new success factors were stated and reasoned. In order to ensure precious data, a detailed interview protocol was written after the interview (Benbasat et al., 1987). The interviewee was asked to review the interview protocol to ensure that the answers were understood correctly by the interviewer. Additional comments were provided to clarify incomplete or inaccurate issues. The final interview protocol was confirmed by the interview partners.

In addition to the interview data, written documentation was gathered as evidence for the statements in the interview if possible. Financial statements, budgets, organisational

charts, ITO contracts and service level agreements (in most cases), documentation about the internal control system: due diligence report, annual reports, vendor reports about audit results, service level compliance, security and risk issues (in two cases). Furthermore, the researcher is responsible for the regulatory compliance of case E and thus could gain in-depth ITO knowledge in this case as a participant observer. From these multiple data sources, both qualitative and quantitative data were collected over the period from 2009 until 2010.

During data collection and data analysis, a linkage was made between the research question, the preliminary ITO Model, the data collected and the conclusions drawn. Thus, a chain of evidence was maintained.

For data collection, it has to be decided if the empirical data are collected one-time (several days) or over a longer period (a year or more). As the entire study is collected by a single investigator, the one-time data collection was chosen, as the longitudinal method would have prohibited the study from including multiple cases, which was decided to be a suitable strategy for investigation of the research question. This approach allows for post-hoc longitudinal data collection (Yin, 1993).

Reliability

Reliability means that another investigator doing the same case would come up with the same results (repeatability of results) when following the same research procedure (Yin, 1989). This requires the need to document the research procedure used. The procedure for conducting the interviews (see construct validity) and the case results (see internal validity) is documented. Furthermore, the interview protocols, the confirmation of the interview protocols and the multiple case study description are stored in a case study database.

Internal validity

Internal validity signifies a valid causal relationship to ensure that certain conditions are shown to lead to other conditions, as distinguished from spurious relationships (Yin, 1989). This quality measure is only relevant for causal or explanatory studies where event x led to event y. Internal validity is relevant in this study, as it is investigated amongst other things which success factors (events x) are responsible for ITO success (event y). The preliminary ITO Model underlying this study addressing success factors was formed based on a literature review and synthesis of 48 scientific studies. Thus it can be acted on the assumption that all the possible factors influencing ITO success are covered by the preliminary ITO Model. Internal validity was further ensured by investigation of the ITO phenomenon by a series of steps.

- The first step was to form the preliminary ITO Model based on the literature review and synthesis of 48 scientific studies whose results were either solely or partly based on the ITO experiences of banks. From this rich database, the currently known success factors were derived and summarised by developing taxonomies for success factors and success factor interdependencies. This embodies the preliminary ITO Model to be tested in the multiple case studies.

- In a second step, the initial case study was conducted as a pilot study on the basis of the predefined interview field manual and interview procedure (see construct validity). No changes needed to be made to the research design, which was therefore applied to all subsequent case studies.

- In a third step, 7 more case studies were conducted on the basis of the predefined interview field manual and interview procedure (see construct validity).

The multiple case study report is organised in a question-and-answer format without a traditional narrative following the questions in the interview field manual (see Yin, 1989). The individual answers of the 8 cases to each question of the interview field manual are presented together, which serves as the basis for the case analysis. This approach is seen as very advantageous in the case of multiple case studies as it allows a reader only to examine the answers within each case study and to be able to make cross-case comparisons tailored to its specific interests.

- Within the case analysis a pattern-matching technique according to Yin (1993) was applied to examine whether a verifying correlation to the preliminary ITO Model can be achieved across cases or if case differences exist. Pattern matching was introduced by Yin (1993) amongst others for the investigation of cases which have a certain type of outcome and if the investigation focuses on how and why this outcome occurred in each case. As this study investigated the determinants of successful ITO projects, this technique was adopted. Pattern matching according to Yin (1993) refers hereby to the determinants of the type of outcome. Hence, with the use of the pattern-matching technique it is examined whether the empirically investigated determinants of ITO success (= patterns), which are success factors and success factor interdependencies, coincide with the predictions of the preliminary ITO Model. Therefore, the wording and meaning of the statements of the interviewees were thoroughly compared to the terms and definitions used in the preliminary ITO Model. A precise pattern matching was supported by pre-formulating of the success factors and success factor interdependencies in the interview field manual. According to Yin (1993) the comparison between the predicted and the actual pattern may involve no quantitative or statistical criteria.

- In order to get certainty about the stability of the findings, the cross case analysis was done not only for all 8 cases (cross-case analysis 1) but also for around two-thirds of the cases (cross-case analysis 2). The choice of the cases for the second cross-case analysis considered cases with different types of ITO as these were the main reasons for deviations between the investigated cases (see external validity for more details). The results of cross-case analysis 1 could be confirmed by cross-case analysis 2.

External validity

External validity refers to the ability to generalise the findings of a study, which means that the results of the research can be applied to a setting beyond a single case. According to Yin (1993), generalisation in case study research happens at the analytical level, which differs substantially from statistical generalisation.

> *"In analytical generalisation, a previously developed theory is used as a template against which to compare the empirical results of the case study. If two or more cases are shown to support the same theory, replication may be claimed. The empirical results may be considered yet more potent if two or more cases support the same theory but do not support an equally plausible, rival theory... The contrasting, and inappropriate, manner of generalising assumes that the selected cases are some sample of a larger universe of cases, which leads to such incorrect terminology as the "sample of cases" or the "small sample of cases" ...Such sampling criteria will usually be irrelevant in designing case study research and should be avoided"* (Yin, 1993, p. 50).

The required "theory" in this study is the preliminary ITO Model which consists of success factors and success factor interdependencies extracted from the literature (see Chapter 5.1). The "theory" states the conditions (success factors) under which a particu-

lar phenomenon is likely to be found (literal replication) and the conditions when it is not likely to be found (theoretical replication) (Yin, 1989). This replication logic requires the application of a multiple case study. Thus eight application outsourcing cases were investigated encompassing five leading European banks as ITO customers (see unit of analysis). The phenomenon investigated in this study is ITO success, and it is hypothesised that ITO success is dependent on the sum of the factors described in Chapter 5.1 which is the basis for literal replication across cases.

Some success factors could be confirmed in all cases, hence literal replication was accomplished for these success factors. Some success factors were not relevant in each case, in spite of the fact that in every case study application outsourcing was examined in order to guarantee the comparability of the results. Thus, it was becoming obvious that the success factors' relevance not only depends on the kind of IT function outsourced, but also on other surrounding conditions. The deviations between the cases could be explained based on information given by the interview partners and by comparing the basic conditions of the investigated ITO cases. The deviations depend mainly on different types of ITO. Thus a theoretical replication could be achieved for those success factors.

Types of ITO influencing the relevance of ITO success factors
• **Organisational form of ITO** ITO can basically be organised as external ITO, joint-venture or internal ITO. Figure 2 (page 14) and Table 1 (page 15) give an explanation of the three forms in detail. If one looks at the organisational forms in this order, a rising degree in financial participation of the client in the vendor is connected with it. With this financial participation, on the other hand, an influence of the client on the vendor is connected which enables the client to form the vendor performance in a more or less high degree according to its needs. Additionally, the financial participation relativises the existing aim conflict of profit maximisation on the vendor's side and cost minimisation on the client's side within the scope of the ITO contract, because the client also has an interest in the continuity of the vendor, because his capital is bound in the vendor organisation. By this interference of the vendor by the client sinks the relevance of particular success factors or does no longer exist. For example, the securing of a reasonable vendor profit is not relevant in the case of internal ITOs, as no profit achievement intention exists. Instead, the outsourced IT function should be produced with as low as possible costs.
• **Delivery model of ITO** The delivery model contains different possible places of service provision. It is distinguished between onsite, onshore, nearshore and offshore delivery model. Figure 2 (page 14) and Table 1 (page 15) give explanations of the four forms in detail. The nearshore and offshore delivery model represents a service provision within or beyond the continent of the client's place of business. With it, cultural differences arise between client and vendor. Theses cultural differences can also occur in the onsite or onshore delivery model, if employees of a different nationality serve the client. The cultural differences influence the relevance of particular success factors. One of these success factors is the regular monitoring and control of the vendor. A strict control of the vendor in case of cultural differences and the identification and management of these play an important role in ITO success (see in particular case H). Furthermore, the success factor "minimum customer involvement" is not relevant in this case, for example.
• **Degree of ITO** A client company can either fully or partly outsource its information technology. For a detailed description of the two possibilities see Figure 2 (page 14) and Table 1 (page 15). The degree of ITO influences the relevance of single success factors. For example, the securing of the internal capability to implement specific requirements not covered by standard applications of vendors is a success factor under investigation. It is not relevant in case of full ITOs (see case G).

• **Outsourced type of IT function (IT subject)** The IT subject to be outsourced is currently typified regarding the degree of business relevance according to infrastructure, application, business process and knowledge process outsourcing (see Figure 2 (page 14) and Table 1 (page 15)). This study focuses on the investigation of one type of IT subject, application outsourcing, to ensure the comparability of the research results. Within this study it emerged that different aspects within the application cluster are vital for the relevance of certain success factors. For example, if the application is classified as critical or strategic or commodity application. Critical / strategic IT functions should only be outsourced in connection with a detailed contract and a strategic partner (see success factor dependencies). Another aspect within the application cluster which affects the relevance of success factors is the differentiation whether standard functionality available in the market is sourced or if individual demands must be implemented externally. The success factor securing that long-term employees join the vendor is only relevant if necessary knowledge for the external operation of the outsourced application is not available in the market (e.g. in the case of the ITO of individually developed applications without good system documentation, or with ITO of standard applications with resource bottlenecks in the market).

Table 17: Basic conditions influencing the relevance of success factors

The internal validity of the study results is further enhanced by establishing of the rival proposition that solely a single success factor or a subset of success factors are relevant for ITO success, as several studies postulate (Grover et al., 1996; Lee and Kim, 1999; Lacity and Hirschheim (1993); Cullen and Willcocks (2003); Koh et al. (2004); Pei et al. (2007)). In every examined case a huge number of success factors were seen as responsible for the ITO success. Thus, the rival hypothesis was disproved.

Within the scope of the semi-structured case study interviews, the interview partners had to deliver not only an assessment of the relevance of pre-formulated success factors and success factor interdependencies, but also had the opportunity to state additional success factors and success factor interdependencies. For these additionally mentioned factors no comparison can be drawn to the other case studies, thus an analytic generalisation is not possible for these factors.

The final relevance and weighting of the success factors was given on the basis of a qualitative analysis and comparison of the answers of all 8 cases. For the aggregation of all answers to the final result, the following definitions were used:

- Relevance:
    - Yes: Success factor relevant for ITO success
    - No: Success factor not relevant for ITO success
- Weighting:
    - Mandatory: Success factor basically relevant
    - Partly necessary: The relevance of the success factor depends on the existence of certain surrounding conditions (e.g. ITO options)

The reasoning for the final result is given within the case analysis.

The preliminary ITO Model was adjusted based on the results of the case analysis. Success factors were confirmed, rejected, missing success factors were identified, success factors were conceptually developed and the weighting for each relevant success factor and its time of relevance within the ITO process was determined. Success factor interdependencies were confirmed or rejected.

4.5 Design of the novel ITO Model

The main result of this thesis is a novel ITO Model guiding outsourcing banks step by step in planning and implementing an application outsourcing project incorporating weighted factors responsible for ITO success. The novel ITO Model was designed in three steps:

- In the first step, the empirically confirmed success factors / success factor interdependencies were translated into "rules" which are action instructions.

- In the second step the rules were sorted chronologically according to the empirically collected temporal relevance of the underlying success factor within the ITO process phases: preparation, selection, contract, transition, and execution, post-deal.

- In the third step the rules were assigned to four levels of environment: external factors having an effect on the outsourcing enterprise, internal factors at enterprise level, internal factors at IT level, and internal factors at ITO project level to point whether and in which extent the success factor is influenceable by IT units of the outsourcing enterprise. External success factors are settled at the industrial level and can therefore hardly be governed. Internal factors at enterprise level are factors of influence within the outsourcing enterprise (excluding IT and ITO specific factors). These factors can possibly be influenced by the ITO project, but their fulfilment de-

pends on the willingness of people outside the IT department to support the ITO project. Internal factors at IT level reflect IT specific success factors. Internal factors at ITO project level are the success factors influencing directly the ITO project during the ITO process. The strongest possibility of influence comes from these IT-related internal factors (IT level, ITO project level) as the responsibility for the conversion lies in the competence area of the IT department.

4.6 Evaluation of the novel ITO Model

In order to further strengthen the external validity of the research results, the ITO Model was evaluated by obtaining expert opinion.

Four consultants of three leading ITO advisory companies were interviewed. Table 18 shows the business functions of the interview partners.

Expert	Business function
Expert 1	Manager
Expert 2	Executive Director
Expert 3	Executive Director
Expert 4	Partner

Table 18: Business function of ITO experts within ITO Model evaluation

With the choice of the experts value was placed to win representative of well known management consultancies which consult customers from the bank branch in subjects of information technology and which have in particular several years' experience with the consultation of banks and vendors in IT outsourcing projects. Hence, it can acted on the assumption that a rich set of ITO experiences is underlying the evaluation of the ITO Model.

The interviews were conducted face-to-face at the experts place of business in Frankfurt, were open-ended and lasted between one and a half and three hours with the average being two hours long.

During the interview the ITO Model was presented and each component was discussed in detail. Prior to the interviews, the interviewees were informed in detail about the data to be gathered and how the interview would be conducted in order to ensure a good coverage of the research questions and an excellent use of the time spent on the interviews (Benbasat et al., 1987). The ITO Model was provided beforehand. All interviews followed the same procedure. During the interview, the interviewer thoroughly compared the wording and meaning of the expressed viewpoints of the interviewees with the terms and meanings used in the ITO Model in order to avoid ambiguity due to the terms and definitions used. Beside the discussion of the preliminary ITO Model, the interviewer gave the opportunity to add missing aspects. New success factors were stated and reasoned. In order to ensure precious data, a detailed interview protocol was written after the interview (Benbasat et al., 1987). The interviewee was asked to review the interview protocol to ensure that the answers were understood correctly by the interviewer. Additional comments were provided to clarify incomplete or inaccurate issues. The final interview protocol was sent to the interviewees for confirmation.

4.7 Summary

During the MPhil stage, the research focused on two aspects: first, the identification of known ITO outcomes, influencing factors and dependencies between influencing factors by qualitative content analysis of 48 scientific studies; second, the aggregation and classification of known influencing factors and dependencies between influencing factors by generating two ITO taxonomies (an ITO success factor taxonomy and an ITO success factor dependency taxonomy). This, in summary, constitutes the preliminary ITO Model (for details see Chapter 5.1).

The practical relevance of the preliminary ITO Model was empirically tested in the PhD stage by investigation if its aspects applied to 8 long-running ITO cases of 5 European

banks (multiple case study methodology). Therefore, first the outcome of the ITO cases was determined. This ensured that only successful ITO cases were used for further investigation. Second, selected interview partners of the participating banks were asked to indicate if a prepared list of pre-formulated success factors and success factor dependencies applied in the respective case. For the success factors rated as relevant, the weighting and temporal relevance within the ITO process were determined additionally. Besides this, the interviewees were asked to state additional aspects not covered by the semi-structured interview field manual. The validity and reliability of the research process was ensured within the multiple case study design.

The main result of this thesis is a novel ITO Model guiding outsourcing banks step by step in planning and implementing an application outsourcing project incorporating weighted factors responsible for ITO success. The novel ITO Model was designed in three steps: first, empirically confirmed success factors / success factor interdependencies were translated into “rules”. Second, these rules were sorted chronologically according to the empirically collected temporal relevance of the underlying success factor. Third, the rules were assigned to four levels of environment in order to show the interference of the outsourcing bank in the success factors.

In order to further strengthen the external validity of the research results, the ITO Model was finally evaluated by obtaining expert opinion.

CHAPTER 5

Preliminary ITO Model and empirical validation by a multiple case study

5 Preliminary ITO Model and empirical validation by a multiple case study

In this chapter, the preliminary ITO Model is presented (see Chapter 5.1) which was derived from the current state of the art of empirical ITO success factor knowledge (see Chapter 3.7.1). The management theories often used within the scope of ITO research in the past (see chapter 3.7.2) were not considered by the development of the preliminary ITO Model, because newer studies (Lacity and Willcocks, 2009b) come to the result that these generic theories are not suitable for an application in the ITO field (for details see chapter 3.7.2). Divergences in predictions were ascertained with the application to ITO, beyond it, these management theories partly contradict each other regarding the explanation of ITO success. Hence, exclusively empirical research studies were used as a base for the preliminary ITO Model. The practical relevance of this preliminary ITO Model was tested by investigating whether its aspects applied to 8 successful long-running ITO cases of 5 European banks. The results of this empirical validation are presented in Chapter 5.2.

5.1 Preliminary ITO Model

Chapter 5.1 summarises the preliminary ITO Model, which is:

- A detailed explanation of each known ITO success factor (see Chapter 5.1.2) structured according to the developed ITO success factor taxonomy (see Chapter 5.1.1) and in particular the extraction of ITO success factor categories mentioned in scarce studies which partly focus on long-term experiences: “Strategy”, “Relationship” and certain aspects of “Contract” (flexibility and profit sharing) (see Chapter 5.1.3).
- Success factor categories which can be derived as mandatory for ITO success: “Vendor selection”, “Vendor capability”, “Contract”, “Control” and certain aspects

of "Environment" (regulatory compliance) and "Stakeholders" (support of high level management) (see Chapter 5.1.4).

- Three types of dependence between success factors: success factors as a precondition for other success factors, impact of success factors or success factor values on other success factors and the need for alignment of certain success factors values (see Chapter 5.1.5).

The aim of the PhD work was not only to confirm these existing items, but also to conceptually develop the items, to reject them, and/or to identify missing items based on a multiple case study of 8 long running ITO cases in 5 European banks. The result of this empirical validation is presented in Chapter 5.2.

Figure 8 and Table 21 show the developed taxonomies which structure the contents (success factors, success factor interdependencies) of the preliminary ITO Model. Figure 8 in addition illustrate a summary of the success factors assigned to the success factor taxonomy categories. Each single success factor and success factor dependency under investigation is displayed in Table 19 and Table 20. This basic totality of the examined success factors and success factor dependencies is evident in each subsequent presentation of results: in Table 37 and Table 38 after validation on the basis of the multiple case study and in Table 44 and Table 45 after validation and evaluation by obtainment of expert opinions what allows a clear traceability of the changes, if ocurred, during validation and evaluation.

Success Factor Category	Success Factor
1. Environment	Stable external environment (economic climate)
	Stable external environment (competition)
	Stable external environment (product obsolescence)
	Stable external environment (technology changes)
	Vendor market
	Regulatory compliance
	Stable internal environment (strategic direction)
	Stable internal environment (mergers & acquisitions)
	Stable internal environment (management)
	Stable internal environment (product portfolio)
	Corporate culture
	Corporate terms
2. Strategy	ITO strategy
	Business – IT – Alignment
	ITO objectives
	Inhouse IT functions
	Multiple vendors
	Joint projects
	Selective rather than total ITO
	Incremental instead of "big-bang" ITO
	Contract duration 3-5 years
	Strategic view on IT functions
	Renegotiation and restructuring of contract / Vendor switching / Backsourcing
3. Client capability	Business knowledge
	IT knowledge outsourced IT function
	ITO knowledge
	Interpersonal skills
	Organisational learning capability
	Flexibility: business and technology changes
	Partnership's potential
	Vendor acceptance
	IT capability
	Problem management
4. Vendor selection	Tendering process
	Measurement of service requirements in baseline period
	Requirements specification
	Operational information gathering
	Evaluation of bids
	Vendor profit
	Leverage in-house capabilities
	Realisation of scale effects
5. Vendor capability	Business knowledge client's industry
	IT knowledge outsourced IT function
	ITO knowledge

Table 19: Preliminary ITO Model: ITO success factors

Success Factor Category	Success Factor
5. Vendor capability	Interpersonal skills
	Organisational learning capability
	Staff management
	Flexibility: business and technology changes
	Partnership's potential
	Reliable, professional job completion / Minimum customer involvement
	Attraction of customers
	Financial stability / Cost and financial management
6. Contract	Individual
	Contract: Measurable service requirements, measures and reports
	Contract: Processes: escalation / resolution of performance disputes
	Contract: Financial penalties
	Contract: Improvement targets
	Contract: Flexibility terms
	Contract: Renegotiation / Benchmarking clause
	Contract: Communication channels
	Contract: Benefit sharing arrangements
	Contract: Termination clause
	Contract: Staff regulations / guarantees
	Contract: Control rights
	Contract review
	Due diligence
	Contract amendments
	Contract renegotiations
7. Stakeholder management and Structural organisation	Stakeholder involvement: High-level management
	Stakeholder involvement: Only involve open-minded IT management
	Stakeholder involvement: Avoid conflict of interest of IT management
	Stakeholder involvement: Technical client staff
	Stakeholder involvement: Instruction of client staff
	Stakeholder involvement: IT user
	Stakeholder involvement: Staff affected by ITO
	Stakeholder involvement: Long-term client employees
	Stakeholder involvement: Functional departments
	Stakeholder involvement: Public
	Roles and responsibilities: Project manager
	Roles and responsibilities: Account manager
	Roles and responsibilities: Relationship managers
	Roles and responsibilities: Contract facilitator
8. Control	Monitoring and control
	Vendor payment
	Checks on market standards
	Vendor performance reporting
	Risk assessment and risk management
9. Co-work	Communication
	Knowledge transferring and sharing
	Change project management practices
10. Relationship	Relationship building and management

Table 19: Preliminary ITO Model: ITO success factors

No.	Success Factor Category(ies)	Success Factor Category(ies)
Dependency Type 1: Success factors as precondition for other success factors		
a	Strategy	Contract, Co-work
b	Vendor selection	Contract, Control
Dependency Type 2: Impact of success factors (or values) on other success factors		
c	Environment	Contract, Relationship
d	Environment	Contract, Control
e	Strategy	Contract, Relationship
f	Client/Vendor capability, Contract, Co-work	Relationship, Control
g	Contract	Relationship
Dependency Type 3: Need for alignment of success factor values		
h	Strategy	Contract, Relationship
i	Strategy	Contract, Relationship

Table 20: Preliminary ITO Model: ITO success factor dependencies

5.1.1 ITO taxonomies

This chapter presents two ITO taxonomies in an overview which were developed based on the knowledge gained from the extensive literature survey presented in Chapter 3. The first taxonomy summarises and categorises the known factors influencing ITO success (ITO success factor taxonomy), the second the known interdependencies between these success factors (ITO success factor dependency taxonomy). The ITO success factor taxonomy contains the following 10 success factor categories: Environment, Strategy, Client and Vendor capability, Vendor selection, Contract, Control, Stakeholder management, Co-work and Relationship. The ITO success factor dependency taxonomy incorporates the following three types of success factor interdependencies: Success factors as precondition for other success factors (success factor chains), impact of success factors or success factor values on other success factors, alignment of success factor values. Both ITO taxonomies form the frame for the preliminary ITO Model which is the basis for the empirical derivation of the ITO Model (for details please refer to Chapter 4).

The ITO taxonomies were a necessary step towards the structured generation of a summary about the current state of the art of ITO success factor research.

The 48 scientific studies investigating ITO success or failure factors described to some extent the same themes. Thus, the need for an ITO success factor taxonomy[5] existed because the different expressions of various authors for the same underlying class of semantics needed to be consolidated and summarised. In addition, the categorisation of the success factors within the ITO success factor taxonomy facilitates a better understanding of the different types of success factors as, for example, basic internal and external conditions, capabilities, behaviour patterns, parties involved, roles and tasks, etc. This helps to better understand their time of consideration within an ITO project. For example, necessary skills and expertise on the client side must be ensured before the ITO process is actually started or tasks relevant to ITO success must be allocated in the right place within the ITO process. Thus, the ITO success factor taxonomy is an important basis for the development of the ITO Model.

Also the categorisation of dependencies between these success factors by the ITO success factor dependence taxonomy helped to gain a better understanding of the different types of dependencies and how these affect ITO success factors (e.g. the different directions of cause and effect relationships) which determines the time of consideration within the ITO Model.

By qualitative content analysis, the success factor descriptions were systematically interpreted, condensed and marshalled in order to obtain common success factor categories. 10 success factor categories were identified: Environment, Strategy, Client and

[5] Empirically derived taxonomies are one type of typologisation used by scientists which must be distinguished from theoretically developed typologies (Hambrick, 1984, p. 28). Typologies in general are used to break down a large number of items into a smaller number of categories by identifying commonalities between them. Typologies and taxonomies can serve as "a basis of theory development and hypothesis testing" (Rich, 1992, p. 758).

Vendor capability, Vendor selection, Contract, Control, Stakeholder management, Co-work and Relationship (see Figure 8, page 102). Appendix A, Table 48 (page 265), shows the success factor descriptions of the scientific studies reviewed which led to this categorisation. For the benefit of a clear and consistent representation, all influencing factors are described as success factors. This requires the inversion of influencing factors described as failure factors (McLaughlin and Peppard, 2006; Veltri et al., 2008) or risks (Aubert et al., 1998; Aubert et al., 1999) to success factors, e.g. the failure factor "changes in business environment" was reversed to the success factor "stable business environment". A detailed explanation for the success factors is given in Chapter 5.1.2.

By qualitative content analysis, the descriptions of success factor interdependencies were systematically interpreted, condensed, and marshalled in order to obtain common categories for ITO success factor interdependencies. 3 categories of different ITO success factor interdependencies were identified: success factors as a precondition for other success factors (success factor chains), impact of success factors or success factor values on other success factors, alignment of success factor values (see Table 21). Appendix A, Table 48 (page 297), shows the success factor descriptions of the scientific studies reviewed which led to this categorisation. A detailed explanation of the ITO success factors interdependencies is given in Chapter 5.1.3.

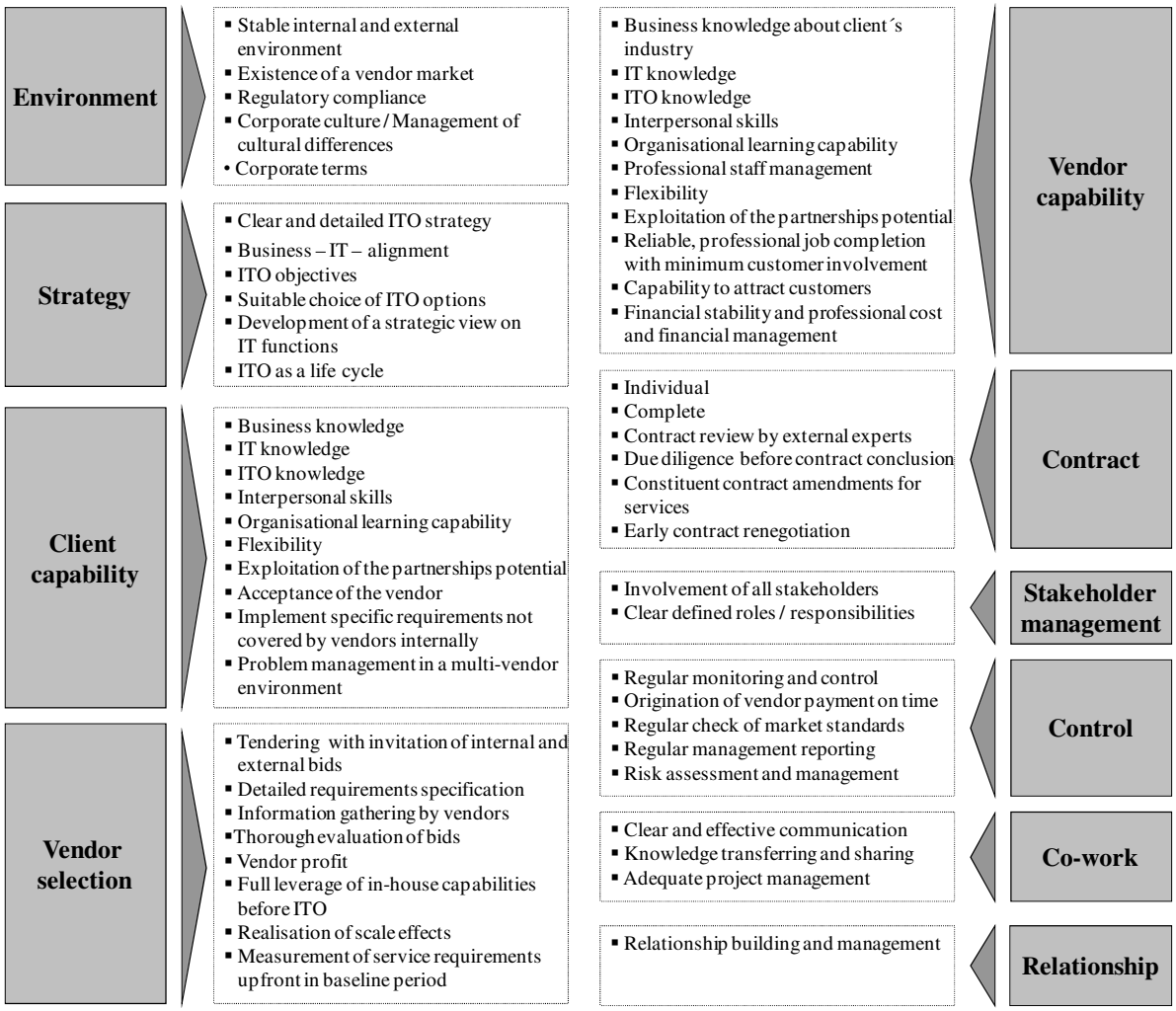


Figure 8: ITO success factor taxonomy

ITO success factor dependency category	Explanation
Precondition	Certain success factors or success factor values are a precondition for the fulfilment of other success factors. For example, the service requirements fixed in the contract (success factor category contract) are the basis for monitoring of vendor performance (success factor category control).
Impact	Certain success factors or success factor values positively influence other success factors. For example, if strategic, core or firm specific functions should be outsourced (success factor category strategy), a tight contract should be written to avoid vulnerability of these functions (success factor category contract) and a strategic partnership should be built with the vendor (success factor category relationship).
Alignment	Different combinations of basic parameters of an ITO project (ITO objectives, ITO degree, contract duration and content, stability of environment, type of relationship) should be harmonised with each other for the optimal support of ITO success. For example, a cost reduction objective (success factor category strategy) is supported ideally by selective outsourcing and a detailed and medium-term contract (success factor category contract and strategy).

Table 21: ITO success factor dependency taxonomy

5.1.2 ITO success factors

The success factors relevant for ITO success derived from the literature survey are explained in detail in this chapter. The description of the ITO success factors is structured according to the developed ITO success factor taxonomy (see Chapter 5.1.1). Appendix A, Table 48 (page 265) shows the underlying scientific studies.

Success factor category Environment

Definition:

A **stable external** (e.g. economic climate, competitors' actions, product obsolescence, technology changes) **and internal** (e.g. change in strategic direction, mergers & acquisitions, new internal management, product portfolio) **business environment** influences ITO success. First, Environmental changes can obviate the need or can change the desire for ITO in general. As a result of mergers, divestitures or acquisitions for example, new entities can result which have possibly reached a critical size to realise the same economies of scale as a vendor or have access to formerly missing IT skills, both making previous ITO decisions unnecessary. A change in strategic direction against ITO can also be caused by a new internal management. Second, environmental stability supports the ability to define stable IT requirements for the lifetime of the ITO contract and thus avoids costly contractual amendments if possible at all.
Furthermore, an **adequate number of vendors able to perform the required IT function** to be outsourced should exist on the market in order to avoid over-reliance on one vendor.
Besides, companies must ensure they comply with **regulatory issues** to maintain their legal competence in general (e.g. compliance of German banks with § 25a KWG; see Chapter 2.4)
Finally, the **corporate culture and terms** of the partners play an important role in the effective coworking of client and vendor and are thus influential on ITO success (see success factor Co-work). In particular, the usage of common terms in the client – vendor communication and a shared culture or a proactive management of cultural differences play an important role.

Table 22: Success factor category Environment

Success factor category Strategy

Definition:

ITO is a strategic decision with long-term impacts: ITO is often connected with the transfer of IT staff and IT assets and demands the establishment of inter-organisational processes between client and vendor. Thus, the strategy and objectives connected with ITO must reflect the longer-term orientation. Sufficient start-up time is necessary to get ITO up and running.
An **ITO strategy** must exist. An ITO strategy should be clear and detailed and should not only cover a single ITO contract but the overall consideration of what IT to source, internally or externally, and why, currently and in the future. Furthermore, it should comprise a standardised, structured and detailed ITO process from preparation till post-contract management which is applied.
The overall objective of IT must be to deliver business solutions capable of supporting current and future business processes. Thus **IT and ITO objectives must be aligned and must comply with business objectives**. On the other hand, IT capability can be used as an innovative source, in terms of which process improvements in technology can enable. The description of the **objectives connected with ITO** must be realistic, detailed and clear for all the people involved on the client and vendor side. With the setting of ITO objectives, the conflict of objectives, e.g. the cost/service trade-off, must be avoided.

Concerning the various **ITO options** to choose, it is recommended that a company should not outsource:
- IT management[6]
- Vendor management[7]
- Technical ability in terms of the ability to discuss architecture evolution with vendors
- Support of critical systems like strategic or core functions differentiating the company from competitors[8], IT activities integral to the firm's achievement of current and future business objectives or closely connected IT functions. Outsourcing of these "core IT capabilities" can lead to a loss of organisational competencies, might impede organisational learning and lower the competitiveness of the organisation as the vendors will either compete with the client in its own domain, or move in different directions.
- IT functions which are highly interconnected. Discrete systems with simple interfaces to other systems and business users enable an easier determination of problem sources and the isolation of problem areas from normal business activities and avoid high switching costs.
- IT functions with a technology which is problematic or changes very fast. Technology changes can lead to costly contractual amendments, if executed by the vendor at all.
- Systems integration

However, other studies report no effect of technology uncertainty, positive results with ITO of core functions and recommend a tight contract and a strategic partnership for the outsourcing of strategic, core or asset specific functions.

On the other hand, it is recommended to
- use multiple vendors for one IT function to minimise vendor dependency
- form joint projects with other ITO clients to positively influence cost structures
- outsource selectively rather than totally. Long-term total outsourcing is only recommended for companies highly experienced in ITO and in managing major, long-term relationships
- make shorter term instead of long-term contracts as IT requirements cannot be predicted over a long time. Shorter term contract durations avoid costly contractual exceptions, ensure competitive prices and motivate vendor performance because, after contract expiration, the client may switch to another vendor if it is not satisfied. But the contract duration should be long enough to achieve operational cost savings. A contract period of 3-5 years is a proven practice in ITO.
- follow an incremental approach to gain ITO experience and to keep up-to-date with sourcing practices.

Table 23: Success factor category Strategy

[6] IT management functions are, for example: IT strategy, mission and coordination; business – IT alignment; relationship management between management, business and IT

[7] Vendor management functions are, for example: Know-how about markets, assessment of vendor claims, monitoring of vendor performance, relationship management with vendor

[8] Functions differentiating a company from competitors are described as functions with a strong need to retain intellectual property, functions which require high business knowledge in the IT products/service and valuable, rare, non-imitable and non-substitutable activities.

Furthermore, companies should develop a **strategic view on IT functions**. In particular, they should decide which IT functions are "core" or "commodity" for their business success. Companies outsource core functions more prudently than non-core functions, which positively affects outsourcing success. In addition, a company should **keep the ability to backsource IT functions or to switch to other vendors**, but it is also recommended to renegotiate and restructure existing contracts to avoid high switching costs.

Table 23 (cont.): Success factor category Strategy

Success factor category: Client capability

Definition: The client company must have mature management capacity with **experience and expertise about the business supported by the IT function to be outsourced, the IT function to be outsourced** itself and **ITO** in general. This ensures the knowledge of how to proceed through the ITO process, the ability to assess and monitor vendor performance regarding the quality and costs of the outsourced IT function and the knowledge about sources of opportunistic behaviour from the vendor. Furthermore, **interpersonal skills** are necessary to positively influence a common understanding, knowledge sharing and the establishment of inter-organisational relationships between client and vendor. The **capability of learning or acquiring the needed knowledge from the vendor** is important for effective knowledge sharing. And the client must have the **capability to cope with changes of technology or business requirements** to ensure flexibility for the benefit of permanent and adequate business support. Furthermore, **the capability of exploiting the partnership`s long-term potential** in terms of leveraging the capabilities of client and vendor to the advantage of each counterpart is also ITO success relevant as well as the **acceptance of the vendor** in the client company. If the client company sources IT from multiple internal and external vendors, it **must ensure that technical problems are rapidly solved**. And **business needs which cannot be covered by the standard technical approaches of vendors must be internally addressed**.

Table 24: Success factor category Client capability

Success factor category: Vendor selection

Definition: The main objective of the vendor selection phase is to choose the right vendor by ensuring that the vendor owns the professional and interpersonal skills suitable for the needs of the client (see success factor category "vendor capability"). Therefore, a **rigorous tendering process with invitation of internal and external bids** is recommended. Before the bidding process, the service requirements, in-house costs, incoming ITO costs and the performance of in-house IT must be collected. These support a **detailed requirement specification** and an effective make or buy evaluation. The **client must ensure that the vendors gather sufficient operational information. Enough time should be spent on evaluating vendor bids** thoroughly by internal and external benchmarking, testing vendor claims on service levels, anticipating hidden costs, investigating people, products and financial stability in order to ensure vendor capability and capacity and an adequate price/performance ratio. **ITO should only be chosen if the external bids are better compared with internal bids and if advantages of scale can be ascertained.** Before making the final decision, **it should always be investigated** why a vendor bid is better compared to an internal bid and **if the external bidding terms and conditions can be achieved internally as well** by considering service requirements, in-house costs, incoming ITO costs and the performance of in-house IT. Politically driven decisions (e.g. a powerful parent organisation is pressing for a decision for/against outsourcing) without an objective make or buy evaluation bear the risk of a disadvantageous position for the outsourcing company compared to an in-house operation of the IT function. Another important point here is to **ensure that the vendor is making a reasonable profit with the delivered bid.** A vendor making no profit will primarily aim to recover costs for the account of additional costs or decreases of service quality. **Before contract conclusion, the service requirements** in the request for proposal **must be measured** in detail during a defined **baseline period**.

Table 25: Success factor category Vendor selection

Success factor category: Vendor capability

Definition:

The vendor's primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs: **experience and expertise with ITO** in general, the **client's industry** and the **outsourced IT function and underlying technology**; the **capability to attract client**s; a **good staff management** (e.g. staff quality, capacity, working conditions, allocation, low staff turnover); **financial stability**; a **good cost and financial management; reliability and professionalism; job completion with minimum customer involvement**; the **ability to learn the needed knowledge from the client** supporting an effective knowledge sharing, the **ability to communicate and relate to client staff,** and the **ability to react flexibly to changing client and IT needs**. In addition, a vendor must be willing to look beyond the existing ITO contract together with the client to **identify the long-term potential of the partnership**.

Table 26: Success factor category Vendor capability

Success factor category: Contract

Definition:

The ITO contract balances the power between the client and vendor. A **standard contract of the vendor should never be accepted**. Instead, it needs to be tailored to the client's specific needs. The **contract must be comprehensive, clear and detailed before the contract is awarded to the vendor**. Important aspects to regulate in the contract are: **specific and measurable service requirements and related service level measures and reports**, **escalation procedures, process for resolution of performance disputes**, **financial penalties for vendor under-performance**, **improvement targets concerning costs and service levels**, **flexibility terms** for the case of changing business and IT requirements (e.g. flexible pricing options considering growth rates and service volume fluctuations), occasions for **renegotiation possibilities** (e.g. biannual assessment of pricing adjustments, renegotiation based on external benchmarking), **account manager on vendor side** in order to establish a communication channel, **benefit sharing arrangements** (e.g. vendor and client benefit from application revenues, increased efficiencies or reduced client costs), **termination clause**, **regulations and guarantees for transferred staff** and, if applicable, **control rights for the client and regulatory institutions**. It is recommended to **contract each work to be done** by the vendor **in constituent contract amendments** with their own pricing and service levels. Before contract conclusion, **external advice** should be engaged as ITO is very complex and as vendors are normally more experienced compared to clients. Technical experts, for example, can help during the measurement of the baseline services to create technical performance measures for incorporation into the contract. Legal experts can help to get an adequate and complete contract negotiated. Finally, a **due diligence process** should be conducted to ensure that an adequate vendor is selected concerning company, price, solution, contract and customer references. Necessary **contract renegotiations should be done early** as this can positively change service performance and the relationship between client and vendor.

Table 27: Success factor category Contract

Success factor category: Stakeholder management

Definition:

In the client company a multitude of **stakeholders** exist **whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the needed support from all sides**. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. **Important stakeholders are: high level management, business and IT staff, IT users and functional departments** like human resource management.
The promoter of ITO in a client company must achieve the commitment of the company's **high level management** on the business and IT side. This ensures the needed decision making authority and technical competence. The **CIO**s potential conflict of interest caused by career opportunity offerings of vendors must be avoided. Furthermore, the **CIO** should only be involved in the selection process if he or she is open-minded about ITO.
On the other hand, **technical competent staff** able to control the vendor on a day-to-day basis should be retained and involved in the ITO project already from the vendor selection phase, as well as relevant **functional departments** like the human resources or the legal department. To technical people accomplishing the make or buy evaluations, detailed instructions should be given to avoid a simple vote against ITO (e.g. the evaluation has to be done in separate elements even down to the employee level and recommendations should be given based on the evaluation of risks and advantages).

Furthermore, the **IT user**'s expectations necessary for satisfaction must be clear and respected. With **staff directly affected by ITO**, open, honest and credible communication is important. Therefore, an ITO concept should already exist to ensure that the staff can receive a realistic impression about the ITO venture, upcoming decision points, schedules, the influence on their job and possible options. This requires that vendor evaluations, testing and business case calculations should be done confidentially beforehand. Furthermore, it is important that the client **make sure long-term employees join the vendor** by negotiation of ensure jobs and good working conditions on the vendor side. This fosters a smooth start to the external operation, especially in the case of not existing or incomplete system documentation of the IT function to be outsourced. If applicable, the **public** can be informed. The public announcement of an ITO intent has created positive stock market returns for client companies publicly listed in the past.

The **roles and responsibilities** (e.g. decision making rights, reporting structures) **needed to perform and manage the outsourced IT function on the client and vendor side must be clearly delineated and defined**. The unification of complex, multidimensional roles should be avoided. A strong **project leader** is necessary. The establishment of an **account manager for the outsourcing client on the vendor side** facilitates a communication channel which positively influences a common understanding and which prevents vendor opportunism and the negative consequences of legal loopholes. Besides, active **relationship managers** on both sides with adequate interpersonal skills are important for successful co-working and for the resolution of disputes. And, in an environment were a company is using multiple external and internal sources of supply, the resolution of operational problems and conflicts must be ensured by a **contract facilitator** as a single point of contact for IT users.

Table 28: Success factor category Stakeholder management

Success factor category: Control

Definition:

The **performance of the ITO vendor must be controlled tightly and constantly based on service level agreements and measures, cost targets and performance development goals defined in the ITO contract**. Therefore, a **measurement system** able to track tangible and intangible expectations over a long time-scale must be developed and established. The ability to measure vendor performance is positively related to ITO success. Measurement problems can result in disputes and litigations. If the vendor performance gives **no reason for complaints, vendor payments should be originated on time**. **Contract and control adaptations are necessary if the market standard changes regarding contract, processes, service metrics and price to ensure competitiveness.** The results of the regular monitoring of vendor performance should be adequately summarised in **management reports** stressing core points and possible spheres of activity for the client's management. Last but not least, the **risks** inherent in ITO **must be adequately assessed and managed** by the client throughout the ITO process to achieve risk mitigation.

Table 29: Success factor category Control

Success factor category: Co-work

Definition:

Good co-working is important for ITO success, which is fostered by the following aspects: A **clear and effective communication** between both parties on a regular basis in order to generate a common understanding about performance expectations, governance structures, etc., **common terms**, a **shared culture** and proactive management of cultural differences, **project management practices ensuring quality** and **knowledge transferring and sharing** between client and vendor. Vendors should share the necessary knowledge for using the outsourced IT function. Clients should share their business knowledge for improving the understanding of the vendor for business requirements.

Table 30: Success factor category Co-work

Success factor category: Relationship

Definition:

Between the people involved in client-vendor interactions a **long-term relationship based on partnership** should be created and sustained, as **certain elements of a partnership influence ITO success positively,** e.g. **trust, communication, cooperation, satisfaction, business understanding, benefit and risk share and commitment.** The establishment of a partnership requires time, knowledge and dedicated resources with interpersonal skills on the client and vendor side already, before contract conclusion. Different types and intensities of relationship management are required dependent on the type of the ITO contract (strategic partnership versus buyer/seller relationship).

Table 31: Success factor category Relationship

Overall, the ITO venture must comply with regulatory issues and the probability of ITO success is higher if a stable internal and external environment exists, if a complete and clear ITO contract is concluded, if co-work and relationship building can be attained and, last but not least, if a capable and flexible client and vendor are collaborating. The bigger part of success factors relate to client capabilities: the knowledge of how to build an adequate ITO strategy, how to manage stakeholders, how to select a vendor and how to control the ITO venture. From this it follows that, for an ITO venture to be successful, it needs a significant amount of commitment from the client and the necessary effort and time to manage the ITO arrangement. Thus ITO, if it is to succeed, is not connected with a total hand-over of the responsibility for the IT function to the vendor in the belief that the vendor will manage it to the advantage of the client. In addition, one has to bear in mind that both parties need to obtain value from the arrangement to ensure ITO success in the long run.

5.1.3 Success factors for long-term ITO success

The success factors described in Chapter 5.1.2 are derived from empirical studies whose underlying ITO contract durations are predominantly not stated or short-term. The few studies which convey their research results at least partly from ITO contracts running already > 5 years (= definition of long-term according to Lee and Kim (1999)) are the studies of Lacity and Hirschheim (1993), Collins and Millen (1995), Saunders et al. (1997), Nagengast (1997) and Kim and Chung (2003). Gerigk (1997) stated that his results were based on “longer ITO experiences”. Lacity et al. (1996) mentioned that enough time has elapsed for the evaluation of ITO outcomes and influencing factors in their contracts of investigation. None of these studies focused solely on long-term ITO experiences. The following success factors were stated in these studies, which can therefore be interpreted to be especially important for the achievement of long-term

ITO success (see Table 32). Their actual relevance for long-term ITO success will be tested in this thesis, which will focus on long-running ITO contracts.

Success factor category	Success factor description
Strategy	• Develop a clear IT / ITO strategy • Do not outsource the management of IS • Do not outsource asset specific IT functions • Do not outsource core activities, unless they are incorrectly perceived as core or if a company lacks the talent and skills to develop potential core differentiating applications. If core activities should be outsourced, a tight contract must be ensured to restrict vulnerability and to provide a proper basis for control • Do not outsource commodity functions either if they are expected to become core • Outsource in a reasoned, selective and incremental way; long-term total ITO should only be chosen in companies highly experienced with ITO • Use multiple vendors to benefit from the strength of each vendor • Align relationship management (strategic partner or service supplier), detail of contract (loose or tight) and the view of the IS function (commodity or core)
Vendor selection	• Choose the right vendor • Investigate if the terms and conditions of vendor bids can be achieved internally
Vendor capability	• Skills • Commitment
Contract	• Measure the required service level before contract conclusion in a defined baseline period • Conclude a complete contract to balance the power between client and vendor (service levels, service level measures, service level reports, service volume fluctuations/growth rates, escalation procedures, cash penalties for non-performance, adjustment of charges to changes in business, account manager on vendor side, termination clause, watch out for change of character clauses, arrangements for transferred staff, renegotiation option, profit sharing clauses) • Ensure flexibility • Do not accept the vendor's standard contract, negotiate an individual contract which suits the organisation's specific needs • Engage external legal and technical advice for contract conclusion
Stakeholder	• Ensure high level management support for ITO • Include actively colleagues of other functional areas (Human Resources, etc.) • Ensure that the in-house staff accept the vendor • Avoid role integrity
Control	• Monitor and control vendor performance
Co-work	• Ensure a common terminology
Relationship	• Form partnerships and support common profit motives with contractual arrangements like profit sharing, equity stake • Create solidarity between partners • Convey continuity intention

Table 32: Success factors for ITO based partly on long-term ITO experiences

In summary, one can conclude that almost all the success factor categories (except for the categories "Environment" and "Client capability") seems to be relevant for long-term ITO success, even though with varying intensity. Considering the long-term focus, it is assumed that the development of a proper "Strategy", in particular the decision "what" to outsource "how", gains importance as the outsourcing company commits itself for a long period to an external vendor and thus cannot run the risk of making false decisions which cannot be reversed rapidly. Abnormal terminations of ITO contracts are always connected with high costs, dependent on the termination conditions negotiated (in most instances: payment of a compensation sum or of residual costs), which should be avoided. An ITO strategy, although not explicitly stated above, also includes a determination of the objectives connected with ITO. Therefore, it is important to ensure that the objectives connected with ITO support the achievement of the outsourcing company's long-term business goals if a long-term contract is to be concluded. Furthermore, one can act on the assumption that the longer the period of cooperation with a vendor on a day-to-day basis persists, the more important are good personal relations between the partners in order to establish good co-working. Thus, the importance of the success factor "Relationship" seems to rise with longer contract durations.

On the other hand, the choice of the right vendor ("Vendor selection", "Vendor capability"), the negotiation of a suitable contract ("Contract"), the control of vendor performance ("Control") and the commitment of the outsourcing company's high level management ("Stakeholder") appear to be relevant independent from the intended contract duration. But, concerning the success factors around the ITO contract, one can act on the assumption that in particular flexibility and profit-sharing clauses must be prepared for long-term contracts. The longer the intended contract duration, the less it is possible

to define stable IT requirements. Thus, long-running ITO contracts must include flexibility clauses (e.g. service volume fluctuations, growth rate, adjustment of charges to changes in business) to allow necessary contract adaptations within acceptable costs. Furthermore, especially in long-term ITO contracts, it seems to be important to incorporate profit-sharing clauses to achieve the commitment of both partners to long-ranging co-work. In contractual relationships where one partner stands to make a loss, one can imagine that this partner has no interest in maintaining this partnership in the long run.

Finally, the consideration of strategic elements in the ITO contract (see "Strategy"), the acceptance of the vendor by the client staff and a common understanding appear to be relevant for each ITO contract, independent of its specific contract duration. It is recommended that core functions should only be outsourced if a tight contract can be written and if a strategic partnership can be developed to gain enough control for these strategically important IT functions, regardless of whether they are grounded in short or long running ITO contracts. And if the outsourcing client's staff cannot or do not want to understand the vendor, ITO failure is inevitable, independent of whether it had a short or long-term focus (see "Co-work" and "Stakeholder").

5.1.4 Strength and importance of success factors

The success factor descriptions in Appendix A provide no indication of the varying weights of the success factors. The factors were generally described as critical or important to consider for the achievement of success with ITO. Lacity and Willcocks (2009b), for example, propose "two major critical success factors" for ITO based on their research: selective outsourcing and a short-term, detailed ITO contract.

But, given that an outsourcing bank must ensure at least the same quality of the outsourced service compared to an in-house production due to regulatory issues (see Chapter 2.4), the choice of a vendor owning the necessary professional and interpersonal skills for the external execution of the outsourced service must be a mandatory success

factor. Furthermore, a comprehensive and detailed ITO contract is described as the only certain way to balance the power between the diverging interests of client and vendor (Lacity and Hirschheim, 1993). The ITO contract can thus be valued as mandatory as well. The client's interest is to receive the outsourced service at a low cost and with high quality. The vendor, in contrast, aims to maximise its profit. This situation leads inevitably to another mandatory success factor: the constant monitoring and control of vendor performance to ensure that the client's and not the vendor's interests are met (Willcocks and Fitzgerald, 1994; Feeny and Willcocks, 1998; Cullen and Willcocks, 2003; Kim and Chung, 2003; Diamond Cluster, 2005; Lacity and Willcocks, 2009d). The CMMI model for outsourcing (see Chapter 3.2) gives a similar indication about mandatory success factors. The achievement of the first CMMI maturity level 2 requires at least the capability to fulfil two core competence process areas for successfully acquiring technology solutions: the solicitation and supplier agreement development process area and the acquisition management process area. These process areas describe how to get the right vendor contracted and how to manage vendor agreements. In the banking industry, another mandatory requirement exists: the compliance with regulatory issues to maintain the legal competence of banks externally (see Chapter 2.4). Besides, the outsourcing company's high level management of all affected departments must support ITO in order to gain the internal decision power for the realisation of the ITO.

Aside from this, clear but also sometimes contradictory statements exist concerning what IT to keep internally.

Based on the current body of knowledge, it is not possible to define any other categories of success factor concerning their strength or importance apart from the "mandatory" category.

5.1.5 ITO success factor interdependencies

The success factors derived from the literature (see Appendix A) show that the research approach of some authors to investigate just the influence of one or a few factors on outsourcing success - e.g. ITO process (Cullen et al., 2005); Relationship (Grover et al., 1996) (Lee and Kim, 1999) (Lee, 2001) (Kim and Chung, 2003); Contract (Lacity and Hirschheim, 1993) - or to focus on particular phases of the ITO process in their studies - e.g. Execution phase (Cullen and Willcocks, 2003) (Koh et al., 2004) (Pei et al., 2007) - does not entirely ensure ITO success, because the success factors are at least partially dependent on each other. Thus the comprehensive picture of ITO success factors and their interdependencies must be taken into account and needs further investigation. The success factor descriptions give hints about existing interdependencies. These were assigned by the author to the ITO success factor categories of the developed IT success factor taxonomy. By the mapping of each described dependency step by step into the ITO success factor taxonomy, even linkages between separately described interdependencies occurred. Three different types of interrelationships could be detected between the success factors: success factors as preconditions for other success factors (see Table 33), impact of success factors or specific success factor values on other success factors (see Table) and the need for alignment of specific success factor values (see Table 35, page 116).

Success factor dependency category: Precondition for other success factors

Success Factor	Success Factor	Description of interdependency
Strategy	Contract Co-work	The contractual description and articulation of objectives bounded with ITO must be realistic, clear and detailed for all people involved on the client and vendor side.
Vendor selection	Contract Control	The necessary service level requirement, measures and reports, as well as cost aims and development objectives are determined within the vendor selection phase and are fixed in the contract. Then the contract is the basis for monitoring the vendor performance regularly and in detail. In addition, the contract contains controlling mechanisms for the support of contract observance (e.g. financial penalties for non-performance), for the protection of competitiveness (e.g. a renegotiation option in case of changing market standards) or for termination of the contract (termination clause).

Table 33: Success factors as precondition for other success factors

Success factor dependency category: Impact of success factors or success factor-values on other success factors

Success Factor	Success Factor	Description of interdependency
Environment	Contract Relationship Control	A stable internal and external business environment supports the ability to define stable IT requirements for incorporation into the ITO contract. ITO in unstable environments should be handled by a flexible long-term contract with a strategic partner. The national regulatory authorities monitoring banks define requirements for ITO which have to be met. A German bank conducting ITO, for example, must regularly monitor the outsourced IT functions according to the German Banking Act to ensure the orderliness of this business or service. The federal financial supervisory authorities must further on have the right to audit and the ability to monitor the bank under its jurisdiction. This requires regular data collections by the bank and the federal financial supervisory authorities on the vendor side. These rights must be grounded in the ITO contract. Furthermore, regulatory entities published principles on how to mitigate ITO risks and how to comply with regulatory issues in this context.
Strategy	Contract Relationship	Strategic and company specific IT functions and IT functions supporting the core business processes of a company or IT functions closely linked with those IT functions are only outsourced in connection with a detailed contract and the establishment of a strategic partnership.
Vendor selection	Contract Relationship	The ideal precondition for a successful long-term partnership between the client and vendor is a situation where both sides gain value from the contract. This can be supported by benefit sharing arrangements. Each Partner could give the counterpart an incentive for success, for example participation in efficiency increases, cost reductions, etc. This gets each partner to support the attainment of advantages for the counterpart. To provide a formal basis for this profit-sharing model, it should be grounded in the ITO contract. If the vendor does not make a profit, it will probably take every opportunity to charge additional costs or to decrease service levels, which can negatively affect the relationship between client and vendor.

Table 34: Impact of success factors or success factor values on other success factors

Co-work Vendor capability Contract Stakeholder management	Relationship	Elements of a partnership - like trust, communication, cooperation, satisfaction, business understanding, benefit and risk share and commitment - impact ITO success. The establishment of a partnership requires time, knowledge and dedicated resources with interpersonal skills on the client and vendor side already before contract conclusion. Furthermore, an incomplete and unclear contract requires ongoing discussions between client and vendor about what is fixed in the contract and what is not. The right definition of the required service levels allows an early detection of critical vendor performance which helps to avoid escalation and negative consequences for the relationship.

Table 34 (cont.): Impact of success factors or success factor values on other success factors

Success factor dependency category: Need for alignment of success factor values

Success Factor	Success Factor	Description of interdependency
Strategy	Contract Relationship	The basic parameters of an ITO contract must be harmonised with each other to achieve optimal support of ITO success. On this, the following recommendations are given in the literature: • ITO objectives, degree of ITO, contract duration (strategy) – amount of detail in the contract (contract): The achievement of a reduction in costs is supported ideally by a combination of selective outsourcing, a detailed contract and medium-term contract terms. Strategic aims or innovations are achieved ideally by a combination of comprehensive outsourcing, a rather loose contract and a long-term partnership. • Stability of environment (environment) – detail of contract (contract) – kind of relationship (relationship): A "buyer – seller" relation is optimum if the achievement of efficiency increases / reduction in costs is the objective of the ITO, if a stable sphere exists which allows the definition of a detailed contract, and if low asset specificity needs to be fulfilled. The construction of a strategic partnership is promising in an unstable sphere which complicates a stable definition of the requirements in the contract (in the case of high asset specificity) or in a stable sphere for the conversion of enterprise-wide changes.

Table 35: Need for alignment of success factor values

5.2 Empirical validation of preliminary ITO Model

This chapter presents the results of the multiple case study, which were leveraged to investigate empirically whether the preliminary ITO theory (see Chapter 5.1) applies in 8 real-life ITO cases running already for a long period. First, the ITO outcome of the investigated ITO cases is presented to demonstrate that ITO cases rated as successful underlay the research results (see Chapter 5.2.1). Second, the success factors which finally turned out as relevant for long-term ITO success are explained in detail and their empirically determined weighting and temporal relevance within the ITO process are shown (see Chapter 5.2.2). Third, the validated dependencies between these success factors are presented (see Chapter 5.2.3). And Chapter 5.3 concludes with an assessment of the propositions made in Chapter 4 of this study.

5.2.1 ITO outcome of investigated ITO contracts

Table 36 shows the outcome of the 8 investigated ITO cases measured according to the measurement model for ITO success of Dahlberg and Nyrhinen (2006) (for details see Chapter 4.3). The measurement model of Dahlberg and Nyrhinen (2006) measures ITO success qualitatively by evaluation of the objectives set versus objectives achievement by a 7-point-Likert scale for each objective and overall. With this measurement instrument it is possible to determine the importance of the ITO objectives and the degree of the ITO objectives' achievement. For example, in case A the objectives "Ensure the availability of necessary or new technology" and "Reduce IT expenditure" were mentioned amongst others. The objective "Ensure the availability of necessary or new technology" got the score "7" and the objective "Reduce IT expenditure" the score "6" on the scale "Our objective was to…". This means that the objective "Ensure the availability of necessary or new technology" was more important for the outsourcing bank than

the objective “Reduce IT expenditure”. The lower the score on the Likert scale, the less important is the objective in comparison to the other mentioned objectives owning a higher score. The scale “Objective reached” finally points out, if the stated objectives were achieved by the outsourcing. Hereby, a score below the score of the scale “Our objective was to…” indicates that the objectives was not fully reached, a score above the score of the scale “Our objective was to…” indicates that the objective was exceeded, a score equally to the score of the scale “Our objective was to…” demonstrates that the objective was fully reached.

The majority of the ITO objectives were fully reached as the score on the scale “Our objective was to…” was rated equal to the score of the scale “Objective reached” (see Table 36).

Single ITO objectives were valued aberrantly.

In the case A expected ITO objectives (“focus on core competencies”, “scale economies”, “reduce IT expenditure”, “improve control over IT expenditure”, “standardised IT environment”) were even exceeded.

In the cases B, D, E, H single ITO objectives from the portfolio of objectives connected with the ITO were not completely achieved. In the case B one of 13 ITO objectives ("a well functioning IT environment") has received one score lower at the Likert scale. Case B is satisfied with the outsourcing overall (assessment "6" of "7"). Nevertheless, mergers of the vendor required a migration on a new core banking system which could be done successfully. But the new systems covers the requirements not completely. Other external solutions needed to be bought and linked by the vendor to the new core

banking system. This was done successfully, but the interfaces between the systems remain and need to be operated. In the case D two of 14 ITO objectives ("ensure the availability of necessary or new technology" and "improve users satisfaction") has received also one score lower at the Likert scale. The investigated contract was a further outsourcing, as the price/performance relation of the first vendor was not market compliant any more. A significant cost reduction could be achieved from the current vendor by synergetic effects and standardization. In addition, cost transparency, service quality and the cooperation processes improved. Nevertheless, it has turned out that also the new vendor moves certain demands for the first time. But despite, it owns a high experience with the basic technology and has competent employees. On account of that the objective "ensure the availability of necessary or new technology" was not completely achieved yet. Nevertheless, the conditions for it are given in future. The satisfaction of the user departments has also suffered from the weaknesses of the first vendor. Currently, a software redesign is done by the new vendor, based on this the bank expects an improvement regarding the acceptance of the CRM system. Therefore, the objective "improve users satisfaction" was not achieved completely yet. In the case E three of five ITO objectives were not reached completely ("scale economics", "Optimal use of IT resources and common applications", "reduce IT expenditure"). Reasons for this ITO were to bundle the information technology of the whole bank group centrally at an IT vendor, IT efficiency improvements, realising cost advantages by scale effects in the long term, deepening the cooperation with the bank group, protecting IT jobs in the federal state as well as to use IT resources in the federal state optimally. A close collaboration in the bank group and the protection of IT jobs were reached by the outsourcing. The achievement of cost advantages and synergetic effects in the bank group as well as an improvement of the IT resource use could not be achieved in the desired extent, because the vendor operates most parts of the system exclusively for the outsourcing

bank. Nevertheless, with a score of "5" the outsourcing is valued overall as success, even if the expected benefits could not be achieved completely. In the case H, one of four ITO objectives ("Reduce IT expenditure") received a score lower at the Likert scale. The outsourcing bank owns daughter's banks in Southeast Europe (Serbia, Bosnia, and Montenegro). Parts of the necessary IT services for these southeast-European daughters were already covered by an IT vendor in Belgrade as the strategical decision was met to buy this IT vendor and to develop it successively towards covering all IT needs of the southeast-European daughters. The objective of this outsourcing was to serve the southeast-European daughters with an IT vendor from the same culture to make communication easier, to raise customer satisfaction and service quality and to lower at the same time the IT costs by leveraging the wage slope in Europe. The cost advantages which should be realised in the course of the outsourcing were achieved, even if not in the planned extent. The controlling expenditures are higher than expected on account of the cultural and mental differences (management of the IT vendor by expatriates on site, weekly meetings with the IT vendor at management level, intensive control of the work results). Hence, the success of the ITO is valued with a score of "5".

ITO cases with an overall assessment of satisfaction > 4 (mean value) are classified as successful in this study. As a result, all investigated ITO cases can be rated as successful ITO cases. Also in case of consideration of the discrete objective assessments one comes to the same result. The large part of the ITO objectives was reached completely. In the case A ITO objectives were even exceeded. In the cases B, D, E and H single ITO objectives within the porfolio of objectives were not achieved completely for understandable reasons. Nevertheless, the outsourcings were valued as successful.

ITO objective(s)	Our objective was to*[1]							Objective reached*[1]							Comments
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
Strategic															
Focus on core competencies					B	A						B		A	
Improve the capability of IT to support the needs of business operations					B C D							B C D			D: Improvement of assignment process.
Improve the management of technology and human resources (e.g. exoneration of resources for other important projects, better ways to manage/work)		D				B			D				B		
Scale economics (synergies, streamlining of services, diversification benefits)					D	A	B C E					D	E	B A C	D: Higher experience of the new vendor with the outsourced IT function.
Increase the number of IT based innovations				D							D				
Reduce the number of IT staff				B							B				
Generate a momentum for change/flexibility (e.g. potential for participating as a vendor in the ITO market)			C			D				C			D		C: Implementation of Basel II. D: "A shot across the bows" against the previous vendor which is still handling other applications for the client in order to generate improvements by stoking fears that all applications could be terminated.
Other: Deepening the cooperation with the financial group							E							E	
Other: Protection of IT jobs in the federal state							E							E	
Other: Optimum use of IT resources and common applications							E	E							
Other: Foundation of an IT competence centre in the banking group and implementation of one IT-System for all group members							G							G	
Other: Low IT value added depth							F							F	
Other: Service of the southeast-European affiliated companies by a local IT service provider (because of language, mentality).							H							H	
Economic															
Reduce IT expenditure						A B	D E F G H					H	B E	D A F	D: Annual cost savings of approximately 450 TEUR could be achieved. F: The costs for the core banking system can be divided between all customer banks and the service provider (bank). In addition, 1-2 IT employees were saved in the Italian branch of the outsourcing bank. G: It is too early to evaluate the reduction of IT expenditure. The business case is regularly checked and positive.

*[1]: totally disagree, 7: totally agree

Table 36: Outcome of investigated ITO cases

ITO objective(s)	Our objective was to*1							Objective reached*1							Comments
	1	2	3	4	5	6	7	1	2	3	4	5	6	7	
Economic															
Reduce IT expenditure															H: Use of the more favourable wage level in south-east Europe and cheaper local technology. These cost advantages were realised, however, not to the planned extent, because the controlling expenditure is higher than expected because of cultural and mentality differences (e.g. since expats are managers of the IT service provider, weekly meetings with the IT service provider and intense control of work results).
Improve control over IT expenditure			B			A D				B				A D	D: Change quotes are more transparent as single items are listed. This could not be provided by the previous vendor.
Improve financial freedom and flexibility (capital release, flexibility in budgeting and investments)															
Other:															
Technological															
Ensure the availability of necessary or new technology						B D	A					D	B	A	D: It has turned out that the new service provider has also made certain demands for the first time. Nevertheless, it has already a lot of experience with the technology, so that the "mess" of the old vendor can be cleared up with the help of the new vendor.
Ensure the availability of necessary or new IT staff or skills						B D	A						B D	A	
Standardised IT environment (hardware, software, processes)					B D	A						B D		A	
A well-functioning IT environment						D	B						B D		
Other:															
Social															
Improve the quality of service (safe, reliable service corresponding to needs, capable of adapting to individual requirements)			B			D				B			D		
Improve the availability of services (e.g. 7d/24h)					D	H						D	H		D: Higher requirements exist because of connection of foreign entity
Improve user satisfaction				B		H	D				B		D H		
Other:															
Overall															
We are satisfied with our overall benefits from ITO												D E H	B	A C F G	A: Completely satisfied and service quality improved.

*1: totally disagree, 7: totally agree

Table 36 (cont.): Outcome of investigated ITO cases

5.2.2 Validated ITO success factors: explanation, weighting, temporal relevance

Chapter 5.2.2 presents the success factors which emerged as relevant for long-term ITO success from the multiple case studies. In order to come to a final conclusion about the relevance, weighting and temporal relevance of each success factor, the individual answers of the 8 cases to each pre-formulated ITO success factor of the interview field manual were presented together and discussed. Appendix C shows the comparison of the 8 case answers and the discussion for each success factor in detail. Table 37 shows the result of the empirical success factor research. For each success factor it is pointed out if it was validated, if it emerged as irrelevant or if it was not assessable on the basis of the given data (column "Success Factor and Success Factor Weighting"). The success factors which emerged as irrelevant for ITO success have no colour, the success factors which are not assessable have no colour and the text is written in grey colour. For the validated success factors, the weighting and temporal relevance within the ITO process is shown. The red coloured success factors are the mandatory success factors basically relevant for ITO success. The yellow coloured success factors are the partly necessary success factors whose relevance depends on the existence of certain basic conditions (use cases). The temporal relevance of the validated success factors is shown by marking the applicable ITO process phase with grey colour (columns "Outsourcing Process Phases"). Success factors with the prefix "NEW" were stated as additional success factors by the interview partners, which were not part of the interview field manual. Several new success factors emerged within the multiple case studies. Each success factor is assigned to the respective success factor category of the developed success factor taxonomy (see Chapter 5.1.1) (column "Success Factor Category"). In the following, for each validated mandatory or partly necessary success factor, a detailed explanation is given. The success factor explanations are also structured according to the categories of the developed ITO success factor taxonomy (see Chapter 5.1.1).

Success Factor Category	Success Factor and Success Factor Weighting	Outsourcing Process Phases: Preparation	Selection	Contract	Transition	Execution	Post-deal
1. Environment	Stable external environment (economic climate)						
	Stable external environment (competition)						
	Stable external environment (product obsolescence)						
	Stable external environment (technology changes)						
	Vendor market		■				
	Regulatory compliance	■	■	■	■	■	■
	Stable internal environment (strategic direction)						
	Stable internal environment (mergers & acquisitions)						
	Stable internal environment (management)						
	Stable internal environment (product portfolio)						
	Corporate culture		■	■	■	■	
	Corporate terms		■	■	■	■	
2. Strategy	ITO strategy	■					
	Business – IT – Alignment	■					
	ITO objectives	■					
	Inhouse IT function: vendor management	■					
	Inhouse IT function: IT management, Interconnected / critical functions, etc.	■					
	Multiple vendors						
	Joint projects	■					
	Selective rather than total ITO						
	Incremental instead of "big-bang" ITO						
	Contract duration 3-5 years	■					
	Strategic view on IT functions						
	Renegotiation and restructuring of contract / Vendor switching					■	
	Backsourcing					■	
3. Client capability	Business knowledge	■	■	■	■	■	■
	IT knowledge outsourced IT function	■	■	■	■	■	■
	ITO knowledge	■	■	■	■	■	■
	Interpersonal skills	■	■	■	■	■	
	Organisational learning capability	■			■	■	
	Flexibility: business changes	■				■	
	Flexibility: technology changes	■				■	
	Partnership's potential					■	
	Vendor acceptance				■	■	
	Internal IT capability	■	■	■	■	■	
	Problem management	■			■	■	
4. Vendor selection	Tendering process		■				
	Measurement of service requirements in baseline period						
	Requirements specification		■				
	Operational information gathering		■				
	Evaluation of bids		■				
	Vendor profit						
	Leverage in-house capabilities	■	■				
	Realisation of scale effects	■	■				
5. Vendor capability	Business knowledge client's industry		■				
	IT knowledge outsourced IT function		■				
	ITO knowledge		■				
	Interpersonal skills		■				
	Organisational learning capability		■				
	Staff management: staff quality, capacity, working conditions, allocation		■				
	Staff management: low staff turnover		■				

■ Mandatory success factor ▨ Partly necessary success factor □ Success factor is not relevant for ITO success

▨ Relevance of success factor is not assessable ■ Success factor is relevant in this ITO process phase

Table 37: Validated ITO success factors: explanation, weighting, temporal relevance

Success Factor Category	Success Factor and Success Factor Weighting	Outsourcing Process Phases: Preparation	Selection	Contract	Transition	Execution	Post-deal
5. Vendor capability	Flexibility: business and technology changes		■				
	Partnership's potential					■	
	Reliable, professional job completion		■				
	Minimum customer involvement		■				
	Attraction of customers		■				
	Financial stability / Cost and financial management		■				
	NEW: Short response time in case of problems		■				
6. Contract	Individual			■			
	Contract: Measurable service requirements, measures and reports			■			
	Contract: Processes: escalation / resolution of performance disputes			■			
	Contract: Financial penalties			■			
	Contract: Improvement targets						
	Contract: Flexibility terms			■			
	Contract: Renegotiation			■			
	Contract: Communication channels			■			
	Contract: Benefit sharing arrangements						
	Contract: Termination clause			■			
	Contract: Staff regulations / guarantees			■			
	Contract: Control rights			■			
	Contract review			■			
	Due diligence			■			
	Contract amendments			■			
	Contract renegotiations					■	
7. Stakeholder management and Structural organisation	Stakeholder involvement: High-level management	■	■	■	■	■	
	Stakeholder involvement: Only involve open-minded IT management						
	Stakeholder involvement: Avoid conflict of interest of IT management						
	Stakeholder involvement: Technical client staff	■	■	■	■	■	■
	Stakeholder involvement: Instruction of client staff		■				
	Stakeholder involvement: IT user	■	■	■	■	■	
	Stakeholder involvement: Staff affected by ITO	■	■	■			
	Stakeholder involvement: Long-term client employees		■	■	■		
	Stakeholder involvement: Functional departments	■	■	■			
	Stakeholder involvement: Public						
	Roles and responsibilities: Project manager	■	■	■	■		
	Roles and responsibilities: Account manager		■	■	■	■	
	Roles and responsibilities: Relationship managers		■	■	■	■	
	Roles and responsibilities: Contract facilitator						
	NEW: Roles and responsibilities: Service level manager		■	■	■	■	
	NEW: Roles and responsibilities: Mediator		■	■	■	■	
	NEW: External recruitment of vendor employees				■	■	
8. Control	Monitoring and control				■	■	
	Vendor payment					■	
	Regular check of market standards					■	
	Vendor performance reporting				■	■	
	Risk assessment and risk management	■	■	■	■	■	■
9. Co-work	Communication		■	■	■	■	
	Knowledge transferring and sharing				■	■	
	Change project management practices					■	
	NEW: Working packages and responsibility				■	■	
	NEW: Top balance				■	■	
	NEW: Neutral body				■	■	
	NEW: Regular advisory board				■	■	
10. Relationship	Relationship building and management		■	■	■	■	

■ Mandatory success factor ☐ Partly necessary success factor ☐ Success factor is not relevant for ITO success

☐ Relevance of success factor is not assessable ■ Success factor is relevant in this ITO process phase

Table 37 (cont.): Validated ITO success factors: explanation, weighting, temporal rel.

Environment: Vendor market

Generally, the possibility of changing the vendor in case of dissatisfaction with vendor performance should exist to avoid over-reliance on one vendor. This requires the existence of other vendors in the market able to perform the outsourced IT function. After contract conclusion this success factor cannot be influenced by the ITO project, which is why it is to be ensured in the vendor selection phase. But a sufficient vendor market was not seen as necessary in the investigated cases with the organisational forms of a joint venture and internal ITO. In the case of the joint venture as IT service society, a monopoly was consciously founded. Also in the case of one internal ITO by which the vendor serves exclusively the banking group. In both cases, enough influencing possibilities can exist based on the capital interlocking between client and vendor in order to ensure a positive vendors' behaviour. But, in another internal ITO case, the influencing possibilities were restricted for cultural and financial reasons. And in a third internal ITO case, specific tax regulations demanded a vendor market: the Italian establishment of a German bank had to prove to the Italian tax authorities that the price paid to the European vendor was competitive. Both cases required a vendor market despite an internal ITO.

Environment: Regulatory compliance

The fulfilment of legal requirements for an ITO in general (in particular §24 a KWG by the ITO of German banks) and for outsourced systems in particular is compulsory for success during the whole ITO process to maintain the legal capacity of the outsourcing enterprise. The measures to fulfil the legal demands on ITO in Germany (see Chapter 2.4) are covered by the following single success factors: control rights for bank and regulatory institutions in the ITO contract, risk assessment and risk management, regular monitoring and control of vendor performance (dependence 4 describes the connec-

tion between these success factors). The ability of the vendor to implement legal business requirements is to be guaranteed in the vendor selection phase. The operational implementation of these business requirements during the external execution by the vendor is to be anchored in the ITO contract.

Environment: Corporate culture

The culture influences the behaviour and the communication of client and vendor and thus has an influence on the cooperation. In the vendor selection phase the cultural background of the vendor is to be determined.

In investigated cases with the organisational form of a joint venture or with a nearshore delivery model, a similar culture an accordingly an active management of cultural differences (e.g. strict controls) was seen as mandatory for the achievement of ITO success. In the case of a joint venture, enterprise decisions must be made by the partners together, which can be positively influenced by a common enterprise culture or an active management of cultural differences. The cultural differences which were based on different land cultures (nearshore) were rated as hardly controllable or even not controllable at all, which required an active management of cultural differences.

On the other hand, in ITO cases with an onshore delivery model it was said that a good communication can overcome cultural differences (see also success factor “communication”) and a good vendor performance was rated as more important compared to a similar cultural background. In these cases, client and vendor had a culture of one and the same country. Thus, similar behaviour patterns regarding communication can exist.
Existing cultural differences are to be managed during the client/vendor-interaction (ITO process phase’s vendor selection - execution).

Environment: Corporate terms

The use of uniform terms within the communication between client and vendor generates a mutual understanding about communication contents. Uniform terms can be agreed by a terminology or a service catalogue. Nevertheless, a mutual understanding can also be achieved by effective communication (see success factor “communication”) in investigated cases. Hence, the success factor is evaluated as partly necessary. With need of the success factor the common terms are to be defined in the early stages of the interaction, before completion of the ITO contract (ITO process phases: selection and contract) and are to be used in communication during the transition and external execution of the outsourced IT function.

Strategy: ITO Strategy

The development of a clear and detailed ITO strategy in terms of "a plan what IT to source how and why currently and in the future" in the forefront of ITOs makes sense in order to carry out ITOs not randomly but goal-oriented and thus to generate advantages for the outsourcing enterprise. But, surrounding conditions can change during an ITO project, which makes long-term sourcing planning not always possible. For example, objectives bonded originally with the ITO might change. However, this was not a reason to discontinue running ITO projects in the past, the fulfilment of the ITO contract was still central. Hence, an ITO strategy can be evaluated as direction-giving but not mandatory for the continuity of an ITO in case of changes.

Strategy: ITO objectives

The definition of realistic, clear and detailed objectives linked with the ITO (in or beyond the ITO contract) and the avoidance of aim conflicts is partly relevant to success. Basically, only if the objectives are known on the client and vendor side can both par-

ties try to achieve the settled aims and help in supporting the achievement of the business objectives of the outsourcing company (see success factor "business-IT-alignment"). Nevertheless, triggered by volatile surrounding conditions, the objectives originally linked with the ITO can change. However, this was not a reason to discontinue running ITO projects in the past, the fulfilment of the ITO contract was still central. Hence, the definition of the ITO objectives is direction-giving, but not mandatory for the continuity of the ITO in case of changes. The ITO objectives are to be defined in the preparation phase of the ITO process and are to be communicated regularly (see success factor "communication").

Strategy: Business-IT-alignment

The support of the business objectives by the ITO objectives of the outsourcing company in the forefront of an ITO is a partly relevant success factor. The alignment of the ITO objectives with the business objectives is basically necessary to guarantee the competitiveness of the outsourcing company in the future. Nevertheless, the business objectives can change because of volatile surrounding conditions. However, this was not a reason to discontinue running ITO projects in the past, the fulfilment of the ITO contract was still central. Hence, the adjustment of the ITO objectives to business and IT objectives in the preparation phase of the ITO is direction-giving, but not mandatory for the continuity of the ITO in case of changes.

The utilisation of ITO as an innovative source has its limitations and, hence, is partly necessary for the achievement of ITO success. Generally, innovations in standard applications have to be beneficial for a wide user group to have a chance to be implemented there. But this complicates the differentiation from competitors in the market. Thus it was stated that innovations which should serve for differentiation are to be implemented - internally or externally - individually.

Strategy: IT function

In the preparation phase of the ITO process the type of ITO (see Figure 2 (page 14) and Table 1 (page 15)) must be decided which also encloses the choice of the IT subject (IT function) to be outsourced.

The vendor management cannot be outsourced. The internal accomplishment of this IT function is mandatory for the achievement of success with ITO.

The IT management as IT function was not outsourced generally, but in cases of internal ITOs with similar cultural background. With an internal ITO, a capital interlocking between client and vendor exists, so that both partners trive to pursue the aims of the bank group. This can relativise the conflict of aims that normally exists between client (cost minimisation) and vendor (profit maximisation). If cultural differences were given within an internal ITO, nevertheless, a strict control of the vendor was seen as necessary, which required the accomplishment of the IT management by the client again.

Critical systems (like core banking systems) were not outsourced generally, but in cases of external or internal ITO to a vendor acting for a bank group. Over a vendor primarily acting for a bank group, sufficient influencing possibilities exist normally based on the company alliance which can allow the execution of critical systems there.

Very interconnected IT functions were only outsourced in cases where the complexity and accordingly the interconnected IT functions could be encapsulated on the vendor side.

Strategy: Joint projects

In the preparation phase of the ITO process, a type of ITO (see Figure 2 (page 14) and Table 1 (page 15)) must be decided upon which also includes the choice whether the outsourcing is done independently or in co-work with other outsourcing companies. Joint projects with other ITO clients can generally influence the ITO costs positively. But, if the costs / benefit relation is also competitive with individual ITOs, joint projects were not seen as mandatory for ITO success in the cases investigated.

Strategy: Contract duration (3-5 years)

In the preparation phase of the ITO process the type of ITO (see Figure 2 (page 14) and Table 1 (page 15)) must be decided which also includes the decision about the duration of the ITO contract. Previously discussed shorter contract terms of 3-5 years are partly relevant to success. Investigated ITO cases had unlimited or longer contract durations. No specified contract duration emerged as vital, but a contract term long enough to be able to boost desired cost effects.

Strategy: Renegotiation and restructuring of ITO contract / Vendor switching / Backsourcing

The possibility of giving notice to the vendor during the external execution of the outsourced IT function and the ability to further outsource the IT function to another vendor is mandatory for ITO success. On the one hand, this avoids a dependency situation regarding the vendor. On the other hand, this gives an incentive to the vendor to produce the outsourced IT function continuously in a high quality in order to ensure they keep the order in the long run.

The possibility to backsource the IT function has the same positive effects as the ability to further outsource the IT function to another vendor. But in some investigated cases

the ability to backsource was not seen as relevant, as the internal production of IT goods and services for the respective IT function was not any longer part of the IT strategy of the outsourcing company.

Before switching the vendor or backsourcing, existing contracts are to be renegotiated and restructured, as the change to a new vendor involves high switching costs.

Client capability: Business knowledge

Knowledge about the banking business supported by the IT function to be outsourced is a core competence of the outsourcing bank and must exist there. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge of the ITO are skilled in business knowledge. During the course of the ITO project the business knowledge is to be applied to the advantage of the ITO.

Client capability: IT knowledge

Generally, the client should have mature management capacity with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary in cases of outsourcing of standard bank functionality in retail banking. The existence of similar products in the market can offer comparison possibilities making IT knowledge obsolete in this case. And IT knowledge was also seen as not necessary in a case where the prices to be paid to a vendor acting only within a banking group were fixed and thus could not be influenced. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge of the ITO are skilled in IT knowledge. During the course of the ITO project, the IT knowledge is to be applied to the advantage of the ITO.

Client capability: ITO knowledge

The client must have mature management capacity with experience and expertise about ITO to ensure a successful planning and execution of ITO. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge of the ITO have this ITO knowledge. During the course of the ITO project the ITO knowledge is to be applied to ensure a successful execution of the ITO.

Client capability: Interpersonal skills

The employees of the client concerned with ITO must have interpersonal skills to support the interaction with the vendor and to positively influence a common understanding, knowledge sharing and the establishment of inter-organisational relationships. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge with the ITO have interpersonal skills. These skills are to be applied then from the selection phase till the external execution to the advantage of the ITO.

Client capability: Organisational learning capability

The application of the clients' capability to learn or acquire the needed knowledge from the vendor is mandatory during the transition and execution phase of the ITO process for an effective knowledge sharing which positively influences ITO success. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge of the ITO have organisational learning capability.

Client capability: Flexibility in case of changing technology or business requirements

The client must have the capability to cope with changes of business requirements during the execution phase of the ITO process for the benefit of a permanent and adequate

business support by the outsourced IT function. Within the scope of the preparation phase of the ITO it is to ensure that the outsourcing company has this functional flexibility.

The capability to cope with changes of technology requirements during the execution phase of the ITO process emerged as relevant if technology adaptations affected the client (e.g. interconnections of the outsourced IT function into the application landscape of the outsourcing company) or if the technological governance was done by the client (e.g. internal ITO with technological governance by the outsourcing company). Within the scope of the preparation phase of the ITO it is to ensure that the outsourcing company has this technical flexibility.

Client capability: Partnership's potential

The capability to exploit the partnership`s long-term potential in terms of leveraging the capabilities of client and vendor to the advantage of each counterparty during the execution phase of the ITO process was not rated as relevant in all investigated ITO cases. In an external ITO case it was stated that the success factor is not relevant if the price/performance ratio is adequate. In an internal ITO case, the vendor had almost no scope of action for their own decisions as it is governed by the client, which made the success factor irrelevant again. Generally, the exploitation of the partnership's potential can be limited in the case of external sourcing of standard applications.

Client capability: Acceptance of the vendor

The acceptance of the vendor on the client side during the external execution of the outsourced IT function (ITO process phases ITO transition and execution) was seen as

relevant to success in all investigated ITO cases. Three cases stated that this was given in a sense by conclusion of the ITO contract.

Client capability: Internal IT capability

The internal implementation of individual demands not covered by standard applications of vendors is partly necessary and depended on the market development strategy and on the kind and extent of the ITO.

If a bank wants to operate innovatively in the market, the application of standard software was generally seen as not recommended, because the introduction of new products in a standard system depends often on the acceptance of the change by a bigger user group. And, in the case of implementation, these changes are normally available to all users. Hence, a differentiation in the market is not possible thereby. With an innovative market strategy, the individual implementation of new products is necessary. This can be done internally as well as externally. The definition of the market development strategy as a basis for the choice of a standard or individual system is to be done in the forefront of an ITO.

The success factor was relevant in cases outsourcing parts of their IT functions with the organisational forms "external ITO", "joint venture" or "internal ITO with minor influencing possibility over the vendor". Generally, if only parts of the IT are outsourced, the integration of the outsourced IT function in the application landscape of the outsourcing company is to be carried out in the transition phase, for which capacity and skill must be held available at the beginning of the ITO. In one case outsourcing parts of their IT functions, the outsourcing company is a companion of the vendor (joint venture). In this case, a capacity balance in terms of allocation of employees of the out-

sourcing company on the vendor side was agreed between the partners. This requires also the securing of IT capacity and skill on the client side at the beginning of the ITO. In the internal ITO case outsourcing parts of their IT functions, the client owns an influencing possibility over the vendor which makes the external implementation of individual demands possible. But, in one investigated partly internal ITO case, the possibility of influencing the internal vendor was limited, which made the success factor relevant again.

In the case of a full ITO, the IT capacity does not anymore exist for internal solutions, which makes the success factor irrelevant in this case.

Within the scope of the preparation phase of the ITO it is to ensure that the outsourcing company has this IT capability.

During to the course of the ITO, the internal implementation of individual IT demands not covered by standard applications of vendors is to be carried out if necessary.

Client capability: Problem management

When using a sourcing network, and consequently with the availability of several disturbance sources, a quick problem solution in the transition and execution phase of the ITO process is compulsory. How the problem solution process is organised plays no role. In the preparation phase of the ITO it is to ensure that this rapid problem-solving ability exists.

Vendor selection: Tendering process

The accomplishment of tendering in the vendor selection phase emerged as relevant, if cost reduction objectives stand in the foreground of an ITO. In most of the investigated cases, no tendering was carried out as the vendor was decided beforehand because of strategic reasons (e.g. the strategic vendor of a banking group). If a tendering process is conducted, it should be accomplished by invitation of external and internal bids, but the invitation of internal bids cannot be relevant if the internal production of IT goods and services is no longer part of the IT strategy.

Vendor selection: Requirements specification

A detailed requirements specification during the vendor selection phase emerged as not relevant in each investigated ITO case. In the case of an external sourcing of a standard application with low divergences of the standard functionality, the success factor was less important. In favour of scale effects by means of standardisation the standard contract of the vendor was originally accepted. After contract conclusion, divergent service levels and measures were determined successively and anchored in the ITO contract. A low divergence of the standard functionality helped to reduce ITO costs. The development and adaptation of service requirements after contract conclusion occurred also in two internal ITO cases. This could be due to the capital interlocking between client and vendor and the influencing possibilities which accompany that. In the third internal ITO case the relationship between client and vendor is lived as an external client-vendor relation by whom the influencing possibilities of the vendor are restricted. Again, this required a detailed requirements specification in the vendor selection phase. In the case of the success factors relevance, the description of the service requirements in the request for a proposal should already show a high level of detail if a tendering is carried out.

Vendor selection: Operational information gathering

The collection of sufficient operational information by the vendor in the vendor selection phase is generally a success factor to ensure a realistic vendor bid.

Nevertheless, ITO cases were investigated in which no vendor offer was invited or no ITO contract was compiled before the start of the external operation. For example, the ITO was started within the scope of a letter of intent in the case of an external ITO of a standard application with few divergences from the standard functionality. In that case, no detailed information gathering by the vendor was done before the ITO. Necessary service adaptations were agreed after contract conclusion. A low divergence of the standard helped to reduce ITO costs.

In two other cases no vendor offers were invited. In one of these cases, a joint venture was founded and the society was entrusted with the development and implementation of the requirements. In the second case (internal ITO) the vendor was bought and successively aligned to the needs of the bank group. In both these cases, necessary service adaptations can be done also after completion of the ITO contract without any problems, as a capital interlocking between client and vendor and hence an influencing possibility over the vendor exists.

Vendor selection: Evaluation of bids

The thorough evaluation of the vendor bids in the vendor selection phase is generally a success factor to ensure vendor capability and capacity and an adequate price/performance ratio. But ITO cases emerged in which no vendor bid was invited. In the case of a joint venture, for example, society was entrusted with the development and implementation of the requirements. In the second case (internal ITO) the vendor was

bought and successively aligned to the needs of the bank group. In both these cases, necessary service adaptations can also be done after completion of the ITO contract without any problems, as a capital interlocking between client and vendor and hence an influencing possibility over the vendor exists.

Vendor selection: In-house capabilities

An investigation in the early stages of the ITO, whether the vendor`s conditions can also be achieved internally, and the execution of an ITO just in case the external market offers advantages, are partly relevant to ITO success. The need for this success factor depended on the objective of the ITO. If strategic reasons stand in the foreground of the ITO, the success factor cannot be relevant. The internal production of IT goods and services, for example, was not any longer part of the IT strategy of investigated ITO cases. In such a case, it also occurred that a make or buy investigation was done, but thereby only the topical state of internal efficiency and not its potential was considered. The investigation whether the vendor conditions can be achieved internally occurs if necessary at the beginning of the ITO, in the preparation and vendor selection phase. Then the investigation should be done by taking into account the service requirements, internal IT costs and ITO costs.

Vendor selection: Realisation of scale effects

An ITO only in cases where scale effects can be realised was relevant, if the achievement of strategic or economic scale effects belonged to the ITO objectives linked with the ITO. Whether scale effect should and could be realised with the ITO must be checked at the beginning of the ITO, in the preparation and vendor selection phase.

Vendor capability: Business knowledge

Business knowledge of the vendor about the branch of the client is mandatory to achieve ITO success. The outsourcing company has to ensure in the vendor selection phase that the vendor is skilled in business knowledge about the client`s industry.

Vendor capability: IT knowledge

Specialist knowledge of the vendor about the outsourced IT function and the underlying technology belongs to the core competence of the vendor and is mandatory for success with ITO. The outsourcing company has to ensure in the vendor selection phase that the vendor is skilled in IT knowledge.

Vendor capability: ITO knowledge

Knowledge and experience about ITO on the vendor side is compulsory to ensure ITO success. The outsourcing company has to ensure in the vendor selection phase that the vendor has ITO knowledge.

Vendor capability: Interpersonal skills

Social competence of the vendor, in particular the ability to communicate with the client and to build up relations with the client, is mandatory for the achievement of success with ITO. The outsourcing company has to ensure in the vendor selection phase that the vendor has interpersonal skills.

Vendor capability: Organisational learning capability

The capability of the vendor to learn or acquire the necessary knowledge from the client is mandatory for effective knowledge sharing which positively influences ITO success.

The outsourcing company has to ensure in the vendor selection phase that the vendor has organisational learning capability.

Vendor capability: Staff management

Professional personnel management by the vendor from takeover of the IT function is mandatory for a successful external execution of the outsourced IT function. In particular, a high staff quality, sufficient staff capacity, good working conditions, a good management of staff allocation and a low staff turnover need to be ensured in the vendor selection phase.

A low staff turnover, as another aspect within the vendors' personnel management, emerged as a specific success factor. By choice of the organisational form of a joint venture, employee fluctuation on the vendor side was seen as less critical. In this case, it was contractually agreed that the client is obliged to pass over client employees to the vendor if needed. The outsourcing company has to ensure in the vendor selection phase that the vendor has a low employee fluctuation, if necessary.

Vendor capability: Flexibility in case of changing client and IT needs

The implementation of changing business and IT requirements by the vendor during the external execution of the outsourced IT function is mandatory for successful ITO. The outsourcing company has to ensure in the vendor selection phase that the vendor is functionally and technically flexible.

Vendor capability: Partnership's potential

The capability to exploit the partnership`s long-term potential in terms of leveraging the capabilities of client and vendor to the advantage of each counterparty during the exe-

cution phase of the ITO process was not rated as relevant in all investigated ITO cases. In an external ITO case it was stated that the success factor is not relevant if the price/performance ratio is adequate. In an internal ITO case, the vendor had almost no scope of action for their own decisions as they were governed by the client, which again made the success factor irrelevant. Generally, the exploitation of the partnership's potential can be limited in the case of the external sourcing of standard applications.

Vendor capability: Reliable, professional job completion / Minimum customer involvement

Reliable and professional principles of value performance on the vendor side are mandatory for the achievement of success with ITO. The outsourcing company has to ensure in the vendor selection phase that the vendor has this capability.

A minimum customer participation in the external production of IT goods and services by the vendor is partly relevant to success. With big cultural differences between client and vendor the opposite, a maximum customer involvement, emerged as mandatory. Cultural differences required an on-site management (managers of the vendor were expatriates of the outsourcing bank) and strict controls in one case. In another case, with the organisational form of a joint venture intensive customer participation was even welcome. The joint-venture is led by the partners together and the partners own the business and decision competence for the outsourced rating modules. If necessary, the outsourcing company has to ensure in the vendor selection phase that the vendor has this capability.

Vendor capability: Attraction of customers

The capability of the vendor to win new customers during the term of the ITO is partly relevant to success. If the cost / benefit relation of the ITO fits, no need exists for acquiring new customers from the point of view of several ITO clients of investigated cases. In other cases, the vendor operated mainly for banks within a bank group, which made the success factor irrelevant. The outsourcing company has to ensure in the vendor selection phase that the vendor is able to attract new customers, if necessary.

Vendor capability: Financial stability / Cost and financial management

Financial stability and a professional financial management of the vendor are necessary for the success of ITO to avoid negative effects on the external production of IT goods and services. The outsourcing company has to ensure in the vendor selection phase that the vendor is financially stable and has a professional financial management.

NEW: Vendor capability: Short response time in case of problems

The ability of the vendor to respond quickly to problems on the client side during the external execution is a mandatory success factor. The outsourcing company has to ensure in the vendor selection phase that the vendor has this capability.

Contract: Individual contract

The refusal of the vendors' standard contract and, instead, the negotiation of an individual contract is partly relevant to ITO success. With the organisational form of a joint venture the success factor was not seen as relevant, because the contract was developed by the partners together according to their needs. In the case of an external or internal organisational form, the outsourcing company should be aware that the contract meets the demand, no matter whether this is already considered in the standard contract or

must be negotiated separately. In particular, if an outsourcing company pursues ITO to achieve scale effects, it was recommended to accept the vendors' standard contract as far as possible in the cases investigated.

Contract: Measurable service requirements, measures and reports

A detailed specification of the requirements and the linked measures and reports in the ITO contract emerged as not relevant in each investigated ITO case. In the case of an external sourcing of a standard application with low divergences of the standard functionality, the success factor was less important. In favour of scale effects by means of standardisation the standard contract of the vendor was originally accepted. After contract conclusion, divergent service levels and measures were determined successively and anchored in the ITO contract. A low divergence of the standard functionality helped to reduce ITO costs. The development and adaptation of service requirements after contract conclusion occurred also in two internal ITO cases. This can be possible due to the capital interlocking between client and vendor and the influencing possibilities coming along with that. In the third internal ITO case the relationship between client and vendor is lived as an external client-vendor relation by which the influencing possibilities to the vendor are restricted. Again, this required a detailed requirements specification in the vendor selection phase.

Contract: Escalation procedures / process for resolution of performance disputes

The contractual agreement of escalation procedures and processes for the resolution of performance disputes in case of insufficient performance or malperformance of the vendor emerged as partly relevant to success. In the cases with the organisational form of an external or internal ITO, the success factor was seen as necessary. In the case of

the joint-venture, influencing possibilities existed on the vendor by committees which made a contractual definition unnecessary.

Contract: Financial penalties

The contractual definition of financial penalties is an incentive to keep the vendor performing according to the arrangements in the ITO contract. Nevertheless, this was not relevant in all cases. In a case which sources a standard application externally with low divergences from the standard functionality, the success factor was not seen as relevant. No performance improvements were expected thereby. In the case of external ITOs with capital interweaving between client and vendor, no financial penalties were agreed either. In these cases influencing possibilities exist over the vendor which can make the contractual definition unnecessary. In a case with the organisational form of a joint venture, the success factor was also not relevant, because financial punishments would curtail the income from investment. Hence, the success factor is relevant in the case of external ITOs sourcing no standard functionality externally and without equity holding between client and vendor. In the investigated internal ITO cases belonged the vendor to 100% to the client, thus influencing possibilities are given as well. But internal ITOs rated financial punishments in the ITO contract as mandatory for ITO success. Internal ITOs can look at financial punishments as necessary contractual mechanisms to keep the vendor acting according to the arrangements in the ITO contract despite a certain order situation.

Contract: Flexibility terms

Flexibility clauses in the contract to ensure the possibility of contract adaptation with changing business or technical demands are mandatory for ITO success. From case to case, different flexibility clauses are necessary (e.g. avoidance of minimum purchase,

approach for implementation of application changes, arrangement of growth rates or volume ranges for services, etc).

Contract: Renegotiation

The contractual definition of regular renegotiation possibilities (e.g. based on external benchmarking) gives the possibility to guarantee contract conditions in line with market requirements. But regular renegotiation possibilities were not seen as relevant in all investigated ITO cases. In the ITO cases without profit achievement intention (e.g. internal ITO, joint venture) the success factor was not relevant, because in these cases the ITO goods and services are to be performed at as low as possible cost, which was passed onto the ITO clients. In another case, where the success factor was rated as not relevant, an external ITO with equity holding to a vendor acting within a bank group was given. In all of these exceptional cases, prices are not negotiated between client and vendor.

Contract: Communication channels

The contractual definition of communication channels between client and vendor is compulsory for the achievement of ITO success, for example the notable naming of the vendors' account manager (see success factor roles and responsibilities: account manager).

Contract: Termination clause

The contractual arrangement of exit clauses is a mandatory factor for the achievement of success with ITO. This contains notice possibilities as well as the necessary support of the vendor for backsourcing or further outsourcing to another vendor.

Contract: Staff regulations / guarantees

Contractual regulations and guarantees for staff transferred to the vendor are relevant in case of a personnel transfer.

Contract: Control rights

Regulation authorities demand the fixation of controlling rights for the outsourcing bank as well as for the supervisory authorities in the ITO contract by law.

Contract: Contract review

Before contract conclusion, external advice is to be engaged in the contracting phase as ITO is very complex and as vendors are normally more experienced compared to clients. Depending on the individual experience of the outsourcing client with ITO, different external experts should be included dependent on the respective topic (legal experts, technical experts, chartered accountants, tax advisers, management consultants, etc.).

Contract: Due diligence

The accomplishment of a due diligence check before completion of the ITO contract helps to ensure that company, price, solution, contract and references are suitable for the ITO needs. But in all the ITO cases investigated no due diligence check was conducted, as the vendor was already certain on account of strategic ITO objectives.

Contract: Contract amendments

The need for separate contract appendices per IT good and service with separate price and service level agreements emerged as partly relevant to ITO success. In three cases, own contract appendices were seen as not necessarily inevitable. Instead, it was seen as important that the service requirements were described in a suitable level of detail. But

in one case with a high ITO degree a large number of IT goods or services were to be regulated in the ITO contract. In order to achieve transparency in this case the need for separate contract appendices was given. In another case with a high ITO degree, a standardised product catalogue on the vendor side existed, which again made the success factor irrelevant. In this case, the IT goods and services to be outsourced were not described individually in the contract, but the contract referred to the standard product catalogue of the vendor.

Contract: Contract renegotiation

A regular comparison of the ITO relation with market standards, and based on that a regular renegotiation of the ITO contract, guarantees contract conditions in line with market requirements. But regular renegotiations were not seen as relevant in all the ITO cases investigated. In the ITO cases without profit achievement intention (e.g. internal ITO, joint venture), the success factor was not relevant, because in these cases the ITO goods and services are to be performed to as low as possible costs, which were passed on to the ITO clients. In another case, where the success factor was rated as not relevant, an external ITO with equity holding between client and vendor was given by which the prices could not be negotiated. In all of these cases, prices are not negotiated between client and vendor.

Stakeholder management: Stakeholder involvement: High level management

The obtaining of the commitment of the high-level management on the business and IT side is necessary for success with ITO. Before the ITO, this support is necessary to receive a positive decision on the ITO and with it the approval for the completion of the contract and the basic conditions agreed in it, as well as to guarantee the necessary technical knowledge (relevant in ITO contract phases preparation - contract). During

the contract term the management must carry the consequences of the ITO (e.g. software changes only within agreed release cycles). Besides, relationship management at management level (see success factor relationship management) and acting as one hierarchy level of escalation in case of performance disputes (see success factor vendor performance reporting) belong to the tasks which need to be performed by the management during ITO.

Stakeholder management: Stakeholder involvement: Technical client staff

The retention of technically competent staff and their involvement in the ITO project is partly relevant to success. IT knowledge to a greater or lesser extent, is in general necessary to be able to judge the cost / benefit ratio of the IT function sourced externally and thus to exert control over the vendor. The more external an ITO relation is, the more client and vendor pursue two different objectives: cost minimisation versus profit maximisation. Hence, an outsourcing enterprise should protect itself from the opportunistic behaviour of the vendor and should also be able to judge the vendor's performance technically.

This was not relevant in a case of outsourcing standard bank functionality in retail banking. Hereby enough comparison possibilities can exist in the market. And IT knowledge was also not that important in one case where the prices to be paid to the vendor which serves only banks of a particular bank group were fixed and thus could not be influenced.

At the beginning of the ITO the availability of technical knowledge is to be guaranteed and technically competent members of staff are to be retained if necessary. These mem-

bers of staff are to be involved from the vendor selection phase till the end of the ITO project.

Stakeholder management: Stakeholder involvement: Instruction of client staff

By accomplishment of a make or buy analysis an adequate instruction of the employees in charge is relevant for ITO success in the vendor selection phase. In particular, detailed instructions should be given to avoid a simple vote against ITO. For example, the evaluation has to be done in separate elements, even down to the employee level, and recommendations should be given based on the evaluation of risks and advantages. In most of the investigated ITO cases a make or buy evaluation was not carried out as the internal production of IT goods and services was not part of the ITO strategy anymore.

Stakeholder management: Stakeholder involvement: IT user

The consideration of the user requirements at the beginning of an ITO and regularly during the external execution is generally recommended to ensure the support of this stakeholder group for ITO. But this was not confirmed in any investigated ITO case without limitations. In one application outsourcing case, no user interface existed, which made the success factor irrelevant. In another case, a standard application was sourced externally. Therefore, not all wishes on the functional side could be considered. However, cost savings could be achieved by means of scale effects through standardisation. In other cases, the implementation of the desired user requirements emerged as dependent on the strategic significance of the outsourced application, e.g. with the distribution relevance of an application or, in the case of user requirements related to legal demands, user requirements became a high priority.

Stakeholder management: Stakeholder involvement: Staff affected by ITO

The employees directly affected by the ITO (employees to be outsourced as well as employees remaining in-house and becoming responsible for the control of the ITO) are to be informed openly and honestly before conversion of the ITO. In particular, a realistic plan of the ITO, the upcoming decisions, the time schedule and the effects on their work are to be communicated. Hence, reliable data must already be given at that time. This requires that vendor evaluations, testing and business case calculations should be done confidentially beforehand. The success factor is therefore relevant from the beginning of the ITO till shortly before completion of the ITO contract.

Stakeholder management: Stakeholder involvement: Long-term client employees

The switch of long-term employees of the outsourcing enterprise to the vendor by negotiations of ensure jobs and good terms of employment is partly relevant to success. If the knowledge necessary for the external execution of the outsourced IT function is not available in the market (ITO of individually developed applications without good system documentation, or ITO of standard applications with resource bottlenecks in the market) the outsourcing of long-standing client employees helps to guarantee a good start for the external execution. In the case of outsourcing of standard applications a personnel transfer is not necessary, as a rule, because in the market resources with suitable knowledge are available. A necessary personnel transfer has to be ensured in the ITO process phase's selection, contract and transition.

NEW: Stakeholder management: External recruitment of vendor employees

In the case of the organisational form of a joint venture, the recruitment of the employees for the joint venture in the transition and execution phase from the market had a positive effect on the achievement of ITO success.

Stakeholder management: Stakeholder involvement: Functional departments

In the early stages of the ITO (preparation – contracting phase), the inclusion of relevant business divisions (e.g. human resources, legal department, etc.) is to be ensured to consider all relevant aspects and to support a smooth processing of the decision for or against ITO.

Roles and responsibilities: Project manager

The nomination of a project manager for the governance of the ITO project from the preparation phase up to the end of the transition to the vendor, and the specification of the accompanying responsibilities, is a mandatory success factor. In the preparation phase the nomination of the project manager and the transference of the competences occur. The project manager steers the project from his/her nomination and responsibility transference in the preparation phase of the ITO up to the end of the transition to the vendor.

Roles and responsibilities: Account manager

A notably agreed account manager on the vendor side and the specification of the accompanying responsibilities is a compulsory success factor as he or she facilitates a communication channel which positively influences a common understanding and which prevents vendor opportunism and the negative consequences of legal loopholes. In the vendor selection phase the vendor's account manager is nominated, in the contracting phase the name is taken up in the ITO contract. In the transition and execution phase of the ITO process the account manager practises his/her function as a communication channel between client and vendor.

Roles and responsibilities: Relationship manager

It is mandatory to have an active relationship manager - perhaps more than one - on the client and vendor side with adequate interpersonal skills as they support successful co-working and the resolution of disputes. In the vendor selection phase the people responsible for relationship management are fixed and the competence is transferred. During the client-vendor-interaction in the selection, contract, transition and execution phases of the ITO process, relationship management is pursued.

NEW: Roles and responsibilities: Service level manager

The agreement of service levels, measures and reports before or after contract conclusion (see success factors "Requirements specification" and "Measurable service requirements, measures and reports") was rated as influencing success. Hence, the operational role responsible this job is also compulsory. In the vendor selection phase the service level manager is nominated and the competences are transferred. The service level manager supports with the definition of the service levels in the contracting phase. From the start of the external execution in the transition phase the service level manager acts as a receiver for the agreed service level reports and exercises regular control of the vendor performance.

NEW: Roles and responsibilities: Mediator

By the founding of an IT spin-off (1 tier vendor) by the client which uses a sourcing network (2 tier vendors) for the performance of IT goods and services, mediation between the client and the 2 tier vendors by the IT spin-off is success-influencing during the time of cooperation. In the selection / contract phase the mediator on the side of the IT spin-off is to be nominated and the responsibility is to be transferred. From the be-

ginning of the external execution in the transition phase, the IT spin-off mediates between the client and 2 tier vendors.

Control: Monitoring and control

The regular and strict control of the vendor in the transition and execution phase concerning the fulfilment of the ITO contract (SLAs, etc.) is compulsory for the achievement of ITO success. A regular vendor's control is even prescribed by the regulation authorities legally, to ensure the orderliness of the outsourced business or service. The regular monitoring and control of the vendor's performance is to be done on the basis of a procedure to measure tangible and intangible expectations over a long time-scale. In particular, with the help of the SLA reports it is recognisable if a deterioration of the vendor performance occurs. Thus the opportunity exists of taking measures early to avoid negative effects on vendor performance and on the relationship between client and vendor.

Control: Vendor payment

On schedule settlement of payments to the vendor is a compulsory success factor during external execution of the outsourced IT function in cases of satisfaction with vendor performance.

Control: Check of market standards

A regular check of market standards during external execution concerning contract, processes, service metrics and price and if necessary the initiation of contract adaptations would be basically important to ensure the competitive price/performance ratio of the ITO. But this success factor emerged as irrelevant in all the investigated ITO cases. A market comparison was not possible as a comparable product offer at the market did not exist or as a market comparison was economically not feasible. In another case,

vendor switching was not a possible strategic option, which again made the success factor irrelevant.

Control: Vendor performance reporting

A regular reporting of the vendor performance in the transition and execution phase to the management level of the outsourcing company is necessary for ITO success. This helps to recognise imperfections appearing in the vendor performance early and to create with it the basis to counteract insufficient vendor performance at the suitable management level. Partially, the management reporting is limited to failure situations with which the general monitoring responsibility is delegated at employee level.

Control: Risk assessment and risk management

Documented identification and the management of ITO risks are compulsory for European banks regarding legal regulations. Before the actual ITO, this is necessary for the benefit of a sound motivation of the ITO, to recognise risks early and to put in place measures for the benefit of decreasing risk from the start. During the ITO for monitoring the risks and the risk decreasing measures. And after contract expiry as decision support regarding the continuance of the ITO basically and/or with the current vendor. The extent of the risk management is to be chosen depending on the risk content of the ITO.

Co-work: Communication

Clear and effective communication between client and vendor on a regular basis is compulsory for the achievement of success with ITO, from the vendor selection phase to the execution phase, in order to generate a common understanding about ITO objectives, performance expectations, governance structures, etc.

Co-work: Knowledge transferring and sharing

Knowledge transferring and sharing between client and vendor is mandatory for ITO success from the start of the external production of IT goods and services as it fosters good co-working. Vendors should share the necessary knowledge for using the outsourced IT function. Clients should share their business knowledge for improving the vendor´s understanding of business requirements.

Co-work: Change project management

Change project management practices ensuring quality during the external execution of the outsourced application are compulsory for ITO success. In particular, the following abilities matter: ability to re-plan change projects, management of project risks and construction of an efficient project organisation with a low number of people involved on the client and vendor side.

NEW Co-work: Working packages and responsibility

In the case of the organisational form of a joint venture, the generation of working packages and the distribution of the responsibility for it among the partners had a positive effect on ITO success. This was relevant at the beginning of the external execution in the transition phase, as well as by technical changes during the runtime of the ITO.

NEW Co-work: Top balance

In the case of the organisational form of a joint venture, the introduction of a "top balance" between the partners had a positive effect on ITO success. To guarantee a fair prize / performance relation with different engagement of the partners in the transition and execution phase, it was documented which partner had performed how many man-

days. A balance occurred by means of "additional payments" or "reimbursements" between the partners.

NEW Co-work: Neutral body

In the case of the organisational form of a joint venture, the introduction of a neutral body to the mediation and coordination of votes between the partners in the transition and execution phase had a positive effect on ITO success.

NEW Co-work: Regular advisory board

In the case of the organisational form of a joint venture, regular advisory board meetings during implementation of the ITO in the transition phase and during external execution had a positive effect on ITO success.

Relationship: Relationship building and management

Relationship building and management between client and vendor during the duration of the cooperation (ITO process phases vendor selection - execution) is mandatory for ITO success. The more of a partnership the cooperation is, the more intensely relationship management is to be pursued.

5.2.3 Validated ITO success factor dependencies: explanation, temporal relevance

Chapter 5.2.3 presents the success factor dependencies which emerged as relevant for long-term ITO success from the multiple case studies. In order to come to the final conclusion about the relevance of each success factor dependency, the individual answers of the 8 cases to each pre-formulated ITO success factor dependency of the interview field manual were presented together and discussed. Appendix C shows the comparison of the 8 case answers and the discussion for each success factor dependency in detail.

			Outsourcing Process Phases					
No.	Success Factor Category(ies)	Success Factor Category(ies)	Preparation	Selection	Contract	Transition	Execution	Post-deal
Dependency Type 1: Success factors as precondition for other success factors								
a	Strategy	Contract, Co-work	■	■	■	■	■	□
b	Vendor selection	Contract, Control	□	■	■	■	■	□
Dependency Type 2: Impact of success factors (or values) on other success factors								
c	Environment	Contract, Relationship	■	■	■	□	□	□
d	Environment	Contract, Control	■	■	■	■	■	■
e	Strategy	Contract, Relationship	■	■	■	□	□	□
f	Client/Vendor capability, Contract, Co-work	Relationship, Control	■	■	■	■	■	□
g	Contract	Relationship	□	□	□	□	□	□
Dependency Type 3: Need for alignment of success factor values								
h	Strategy	Contract, Relationship	□	□	□	□	□	□
i	Strategy	Contract, Relationship	□	□	□	□	□	□

Relevant dependency **Partly relevant dependency** Not relevant dependency

■ Dependency is relevant in this ITO process phase

Table 38: Validated ITO success factor dependencies

Table 38 shows the result of the empirical success factor dependency research. 9 success factor dependencies were investigated (see column "No.: a – i" and the respective success factor categories in the two columns "Success Factor Category(ies)"). Each dependency is assigned to one of three types of dependencies (see rows "Dependency Type 1, 2 and 3") according to the developed ITO success factor dependency taxonomy (see Chapter 5.1.1). For each success factor dependency it is pointed out if it was fully or partly validated, or if it emerged as not relevant to ITO success. The success factor

dependencies which emerged as not relevant to ITO success have no colour. The fully validated success factor dependencies are dark grey coloured, the partly validated success factor dependencies are light grey coloured. Partly validated means not all aspects of the pre-described dependency from the interview field manual applied. In the following, for each partly or fully validated success factor dependency, a detailed explanation is given. The temporal relevance of the success factor dependencies is determined by the temporal relevance of the underlying success factors. The temporal relevance of the success factor dependencies is shown by dark grey colouring of the applicable outsourcing process phase in the column “outsourcing process phases”.

Dependency Type 1: Success factors as precondition for other success factors

a: Strategy ↔ Contract / Co-work

The incorporation of the ITO objectives (see success factor category strategy, success factor ITO objectives) in the ITO contract is partly relevant to ITO success. In the investigated case with the organisational form of a joint-venture, the success factor was not seen as necessary as the ITO objectives are regularly discussed in committees.

The ITO objectives are to be defined in the preparation phase (see success factor category strategy, success factor ITO objectives), fixed in the ITO contract (see success factor category "contract") if necessary and communicated during the phases of client/vendor interaction (see success factor category co-work, success factor communication).

b: Vendor selection / Contract ↔ Control

The service level requirements, measures and reports - if necessary investigated in the vendor selection phase (see success factor category "vendor selection") and contractually agreed in the contracting or execution phase (see success factor category "contract") -

are the basis for the regular vendor control (see success factor category "control") during the transition and execution phase of the ITO project.

Dependency Type 2: Impact of success factors on other success factors (Cause / Effect)

c: Environment ↔ Contract / Relationship

Generally, a stable internal and external business environment supports the ability to define contractually stable IT requirements for the lifetime of the ITO contract. An ITO in unstable environments (success factor category “environment”) only in connection with a flexible, long-term contract (success factor category “contract”) and with a strategic partner (success factor category “relationship”) has been confirmed.

The existence of the trigger for the dependency, an unstable environment, must be checked at the beginning of an ITO. If an unstable environment is given, the contract creation as well as the choice of the kind of partnership is influenced. For this reason, the temporal relevance of the success factor dependency is assigned to the three ITO process phases: preparation, selection and contract.

d: Environment ↔ Contract / Control

The implementation of the legal demands for an ITO is compulsory for ITO success to guarantee the legal capacity of the outsourcing bank (success factor regulatory compliance). The national regulatory authorities monitoring banks define the requirements for ITO (success factor category “environment”). A German bank conducting ITO, for example, must regularly monitor the outsourced IT functions according to the German Banking Act to ensure the orderliness of this business or service (success factor category “control”). The federal financial supervisory authorities must, further on, have the

right to audit and the ability to monitor the bank under their jurisdiction. This requires regular data collections by the bank and the federal financial supervisory authorities on the vendor side. These rights must be grounded in the ITO contract (success factor category "contract"). Furthermore, the regulatory entities have published principles on how to mitigate ITO risks and how to comply with regulatory issues in this context (success factor category "control"). Beside the fulfilment of general regulations regarding ITO, specific regulations regarding the outsourced IT function must be met as well (see success factor regulatory compliance).

e: Strategy ↔ Contract / Relationship

The ITO of core functions or strategic functions (see success factor category "strategy") only in connection with a detailed ITO contract (see relevant contract contents in success factor category "contract") and to a strategic partner (see success factor category "relationship") has been confirmed. About the handling of company-specific IT functions no statement can be made on account of the available data.

The decision about the IT function to be outsourced is done in the preparation phase of the ITO process. If a core function or strategic function is outsourced, the contract creation as well as the choice of the kind of partnership is influenced. For this reason, the temporal relevance of the success factor dependency is assigned to the three ITO process phases: preparation, selection and contract.

f: Client/Vendor capability / Contract / Co-work ↔ Relationship / Control

The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements of trust

and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). Benefit and risk share is given in none of the examined ITO cases (see success factor "benefit sharing arrangements") and, hence, cannot be evaluated.

The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phase's selection, contract, transition, execution). And the factors of trust, cooperation and commitment are to be developed during the external execution of the ITO.

Partnership building requires time and the application of suitable people with social abilities on the client and vendor side before concluding the contract. Interpersonal skills are relevant from the preparation phase up to the execution phase (see success factors "client and vendor interpersonal skills").

The definition of the required service levels must be ensured (see success factor category "contract") allowing an early detection of critical vendor performance during external execution, which helps to avoid escalation and negative consequences for the relationship (see success factor category "relationship").

5.3 Assessment of propositions

At the beginning of the research, two propositions were made (see Chapter 4):

1. Proposition 1: The success of ITO is dependent on the sum of factors described in the preliminary ITO Model in Chapter 5.1.
2. Proposition 2 (Rival): ITO success is dependent on the single success factors or on the ITO success factors within certain ITO process phases.

The result of the multiple case study shows that, in every examined IT case, a huge number of success factors covering all phases of the ITO process are responsible for ITO success. From a total of 104 examined ITO success factors (see Table 37, page 124), 76 were confirmed, 16 were denied and 4 could not be evaluated. In addition, 8 new success factors were determined within the scope of the multiple case studies. Within the confirmed success factors there are success factors existing which are basically relevant and success factors whose relevance depends on the existence of certain basic conditions. This differentiation is explained in the detailed success factor descriptions in Chapter 5.2.2. Besides, 6 of 9 investigated success factor interdependencies were empirically confirmed fully or partly (see Chapter 5.2.3).

Thus, proposition 2 is disproved, which was assumed from the fact that the ITO success depends on single success factors or the fulfilment of success factors within certain separated ITO process phases.

Proposition 1 was predominantly confirmed, with the restriction that although a large part of the success factors and success factor dependencies of the preliminary ITO Model are responsible for long-term success with ITO, not all of them are, and additional success factors previously not covered by the preliminary ITO Model were determined.

This assessment of propositions was confirmed by the evaluation of the ITO Model by obtaining expert opinion (see Chapter 7).

5.4 Summary

A multiple case study approach was used to investigate if the preliminary ITO Model (see Chapter 5.1) with its pre-formulated ITO success factors and ITO success factor interdependencies applies in 8 long-running ITO cases of 5 European banks (see Chapter 5.2).

All 8 investigated ITO cases are rated as successful.

From a total of 104 examined ITO success factors, 76 were confirmed, 16 were denied and 4 could not be evaluated. In addition, 8 new success factors were determined within the scope of the multiple case studies.

6 of 9 investigated interdependencies between success factors were empirically confirmed, either fully or partly.

Thus proposition 2 is disproved and proposition 1 is predominantly proved: ITO success depends on a huge number of success factors covering all phases of the ITO process which are partly interconnected to each other.

CHAPTER 6

ITO Model

6 ITO Model

Chapter 6 describes how the knowledge gained empirically about factors of influence relevant to the long-term success of IT application outsourcing, the success factors´ weightings, the success factors´ temporal relevance within the ITO process and the success factors´ interdependencies (see Chapter 5.2) are used to develop the research objective of this thesis: the novel ITO Model.

The ITO Model is developed in three steps. In the first step, the empirically confirmed success factors / success factor interdependencies were translated into “rules” (see Chapter 6.1). In the second step, these rules were sorted chronologically according to the empirically collected temporal relevance of the underlying success factor / success factor interdependency within the ITO process phases (see Chapter 6.2). In the third step the rules were assigned to four levels of environment to give an indication regarding the influential nature of the success factors by the outsourcing bank (see Chapter 6.3).

The ITO Model so generated was evaluated by obtaining the opinion of experts. The results of the expert interviews are shown in Chapter 7. The ITO Model was partly adapted based on the results of the ITO Model evaluation. Chapter 7 also presents the final ITO Model in detail emerging from this PhD thesis. The novel ITO Model is a handbook for IT application outsourcing in the banking industry and is able to aid banks in planning and implementing ITO solutions by guiding them through the ITO process steps of preparation, selection, contract, transition, execution and post-deal comprising all the relevant aspects necessary to achieving ITO success.

6.1 ITO success factor rules

The empirically confirmed success factors / success factor interdependencies were translated into simple understandable "rules," meaning that, instead of just listing a success factor / success factor dependency (e.g. "Renegotiation and restructuring of ITO contracts"), the success factor /success factor dependency is presented as an action instruction (e.g. "Ensure that the existing contract is renegotiated and restructured early before further outsourcing or backsourcing"). Table 39 shows the rules derived from the mandatory success factors and Table 40 (page 170) consists of the rules and use cases derived from the partly necessary success factors. Table 41 (page 173) shows the rules derived from the validated success factor dependencies.

Success Factor Taxonomy Category	Success Factor	Success Factor Rules
1. Environment	1.6 Regulatory compliance	1.6.1 Comply with regulatory issues. See single success factor rules: • 6.12 Include control rights for client and regulatory institutions in the ITO contract • 8.1 Regularly monitor and control vendor performance • 8.5 Carry out an identification and management of ITO risks, depending on the given risk potential 1.6.2 Ensure the capability of the vendor to implement legal business requirements 1.6.3 Include the implementation of legal business requirements in the outsourced IT function in the contract
2. Strategy	2.4 In-house IT function: vendor management	2.4 Do not outsource vendor management
	2.12 Renegotiation and restructuring of ITO contracts / Vendor switching	2.12.1 Renegotiate and restructure ITO contract early before implementing another solution (vendor switching / backsourcing) 2.12.2 Switch to another vendor if necessary
3. Client Capability	3.1 Business knowledge	3.1.1 Ensure the existence of business knowledge about the business supported by the outsourced IT 3.1.2 Ensure the application of business knowledge about the business supported by the outsourced IT
	3.3 ITO knowledge	3.3.1 Ensure the existence of ITO knowledge 3.3.2 Ensure the application of ITO knowledge
	3.4 Interpersonal skills	3.4.1 Ensure the existence of interpersonal skills 3.4.2 Ensure the application of interpersonal skills
	3.5 Organisational learning capability	3.5.1 Ensure the existence of organisational learning capability 3.5.2 Ensure the application of organisational learning capability
	3.6 Flexibility: business changes	3.6.1 Ensure the capability of coping flexibly with business changes 3.6.2 Cope flexibly with business changes
	3.9 Vendor acceptance	3.9 Ensure the acceptance of the vendor
	3.11 Problem management	3.11.1 Ensure the capability of solving operational problems rapidly in a multi-vendor environment 3.11.2 Solve operational problems rapidly in a multi-vendor environment
5. Vendor Capability	5.1 Business knowledge	5.1 Ensure the existence of business knowledge about the client´s industry on the vendor side
	5.2 IT knowledge	5.2 Ensure the existence of IT knowledge about the outsourced IT function on the vendor side
	5.3 ITO knowledge	5.3 Ensure the existence of ITO knowledge on the vendor side
	5.4 Interpersonal skills	5.4 Ensure the existence of interpersonal skills on the vendor side
	5.5 Organisational learning capability	5.5 Ensure the existence of organisational learning capability on the vendor side
	5.6 Staff management: staff quality, capacity, working conditions, allocation	5.6 Ensure the capability of professional staff management on the vendor side in terms of staff quality, capacity, working conditions and allocation

Table 39: Part I of the ITO Model: Success factor rules - mandatory success factors

5. Vendor Capability	5.8	Flexibility: business and technology changes	5.8	Ensure the existence of flexibility on the vendor side regarding the implementation of changing client and IT needs
	5.10	Reliable, professional job completion	5.10	Ensure the capability of a reliable, professional job completion on the vendor side
	5.13	Financial stability / Cost and financial management	5.13	Ensure the financial stability of the vendor and the capability of a professional cost and financial management
	5.14	Short response time in case of problems	5.14	Ensure the capability of the vendor to respond quickly in case of problems
6. Contract	6.6	Flexibility terms	6.6	Include flexibility terms in the ITO contract
	6.8	Communication channels	6.8	Include communication channels between you and vendor in the ITO contract
	6.10	Termination clause	6.10	Include a termination clause and the support of the vendor in that case in the ITO contract
	6.12	Control rights	6.12	Include control rights for client and regulatory institutions in the ITO contract
	6.13	Contract review	6.13	Conduct a contract review by external experts depending on your knowledge needs
7. Stakeholder Management	7.1	Stakeholder involvement: High-level management	7.1	Ensure the commitment of the high level management on business and IT side
	7.7	Stakeholder involvement: Staff affected by ITO	7.7	Inform directly affected employees before execution of the ITO openly and honestly about upcoming decision points, schedules, the influence on their job and possible options
	7.9	Stakeholder involvement: Functional departments	7.9	Involve relevant functional departments in the forefront of the ITO
	7.11	Roles and responsibilities: Project manager	7.11.1 7.11.2	Install an ITO project leader Leverage the ITO project leader
	7.12	Roles and responsibilities: Account manager	7.12.1 7.12.2 7.12.3	Ensure that an account manager is installed on the vendor side Include the vendors' account manager in the ITO contract Leverage the vendors' account manager
	7.13	Roles and responsibilities: Relationship managers	7.13.1 7.13.2	Install active relationship managers on the client and vendor side Leverage active relationship managers on the client and vendor side
	7.15	Roles and responsibilities: Service level manager	7.15.1 7.15.2	Install a service level manager Leverage the service level manager
8. Control	8.1	Monitoring and Control	8.1	Regularly monitor and control vendor performance based on a measurement system able to track tangible and intangible expectations over a long time-scale.
	8.2	Vendor payment	8.2	Originate vendor payments on time if no reasons for complaints exist
	8.4	Vendor performance reporting	8.4	Ensure a regular management reporting of vendor performance
	8.5	Risk assessment and risk management	8.5	Carry out an identification and management of ITO risks, depending on the given risk potential
9. Co-Work	9.1	Communication	9.1	Communicate clearly and effectively
	9.2	Knowledge transferring and sharing	9.2	Mutually transfer and share knowledge with the vendor
	9.3	Change project management	9.3	Carry out change project management supporting quality
10. Relationship Management	10.1	Relationship building and management	10.1	Build and manage a relationship with the vendor of an intensity dependent on the degree of partnership.

Table 39 (cont.): Part I of the ITO Model: Success factor rules - mandatory success factors

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases
1. Environment	1.5 Vendor market	1.5 Ensure that an adequate number of vendors able to perform the IT function to be outsourced exists on the market	• Market comparison possible
	1.11 Corporate culture	1.11.1 Ensure a shared culture or determine cultural differences between you and the vendor 1.11.2 Proactively manage cultural differences	• Cultural differences and joint-venture • Cultural differences and nearshore delivery model • Cultural differences and onshore delivery model and effective communication is restricted
	1.12 Corporate terms	1.12.1 Define common terms 1.12.2 Communicate based on common terms	• A standard service catalogue of the vendor for the service specification does not exist • Effective communication is restricted
2. Strategy	2.1 ITO strategy	2.1 IT Develop a clear and detailed ITO strategy in terms of "a plan of what to source, how and why, currently and in the future", but be aware, that changing surrounding conditions can prevent the implementation of the strategy	• Environmental stability
	2.2 Business – IT – Alignment	2.2. Align ITO objectives with business objectives, but be aware that changing surrounding conditions can prevent the implementation of the strategy	• Environmental stability
	2.3 ITO objectives	2.3 Define realistic and detailed ITO objectives and avoid the conflict of objectives, but be aware that changing surrounding conditions can prevent the implementation of the strategy	• Environmental stability
	2.5 In-house IT function: Interconnected functions	2.5 Outsource highly interconnected IT functions	• Technical complexity can be encapsulated on the vendor side
	2.7 Joint projects	2.7 Form joint projects with other ITO clients	• Cost / benefit relation can be improved
	2.10 Contract duration 3-5 years	2.10 Choose a contract duration long enough to achieve operational cost savings	• Cost reduction objective
	2.13 Backsourcing	2.13.1 Ensure the ability to backsource 2.13.2 Backsource if necessary	• ITO strategy still allows for an internal IT production
3. Client Capability	3.2 IT knowledge	3.2.1 Ensure the existence of IT knowledge about the outsourced IT function 3.2.2 Ensure the application of IT knowledge about the outsourced IT func tion	• External sourcing of non-standard functionality and price can be negotiated
	3.7 Flexibility: technology changes	3.7.1 Ensure the capability to react flexibly to technology changes 3.7.2 React flexibly to technology changes	• Technology adaptations affect the client • Technological governance is done by the client
	3.8 Partnership's potential	3.8 Exploit the partnership's long-term potential on the client and vendor side	• External ITO and cost/benefit relation can be improved • Joint-Venture • Internal ITO to a vendor owning decision rights

Table 40: Part I of the ITO Model: Success factor rules - partly necessary success factors with use cases

3. Client Capability	3.10 IT capability	3.10.1 3.10.2	Ensure the internal capability to implement individual IT demands not covered by standard applications of vendors Ensure the application of internal capability to implement individual IT demands not covered by standard applications of vendors	• External ITO or Joint-Venture or Internal ITO with minor influencing possibility for the vendor and partly ITO and no innovative market strategy
4. Vendor Selection	4.1 Tendering process	4.1.1 4.1.2	Execute a rigorous tendering process Invite internal bids beside external bids	• Primary cost reduction objective • ITO strategy allows still an internal production of IT goods and services
	4.3 Requirements specification	4.3.	Develop a detailed service requirements specification and related cost and development goals	• External ITO and sourcing of no standard functionality • Joint-Venture • Internal ITO with minor influencing possibility for the vendor
	4.4 Operational information gathering	4.4	Ensure sufficient operational information gathering by vendors	• An ITO contract will be conducted before start of operation • A tendering process is conducted
	4.5 Evaluation of bids	4.5	Evaluate bids thoroughly	• A tendering process is conducted
	4.7 Leverage in-house capabilities	4.7	Fully leverage in-house capabilities before ITO	• ITO strategy still allows for an internal IT production
	4.8 Realisation of scale effects	4.8	Ensure the realisation of scale effects (strategically or economically)	• Scale effects should be achieved with ITO
5. Vendor capability	5.7 Staff management: low staff turnover	5.7	Ensure a low staff turnover on the vendor side	• The client does not serve as source of competence for the vendor • Know how necessary for the external execution of the outsourced IT function is not available in the market
	5.9 Partnership's potential	5.9	Exploit the partnership's long-term potential on the client and vendor side	• External ITO and cost/benefit relation can be improved • Joint-Venture • Internal ITO to a vendor owning decision rights
	5.11 Minimum customer involvement	5.11	Ensure the capability of the vendor to accomplish external execution with minimum customer involvement	• Cultural similarities and the client serves not as source of competence for the vendor
	5.12 Attraction of customers	5.12	Ensure the capability of the vendor to attract customers	• Cost/benefit relation does not fit and vendor serves a group of customers beyond the bank group
6. Contract	6.1 Individual contract	6.1.1 6.1.2	Accept the vendors' standard contract as far as possible Do not accept the vendors' standard contract	• External ITO or internal ITO and scale effects as ITO objective • External ITO or internal ITO and the vendors´ standard contract does not fit your need
	6.2 Measurable service requirements, measures and reports	6.2	Include service requirements, measures and reports in the ITO contract.	• External ITO and sourcing of no standard functionality • Joint-Venture • Internal ITO with minor possibility of influencing the vendor

Table 40 (cont.): Part I of the ITO Model: Success factor rules - partly necessary success factors with use cases

6. Contract	6.3 Escalation procedures / resolution of performance disputes	6.3 Include escalation procedures and a process for the resolution of performance disputes in the ITO contract	• External ITO • Internal ITO
	6.4 Financial penalties	6.4 Include financial penalties for non-performance in the ITO contract	• External ITO without equity holding and sourcing of no standard functionality • Internal ITO
	6.7 Renegotiation clause	6.7 Include occasions for renegotiation in the ITO contract.	• External ITO without equity holding
	6.11 Staff regulations /guarantees	6.11 Include regulations and guarantees for transferred staff	• Staff transferred to the vendor
	6.14 Due diligence	6.14 Conduct a due diligence evaluation before contract conclusion	• ITO strategy does not limit the decision to a specific vendor
	6.15 Contract amendments	6.15 Make constituent contract addenda for each work to be done	• High degree of ITO and a standard service catalogue does not exist on the vendor side
	6.16 Contract renegotiation	6.16 Conduct early contract renegotiations	• External ITO and price can be negotiated
7. Stakeholder management	7.4 Stakeholder involvement: Technical client staff	7.4.1 Retain technically competent staff able to control the vendor on a day-to-day basis 7.4.2 Involve technically competent staff able to control the vendor on a day-to-day basis	• Sourcing of no standard functionality and price can be negotiated
	7.5 Stakeholder involvement: Instruction of client staff	7.5 Ensure an adequate instruction of the client staff on how to conduct the make or buy evaluation	• A make or buy evaluation is carried out
	7.6 Stakeholder involvement: IT user	7.6 Consider the IT user's requirements for satisfaction	• Existing user interface and sourcing of no standard functionality or sourcing of core/strategic IT function
	7.8 Stakeholder involvement: Long-term client employees	7.8 Ensure long-term client employees join the vendor	• Knowledge necessary for the external execution of the outsourced IT function is not available in the market
	7.16 Roles and responsibilities: Mediator	7.16.1 Ensure that the vendor takes a mediation role between you and 2 tier vendors 7.16.2 Leverage the vendor as a mediator between you and 2 tier vendors	• Internal ITO to a vendor using a sourcing network
	7.17 External recruitment of vendor employees	7.17 Recruit the employees of the vendor from the market	• Joint-Venture
8. Control	8.3 Regular check of market standards	8.3 Regularly check the ITO market standards and based on that initiate contract adaptations if necessary	• Vendor market and market comparison economically feasible and vendor switching strategically possible
9. Co-work	9.4 Working packages and responsibility	9.4 Build working packages and transfer the responsibility to companion banks	• Joint Venture
	9.5 Top balance	9.5 Introduction of a top balance between partners banks	• Joint Venture
	9.6 Neutral body	9.6 Establish a neutral body	• Joint Venture
	9.7 Regular advisory board	9.7 Call regular advisory board meetings	• Joint Venture

Table 40 (cont.): Part I of the ITO Model: Success factor rules - partly necessary success factors with use cases

No.	Success Factor Category	Success Factor Category	Success Factor Dependency Rules
a	Strategy	Co-Work Contract	aa. Include ITO objectives (Strategy) in the ITO contract (Contract) if no other agreement exists, but be aware that changing surrounding conditions can prevent the implementation of the strategy ab. Communicate ITO objectives (Strategy) clearly and effectively (Co-Work)
b	Vendor Selection	Contract Control	b. Take the investigated (Vendor Selection) and contractual agreed SLAs, measures and reports as well as development goals (Contract) as basis for the regular vendor monitoring and control (Control)
c	Environment	Contract Relationship	c. In case of environmental dynamism (Environment), outsource only to a strategic partner (Relationship) with a flexible, long-term ITO contract (Contract)
d	Environment	Contract Control	Regulatory authorities monitoring banks define the requirements for ITO respectively outsourced IT functions (Environment): da. Include control rights for client and regulatory institutions in the ITO contract (Contract) db. Regularly monitor and control vendor performance (SLA´s, cost and development goals) based on a measurement system able to track tangible and intangible expectations over a long time-scale (Control) dc. Carry out an identification and management of ITO risks, depending on the given risk potential to comply with regulatory requirements (Control)
e	Strategy	Contract Relationship	e. Outsource core or strategic IT functions (Strategy) only to a strategic partner (Relationship) with a detailed contract (Contract)
f	Client/Vendor Capability Stakeholder Contract Co-Work	Relationship Control	fa. Ensure trust building with the vendor, a good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors´ commitment towards the ITO contract to positively influence a good partnership (Relationship) fb. Replace trust and communication (Co-Work) with control (Control) in case of cultural differences between client and vendor fc. Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Stakeholder / Client and Vendor Capability) to positively influence good relationship building (Relationship) fd. Ensure the right definition of the required service levels (Selection; Contract) allowing early detection of critical vendor performance which helps to avoid escalation and negative consequences for the relationship (Relationship) fe. Ensure the right level of detail in the ITO contract (Contract) to avoid discussions between client and vendor about the contract content and to allow an early detection of critical vendor performance for avoidance of escalation and negative consequences for the relationship between client and vendor (Relationship)

Table 41: Part I of the ITO Model: Success factor rules - success factor dependencies

6.2 Temporal relevance of ITO success factor rules within ITO process

The rules presented in Table 39 (page 168), Table 40 (page 170) and Table 41 (page 173) were assigned to the ITO process phases according to the empirically determined temporal relevance of the underlying success factor and accordingly success factor interdependency presented in Chapter 5.2 (see Table 42).

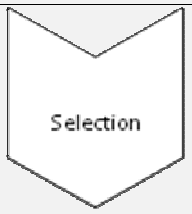
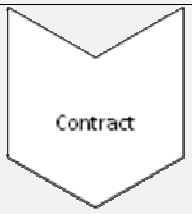
ITO process phases	Explanation ITO process phases	ITO success factor rules
	Decision whether ITO should be chosen or not and how to organise ITO.	Mandatory success factors: 2.4, 3.1.1, 3.3.1, 3.4.1, 3.5.1, 3.6.1, 3.11.1, 7.1, 7.7, 7.9, 7.11.1, 8.5. Partly necessary success factors: 2.1, 2.2., 2.3, 2.5, 2.7, 2.10, 2.13.1. 3.2.1, 3.7.1, 3.10.1, 4.7, 4.8, 7.4.1, 7.6. Success factor interdependencies: aa., ab., c., dc., e., fa., fc.
	Detection of the best internal or external source for the provision of IT goods and services.	Mandatory success factors: 1.6.2, 3.1.2, 3.3.2, 3.4.2, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.8, 5.10, 5.13, 5.14, 7.1, 7.7, 7.9, 7.11.2, 7.12.1, 7.13.1, 7.15.1, 8.5, 9.1, 10.1. Partly necessary success factors: 1.5, 1.11.1, 1.12.1, 3.2.2, 3.10.2, 4.1.1, 4.1.2, 4.3, 4.4, 4.5, 4.7, 4.8, 5.7, 5.11, 5.12, 7.4.2, 7.5, 7.6, 7.8, 7.16.1. Success factor interdependencies: b., c., dc., e., fa., fc., fd.
	Contract negotiations with the chosen vendor.	Mandatory success factors: 1.6.3, 3.1.2, 3.3.2, 3.4.2, 6.6, 6.8, 6.10, 6.12, 6.13, 7.1, 7.7, 7.9, 7.11.2, 7.12.2, 7.13.2, 7.15.2, 8.5, 9.1, 10.1. Partly necessary success factors: 1.11.2, 1.12.1, 3.2.2, 3.10.2, 6.1.1, 6.1.2, 6.2, 6.3, 6.4, 6.7, 6.11, 6.14, 6.15, 7.4.2, 7.6, 7.8, 7.16.1. Success factor interdependencies: aa., b., c., da., dc., e., fa., fc., fd., fe.

Table 42: Part II of the ITO Model: ITO success factor rules within ITO process

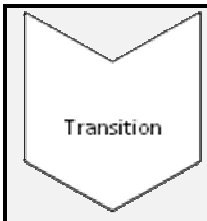
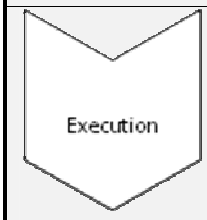
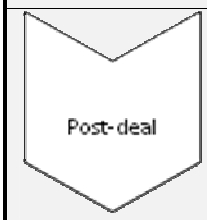
	Realisation of the actual transition of IT assets and staff and the establishment of related processes.	Mandatory success factors: 3.1.2, 3.3.2, 3.4.2, 3.5.2, 3.9, 3.11.2, 7.1, 7.11.2, 7.12.3, 7.13.2, 7.15.2, 8.1, 8.4, 8.5, 9.1, 9.2, 10.1. Partly necessary success factors: 1.11.2, 1.12.2, 3.2.2, 3.10.2, 7.4.2, 7.6, 7.8, 7.16.2, 7.17, 9.4, 9.5, 9.6, 9.7. Success factor interdependencies: ab., b., db., dc., fa., fb., fc., fd., fe
	External execution of the IT functions by the vendor according to the contract and boosting of additional benefits.	Mandatory success factors: 2.12., 3.1.2, 3.3.2, 3.4.2, 3.5.2, 3.6.2, 3.9, 3.11.2, 7.1, 7.12.3, 7.13.2, 7.15.2, 8.1, 8.2, 8.4, 8.5, 9.1, 9.2, 9.3, 10.1. Partly necessary success factors: 1.11.2, 1.12.2, 2.13.2, 3.2.2, 3.7.2, 3.8, 3.10.2, 5.9, 6.16, 7.4.2, 7.6, 7.16.2, 7.17, 8.3, 9.4, 9.5, 9.6, 9.7. Success factor interdependencies: ab., b, db., dc., fa., fb., fc., fd., fe
	Evaluation of whether the contract will be extended, if the vendor will be switched or if the outsourced IT function will be brought back in-house.	Mandatory success factors: 3.1.2, 3.3.2, 8.5. Partly necessary success factors: 3.2.2, 7.4.2. Success factor interdependencies: dc.

Table 42 (cont.): Part II of the ITO Model: ITO success factor rules within ITO process

6.3 Levels of environment

For an enterprise which would like to carry out an ITO, it is not only important to know which factors are relevant for the long-term success of an ITO. It is just as important to know whether these factors lie in the sphere of influence of the outsourcing enterprise and thus can be managed. For this reason different levels of environment were assigned to each success factor rule (see Chapter 6.1). Table 43 explains the 4 different levels of environment and the assignment of the success factor rules is shown.

Levels of Environment	Explanation	Implications for interference of assigned ITO success factors	ITO success factor rules
External	External success factors are settled at industrial level (e.g. market, regulations).	Interference hardly given. Fulfilment must be ensured before start of ITO.	Mandatory success factors: 1.6.2, 1.6.3, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.8, 5.10, 5.13, 5.14, 6.12, 8.1, 8.5. Partly necessary success factors: 1.5, 1.11.1, 1.11.2, 1.12.1, 1.12.2, 3.8, 5.7, 5.9, 5.11, 5.12. Success factor interdependencies: c., da., db., dc., fa., fc.
Internal firm level	Internal factors at firm level are factors of influence within the outsourcing enterprise (excluding IT and ITO specific factors).	Interference possible, but success factors lie in other competence areas than the IT department. Thus, the fulfilment of success factors depends on the willingness of people outside the IT department to support the ITO project.	Mandatory success factors: 3.1.1, 3.1.2, 3.4.1, 3.4.2, 3.5.1, 3.5.2, 3.6.1, 3.6.2, 3.9, 3.11.1, 3.11.2. Partly necessary success factors: 1.11.1, 1.11.2, 1.12.1, 1.12.2 Success factor interdependencies: fa, fb, fc.
Internal IT level	Internal factors at IT level reflect IT specific success factors (excluding ITO specific factors).	Interference high, because success factors lie in the competence area of the IT department.	Mandatory success factors: 2.4, 2.12., 2.12.3, 3.3.1, 3.3.2, 3.4.1, 3.4.2, 3.5.1, 3.5.2, 3.6.1, 3.6.2, 3.9, 3.11.1, 3.11.2. Partly necessary success factors: 2.1, 2.2., 2.3, 2.5, 2.7, 2.10, 2.13.1, 2.13.2, 3.2.1, 3.2.2, 3.7.1, 3.7.2, 3.8, 3.10.1, 3.10.2. Success factor interdependencies: aa., ab., e, fc.
Internal ITO project level	Internal factors at ITO project level are the success factors influencing directly the ITO project during the ITO process.	Interference high, because success factors lie in the competence area of the IT department.	Mandatory success factors: 1.6.2, 1.6.3, 6.6, 6.8, 6.10, 6.12, 6.13, 7.1, 7.7, 7.9, 7.11.1, 7.11.2, 7.12.1, 7.12.2, 7.12.3, 7.13.1, 7.13.2, 7.15.1, 7.15.2, 8.1, 8.2, 8.4, 8.5, 9.1, 9.2, 9.3, 10.1. Partly necessary success factors: 4.1.1, 4.1.2, 4.3, 4.4, 4.5, 4.7, 4.8, 6.1.1, 6.1.2, 6.2, 6.3, 6.4, 6.7, 6.11, 6.14, 6.15, 6.16, 7.4.1, 7.4.2, 7.5, 7.6, 7.8, 7.16.1, 7.16.2, 7.17, 8.3, 9.4, 9.5, 9.6, 9.7. Success factor interdependencies: aa., ab., b., c., da., db., dc., e., fa., fb., fc., fd., fe.

Table 43: Part III of the ITO Model: Levels of environment

External success factors are settled at the industrial level: the legislator / the supervisory authorities, the market and the service provider with his internal environment, important roles, abilities and skills.

Internal factors at enterprise level are factors of influence within the outsourcing firm (excluding IT and ITO specific factors): clients' internal environment with its corporate cultures and corporate terms as well as a part of the abilities and skills of the outsourcing firm (business knowledge).

Internal factors at IT level reflect IT-specific success factors: the abilities and skills of the outsourcing firm excluding business knowledge as well as the formulation of the IT strategy.

Internal factors at ITO project level are the success factors directly influencing the ITO project during the ITO process phases: preparation, vendor selection, completion of the contract, transition, external execution and post-deal: success factors of the ITO success factor categories vendor selection, contract, control, co-work, stakeholder management and relationship management.

6.4 Summary

Chapter 1 presents the components of the ITO Model: ITO success factor rules, the temporal relevance of the ITO success factor rules within the ITO process and the levels of environment.

The empirically validated ITO success factors and their use cases were defined in the form of simply understandable action instructions (rules).

Furthermore, the ITO Model states when these ITO success factor rules need to be considered within the generic ITO process levels of preparation, selection, contract, transition, execution, post-deal.

Finally, the influence on the ITO success factor rules of the outsourcing enterprise is shown by assignment of these rules to four levels of environment: external, internal firm level, internal IT level and internal ITO project level.

CHAPTER 7

Validation and evaluation of ITO Model

7 Validation and evaluation of ITO Model

The ITO Model, whose components are presented in Chapter 1, was developed based on a preliminary ITO Model (see Chapter 5.1) and a test of this theory with eight long-running application outsourcing cases in the banking industry (see Chapter 5.2).

In order to support analytical generalisation, the ITO Model was further validated and evaluated by obtaining expert opinion. Four consultants of three leading advisory companies were interviewed. Each expert had several years of experiences in the consultation of banks with IT outsourcing projects.

This chapter presents the analysis and discussion of the evaluation results. Only the aspects deviating from the ITO Model and accordingly complementary aspects are described here. The original comments of the ITO experts can be found in Appendix D.

Chapter 7 also presents the final ITO Model in detail emerging from this PhD thesis. The novel ITO Model is a handbook for IT application outsourcing in the banking industry and is able to aid banks in planning and implementing ITO solutions by guiding them through the ITO process steps of preparation, selection, contract, transition, execution and post-deal comprising all the relevant aspects necessary to achieve ITO success.

7.1 Analysis of expert opinions on the ITO Model

In this chapter, the expert opinions on the ITO Model (see Appendix D) are compared and discussed with the results of the multiple case study (see Chapter 1). In addition, a final assessment of the discussed success factors (see Table 44, page 182) and success factor dependencies (see Table 45, page 184) is provided.

Ad. Environment: Vendor market

All experts believed that the existence of a vendor market is mandatory, independent of the organisational form of the outsourcing, in order to ensure the market justice of the contract before and during the outsourcing and to have the possibility of changing the vendor. A precondition is the existence of a comparable offer in the market.

In the examined ITO cases this was judged as not necessary in the case of the joint venture and in the case of an internal ITO. With the joint venture, a monopoly was consciously founded. With the internal ITO, the vendor served exclusively a bank group; here, influencing possibilities can exist with regard to the vendor on account of the capital interweaving which makes the success factor non-essential.

A price / performance relation in line with market requirements reinforces the capital strength of the outsourcing enterprise and guarantees a performance corresponding to the market standard. This serves to strengthen the competitiveness of the outsourcing company. Hence, the success factor is finally classified as mandatory for ITO success if a comparable market offer exists. A vendor market must be guaranteed at the beginning of the ITO (success factor “Vendor market”) to be able to carry out market comparisons during the ITO (success factor “Regular check of market standards”) and if necessary to change the vendor (success factor “Vendor switching”).

Success Factor Category	No.	Success Factor and Success Factor Weighting	Outsourcing Process Phases: Preparation	Selection	Contract	Transition	Execution	Post-deal
1. Environment	1.1.	Stable external environment (economic climate)						
	1.2	Stable external environment (competition)						
	1.3	Stable external environment (product obsolescence)						
	1.4	Stable external environment (technology changes)						
	1.5	Vendor market		■				
	1.6	Regulatory compliance	■	■	■	■	■	■
	1.7	Stable internal environment (strategic direction)						
	1.8	Stable internal environment (mergers & acquisitions)						
	1.9	Stable internal environment (management)						
	1.10	Stable internal environment (product portfolio)						
	1.11	Corporate culture		■	■	■	■	
	1.12	Corporate terms		■	■	■	■	
2. Strategy	2.1	ITO strategy	■					
	2.2	Business – IT – Alignment	■					
	2.3	ITO objectives	■					
	2.4	Inhouse IT function: vendor management	■					
	2.5	Inhouse IT function: Interconnected / critical functions	■					
	2.6	Multiple vendors						
	2.7	Joint projects	■					
	2.8	Selective rather than total ITO						
	2.9	Incremental instead of "big-bang" ITO						
	2.10	Contract duration 3-5 years	■					
	2.11	Strategic view on IT functions						
	2.12	Renegotiation and restructuring of contract / Vendor switching	■				■	
	2.13	Backsourcing	■				■	
	2.14	NEW_E: IT Architecture (client)	■					
3. Client capability	3.1	Business knowledge	■	■	■	■	■	■
	3.2	IT knowledge outsourced IT function	■	■	■	■	■	■
	3.3	ITO knowledge	■	■	■	■	■	■
	3.4	Interpersonal skills	■	■	■	■	■	
	3.5	Organisational learning capability	■			■	■	
	3.6	Flexibility: business changes	■				■	
	3.7	Flexibility: technology changes	■				■	
	3.8	Partnership's potential					■	
	3.9	Vendor acceptance				■	■	
	3.10	IT capability	■	■	■	■	■	
	3.11	Problem management	■			■	■	
4. Vendor selection	4.1	Tendering process		■				
	4.2	Measurement of service requirements in baseline period						
	4.3	Requirements specification		■				
	4.4	Operational information gathering		■				
	4.5	Evaluation of bids		■				
	4.6	Vendor profit		■				
	4.7	Leverage in-house capabilities	■	■				
	4.8	Realisation of scale effects	■	■				
5. Vendor capability	5.1	Business knowledge client's industry		■				
	5.2	IT knowledge outsourced IT function		■				
	5.3	ITO knowledge		■				

Mandatory success factor | Partly necessary success factor | Success factor is not relevant for ITO success

Relevance of success factor is not assessable | ■ Success factor is relevant in this ITO process phase

a Success factor integrated in other success factor

Table 44: Evaluated ITO success factors: explanation, weighting, temporal relevance

Success Factor Category	No.	Success Factor and Success Factor Weighting	Outsourcing Process Phases: Preparation	Selection	Contract	Transition	Execution	Post-deal
5. Vendor capability	5.4	Interpersonal skills		■				
	5.5	Organisational learning capability		■				
	5.6	Staff management: staff quality, capacity, working conditions, allocation		■				
	5.7	Staff management: low staff turnover		■				
	5.8	Flexibility: business and technology changes		■				
	5.9	Partnership's potential					■	
	5.10	Reliable, professional job completion		■				
	5.11	Minimum customer involvement		■				
	5.12	Attraction of customers		■				
	5.13	Financial stability / Cost and financial management		■				
	5.14	NEW_C: Short response time in case of problems		■				
	5.15	NEW_E: IT Architecture (vendor)		■				
6. Contract	6.1	Individual			■			
	6.2	Contract: Measurable service requirements, measures and reports			■			
	6.3	Contract: Processes: escalation / resolution of performance disputes			■			
	6.4	Contract: Financial penalties			■			
	6.5	Contract: Improvement targets			■			
	6.6	Contract: Flexibility terms			■			
	6.7	Contract: Renegotiation / Benchmarking clause			■			
	6.8	Contract: Communication channels			■			
	6.9	Contract: Benefit sharing arrangements						
	6.10	Contract: Termination clause			■			
	6.11	Contract: Staff regulations / guarantees			■			
	6.12	Contract: Regulatory requirements			■			
	6.13	Contract review			■			
	6.14	Due diligence			■			
	6.15	Contract amendments			■			
	6.16	Contract renegotiations					■	
	6.17	NEW_E: Contract: Directives outsourcing company			■			
	6.18	NEW_E: Contract: Fluctuation rate / Key players			■			
	6.19	a: Contract: ITO objectives			■			
7. Stakeholder management and Structural organisation	7.1	Stakeholder involvement: High-level management	■	■	■	■	■	
	7.2	Stakeholder involvement: Only involve open-minded IT management						
	7.3	Stakeholder involvement: Avoid conflict of interest of IT management						
	7.4	Stakeholder involvement: Technical client staff	■	■	■	■	■	■
	7.5	Stakeholder involvement: Instruction of client staff		■				
	7.6	Stakeholder involvement: IT user	■	■	■	■	■	
	7.7	Stakeholder involvement: Staff affected by ITO	■	■	■			
	7.8	Stakeholder involvement: Long-term client employees		■	■	■		
	7.9	Stakeholder involvement: Functional departments	■	■	■			
	7.10	Stakeholder involvement: Public						
	7.11	Roles and responsibilities: Project manager	■	■	■	■		
	7.12	Roles and responsibilities: Account manager		■	■	■	■	
	7.13	Roles and responsibilities: Relationship managers		■	■	■	■	
	7.14	Roles and responsibilities: Contract facilitator						
	7.15	NEW_C: Roles and responsibilities: Service level manager		■	■	■	■	
	7.16	NEW_C: Roles and responsibilities: Mediator		■	■	■	■	
	7.17	NEW_C: External recruitment of vendor employees				■	■	
	7.18	NEW_E: Roles and responsibilities: Service manager				■	■	

■ Mandatory success factor ▪ Partly necessary success factor □ Success factor is not relevant for ITO success

▫ Relevance of success factor is not assessable ■ Success factor is relevant in this ITO process phase

a Success factor integrated in other success factor

Table 44 (c.): Evaluated ITO success factors: explanation, weighting, temporal relevance

Success Factor Category	No.	Success Factor and Success Factor Weighting	Preparation	Selection	Contract	Transition	Execution	Post-deal
			Outsourcing Process Phases					
8. Control	8.1	Monitoring and control				■	■	
	8.2	Vendor payment					■	
	8.3	Regular check of market standards					■	
	8.4	Vendor performance reporting				■	■	
	8.5	Risk assessment and risk management	■	■	■	■	■	■
9. Co-work	9.1	Communication		■	■	■	■	
	9.2	Knowledge transferring and sharing				■	■	
	9.3	Change project management practices					■	
	9.4	NEW_C: Working packages and responsibility				■	■	
	9.5	NEW_C: Top balance				■	■	
	9.6	NEW_C: Neutral body				■	■	
	9.7	NEW_C: Regular advisory board				■	■	
10. Relationship	10.1	Relationship building and management		■	■	■	■	

■ Mandatory success factor ▢ Partly necessary success factor ▢ Success factor is not relevant for ITO success

▢ Relevance of success factor is not assessable ■ Success factor is relevant in this ITO process phase

a Success factor integrated in other success factor

Table 44 (c.): Evaluated ITO success factors: explanation, weighting, temporal relevance

No.	Success Factor Category(ies)	Success Factor Category(ies)	Preparation	Selection	Contract	Transition	Execution	Post-deal
			Outsourcing Process Phases					
Dependency Type 1: Success factors as precondition for other success factors								
a	**Strategy**	**Contract, Co-work**	■	■	■	■	■	
b	**Vendor selection**	**Contract, Control**		■	■	■	■	
Dependency Type 2: Impact of success factors (or values) on other success factors								
c	**Environment**	**Contract, Relationship**	■	■	■			
d	**Environment**	**Contract, Control**	■	■	■	■	■	■
e	**Strategy**	**Contract, Relationship**	■	■	■			
f	**Client/Vendor capability, Contract, Co-work**	**Relationship, Control**	■	■	■	■	■	
g	Contract	Relationship						
Dependency Type 3: Need for alignment of success factor values								
h	Strategy	Contract, Relationship						
i	Strategy	Contract, Relationship						

■ **Relevant dependency** ▢ **Partly relevant dependency** ▢ Not relevant dependency

■ Dependency is relevant in this ITO process phase

Table 45: Evaluated ITO success factor dependencies: explanation, weighting, and temporal relevance

Ad. Environment: Corporate culture

Within the scope of the multiple case studies it was found that a similar culture or the active management of cultural differences is mandatory, in particular with the organisational form of a joint venture or with a nearshore delivery model. In the case of joint venture banks of the same bank group working together, this makes mutual understanding easier and can help to accelerate common decisions for the society. With a nearshore delivery model, client and vendor are part of different country cultures. Country culture differences often require additional measures to guarantee the success of ITO. As an example, strict controls up to the management of the (internal) vendor by expatriates of the outsourcing enterprise were mentioned. With an onshore delivery model (enterprise) cultural differences can be overcome by good communication.

This was basically confirmed by the experts. In particular it was emphasised that cultural differences are indeed the biggest risk in nearshore and offshore cases, which makes an active management of cultural differences mandatory. The importance and extent of the management of cultural differences depend on the kind of outsourced IT function according to the opinion of one expert. With a commodity IT function, the need is lower because the performance and the process of performance production are standardised. With less standardised IT functions a management of cultural differences has great importance, as the solution of the problem requires a higher degree of communication and process know-how. By coping with enterprise culture differences in the onshore area through efficient communication it should be noted that the comprehension of the language / dialect is guaranteed.

The assessment of the success factor as partly relevant was confirmed within the evaluation. The success factor description was supplemented with the following aspects:

- Dependence of the importance and extent of the success factor from the degree of standardisation of the outsourced IT function.
- Comprehensibility of the language / dialect as a precondition for efficient communication in the case of onshore delivery cases.

Ad. Environment: Corporate terms

Within the scope of the multiple case studies the definition of common concepts with the help of a terminology or a service catalogue was judged as relevant to success, because this promotes a common understanding about communication contents. However, it was also mentioned that one can master conceptual differences with the help of effective communication.

All experts believed that the definition of concepts is mandatory for ITO success, as different things are understood even under the same concepts. Good communication as a substitute for concept definitions was evaluated as only partly possible. In this case, clarification of a concept takes place during the communication. A timely concept definition at the beginning of the communication guards against misunderstandings.

The definition of uniform concepts in the form of a terminology or a service catalogue is finally evaluated as mandatory. Without concept definitions the risk exists that client and vendor speak about different things. If so, this is first noticed after completion of the contract during the transition, when the IT function is implemented on the vendor side. Negative impacts on the performance and necessary contract changes can be the result. Depending on the outsourced IT function, performance shortcomings can also affect the competitiveness of the outsourcing enterprise negatively. A timely definition

of common concepts helps to minimise this risk and, hence, is evaluated as mandatory for ITO success.

Ad. Strategy: ITO Strategy

The development of an ITO strategy in terms of a plan of what, how and why to outsource now and in the future was evaluated as partly relevant to success within the multiple case studies. The future-directed definition or the conversion of an ITO strategy appeared as not always possible in the examined cases. Nevertheless, this led to no break up of the ITO.

The experts state possible reasons for the continuation of the investigated ITOs in spite of changes to the basic strategic conditions. On the one hand, a backsourcing might not be wanted any more. On the other hand, the continuation of outsourcings is judged as sensible if a rise of flexibility and a lowering of costs are pursued among other things with these ITOs.

The assessment of the ITO strategy as a partly necessary success factor was finally confirmed.

Ad. Strategy: Business-IT-Alignment

The adaptation of the ITO objectives to the business objectives was evaluated as partly relevant to success within the multiple case studies. A change of the business objectives led to no break up of the outsourcing. With juridical demands business objectives have no higher priority.

The use of ITO as an innovative source has its limits, according to the multiple case studies. Sourcing of external standard applications allows, as a rule, no differentiation

between competitors, because the product is also used there. Innovations which are supposed to serve for differentiation should be implemented, externally or internally, individually.

The alignment of ITO objectives and business objectives was basically confirmed by the experts. One expert believes that this is not always possible if political aims are pursued with the ITO. If the lowering of costs and an increase of flexibility are objectives of the ITO, the continuation of the ITO in spite of changed business objectives is understandable.

The use of ITO as an innovative source can be partly possible from the point of view of one expert. For example, if the vendor has know-how that the outsourcing enterprise did not have or innovative, efficient processes. With outsourcing of standard software the potential for innovations is estimated as low. If the outsourcing is connected with a change of own development into standard software, flexibility can be won thereby; for example, innovative products can originate from a combination of standard bank products.

The partial success relevance of the Business-IT-Alignment was confirmed within the evaluation. The adaptation of the ITO objectives to the business objectives is of fundamental importance. Nevertheless, changes in business objectives were not a reason for the failure of ITOs.

The limited use of ITO as an innovative source was also confirmed. Innovation by outsourcing is possible if the vendor has know-how or more efficient processes. The use of standard software as an innovative source indeed makes the same functionality available

to all users, but the combination of standard bank products can allow for the generation of new innovative bank products.

Ad. Strategy: IT management

One expert recommends only mentioning the IT functions relevant to application outsourcing in the ITO Model, because the study focuses on the investigation of application outsourcing cases. This appraisal is agreed, and hence "IT management" as IT function is not considered in the ITO Model.

Ad. Strategy: IT functions/Critical systems

The outsourcing of a core banking system was classified as a business-critical system within the scope of the multiple case studies. In the examined ITO cases, core banking systems were outsourced to vendors primarily acting for a homogeneous banking group (in terms of the 3 column system of banks in Germany).

ITO experts point to the existence of standard core banking systems in the market (e.g. Avaloq) and, hence, rate the outsourcing of critical systems as possible.

Standard core banking systems exist in the market, hence it can be gone out from the fact that business-critical systems can be outsourced. This aspect is added to the ITO Model.

Ad. Strategy: IT functions/Very interconnected IT functions

The result of the multiple case studies was that very interconnected IT functions can be outsourced only if the complexity on the vendor side can be encapsulated.

This statement is basically agreed with by the experts. Complexity is not seen as a reason not to outsource. Great importance is put on the right definition of the interface, and the possibility is mentioned of reducing complexity before or after the outsourcing.

The possibility of outsourcing many interconnected IT functions if the complexity is encapsulated on the vendor side was confirmed. The ITO Model must not be adapted with regard to this point.

Ad. Strategy: Joint projects

Joint projects were evaluated as cost-reducing in the multiple case studies, but as not mandatory if the cost and performance relation fits.

One expert agreed to this statement and added that joint projects also generate the need for coordination between the parties, which further generates expenditure. The expert recommended, therefore, carrying out outsourcing alone where possible.

It was confirmed that joint projects are not necessary if the cost / benefit relation fits. The ITO Model must not be adapted in this regard. The success factor description is complemented by the necessity to consider vote costs within the scope of the cost / benefit analysis.

Ad. Strategy: Contract duration (3-5 years)

Within the multiple case studies it appeared that the contract term must be long enough to achieve the cost objectives linked with the outsourcing. An exact contract duration of 3-5 years is not decisive for ITO success.

The result of the multiple case studies was confirmed within the evaluation. One expert is of the opinion that, according to experience, a period of 5-10 years is necessary to compensate for the high transition costs of an ITO. The ITO Model must not be adapted in this regard.

Ad. Strategy: Vendor switching

Within the multiple case studies the possibility of further outsourcing emerged as a compulsory component of the ITO Strategy.

The result of the multiple case studies was confirmed within the evaluation. The contractual arrangement of the vendor support in case of a further outsourcing is already standard according to expert opinion.

The contractual conditions for further outsourcing and backsourcing are the same (notice clauses, obligation of the vendor to support transition in case of notice and if necessary protection of rights). See also the success factor termination clause. This is why the success factor is also relevant in the preparation phase, as the possible ways of termination need to be fixed in the ITO strategy and its implementation needs to be planned (contract contents) to be possible during external execution.

Neu Ad. Strategy: IT-Architektur

An adaptable and state of the art application landscape on the vendor side (modularisation, service orientation => SOA - service oriented architecture) is seen by an expert as a mandatory precondition to achieving a sustainable external solution in the long run, in particular with application outsourcing. If an outsourcing company wants to have the possibility to backsource during or at the end of the contract term, the application land-

scape on the client side must also allow for this (data model, processes, etc.). Both aspects contain IT technical settings which need to be ensured in the forefront of the outsourcing (preparation and selection phase) in order to have the necessary flexibility for changes in the future. Because the ITO Model should enclose all aspects relevant for success for lasting ITO relations, the success factor application landscape on the client and vendor side is complemented as a future-directed independent success factor in the success factor category strategy (IT architecture of the outsourcing bank) and vendor capabilities (IT architecture of the vendor).

Ad. Client capability: IT knowledge
Ad. Stakeholder involvement: Technical client staff

IT knowledge about the outsourced IT function on the client side was evaluated as relevant for ITO success within the scope of multiple case studies to be able to judge the cost/benefit relation of the ITO and to be able to control the vendor. Two exceptions existed. In the case of an external ITO of a standard application in retail banking, IT knowledge was not judged as relevant; here enough comparison possibilities can exist in the market. Also, in a case where price negotiations were not possible, as all mandators have to pay the same price.

The experts believed that IT knowledge about the IT function to be outsourced must not exist on the client side if market justice is guaranteed by rival offers before the ITO and during the ITO by regular benchmarkings. If no market exists, IT knowledge is necessary again to be able to control the price / performance relation of the ITO.

The predominantly success-relevant assessment of IT knowledge by the investigated ITO cases could partially be explained by the fact that a market comparison at the be-

ginning and a regular benchmarking during the ITO were not carried out. As the ITO Model values the realisation of a market comparison before and during the outsourcing with a given market finally as mandatory, IT knowledge about the outsourced IT function is classified as partly necessary. IT knowledge is necessary if a market comparison is not possible (see also mandatory assessment of the success factor in case C). The success factor description and the use cases were adapted.

Ad. Client capability: Acceptance of the vendor

The compulsory need for vendor acceptance on the client side was confirmed within the evaluation. One expert explained that the quality of the vendor performance influences directly the acceptance of the vendor. The employees of the outsourcing bank have the possibility of reporting discontent to the responsible management. There, the decisions are made for or against a continuation of the ITO. The success factor description was amended.

Ad. Client capability: IT capability

The internal conversion of individual demands not covered by standard applications of the vendor emerged in the multiple case studies as partly necessary for success with ITO. The use of standard applications was not recommended in general if differentiation from competitors was pursued with it; this should be solved, internally or externally, individually. The success factor was relevant in the case of a partial ITO with the following organisational forms: external ITO, joint venture, internal ITO with limited influencing possibilities on the vendor.

According to the opinion of an expert, the individual conversion of requirements not covered by standard applications of vendors can make sense in single cases. However, it

would be better if the individual requirements could be implemented by the vendor. This can be anchored in the ITO contract.

The partly necessary assessment of the success factor was confirmed. Nevertheless, a full conversion of the requirements should be aimed at by the vendor. The description of the success factor was added.

Ad. Client capability: Problem management

The success factor “ability to find a solution quickly to a problem with the use of a sourcing network” was confirmed by the experts. One expert added that this requirement was also an integral part of "ITIL" to which vendors refer. A change of the ITO Model is not necessary.

Ad. Vendor selection: Tendering process / Operational information gathering / Evaluation of bids

In 6 of the 8 examined cases no tendering was carried out, as the service provider was given for strategic reasons. In the other 2 cases the reduction of costs stood in the foreground of the ITO.

In the view of the experts, the accomplishment of a tender is generally meaningful. This helps to put the vendor under pressure, producing the required performance of conditions in line with market requirements. This strengthens the competitiveness of the outsourcing enterprise. The availability of a comparable market offer is a condition.

A price / performance relation in line with market requirements reinforces the capital strength of the outsourcing enterprise and ensures a performance according to the mar-

ket standard. This serves to strengthen the competitiveness of the outsourcing enterprise. Hence, the accomplishment of a tender is finally evaluated as mandatory if a comparable market offer exists.

Ad. Vendor selection: Requirements specification
Ad. Contract: Measurable service requirements, measures and reports

The specification of the requirements before the ITO in the vendor selection phase and their contractual anchorage was evaluated as partly necessary within the multiple case study. In several cases the specification was carried out after completion of the contract. These were internal ITO cases, because here possibilities of influencing the vendor exist on account of the capital interweaving. Also in the case of an external application outsourcing case in retail banking where the requirements specification is done after the conclusion of the contract; in this case the standard contract was originally accepted for the benefit of scale effects. Absolutely necessary divergences were anchored in the contract step by step after the contract's conclusion.

According to one expert's opinion, a specification of the requirements and a contractual anchorage makes sense, in any case, before completion of the contract to make sure that the vendor can produce the IT function to economic costs.
On account of regulatory law in Germany, a bank must guarantee that the outsourced IT application can be operated by the vendor properly (§25a KWG). This can only be guaranteed if the requirements are exactly specified at the beginning, if the vendor submits a quote on this basis and if the requirements are anchored in the contract. Hence, the author agrees with the expert opinion and the success factor is finally judged as mandatory.

Ad. Vendor selection: Reasonable vendor profit

The securing of vendor profit in the vendor selection phase was finally evaluated as not relevant within the multiple case studies. In cases where there is no intention of achieving a profit (internal ITO) the success factor is generally not relevant. Furthermore, political prices and cross-subsidisation were reported. Disadvantageous effects of no or low profit on the vendor side can be avoided by an exact specification of the requirements, from the point of view of ITO clients.

One expert evaluated the success factor as partly relevant, because a client-vendor relationship can only exist on a continuing basis if both sides profit from it. Even low margins often bring the vendor to use less qualified staff, which can result in deterioration in the service.

Finally, a profit on the vendor side is evaluated as partly necessary. In isolated cases it can be that a vendor offers a political and maybe not even a cost-covering price to award the contract. Cross-subsidisation within single clients or even within the whole client base are applied strategies. These vendor strategies may require no profit for the single ITO contract. If one looks at the complete client relations, however, a vendor will not be able to exist in the market without a sufficient profit achievement. Hence, it is recommended to pay a price in line with market requirements. Disadvantageous effects of no or low vendor profit can only partly be avoided by exact service specification; the vendor must still use qualified staff for the unprofitable customer. But this is not often the case any more. Disadvantageous effects on the service quality and on the business success can appear.

Partially, the client has also an interest in the profit of the vendor, as in the case with a joint venture. Here the profit of the joint venture with external customers reduces the costs for the outsourcing companion's banks.

In case of internal outsourcings the success factor is not relevant on account of the lack of a profit motive.

Ad. Vendor selection: In-house capabilities

The conversion of internal optimisation measures before the outsourcing was evaluated as partly necessary within the scope of multiple case studies. For strategic reasons the internal performance cannot be wished for any more, which makes the success factor irrelevant in these cases.

All the experts believed that optimisation measures need not necessarily be taken by the outsourcing bank. These can be also implemented by the vendor within the scope of the transformation phase. If the transformation on the vendor side is used, it is advisable to anchor a reduction of the baseline (topical IT costs) by contract. The client is billed for this transformation, but thereby the operation costs can be reduced. Political aims are seen as responsible for the missing realisation of optimisation.

The partly necessary assessment of internal optimisation measures before the outsourcing was confirmed within the evaluation. If internal optimisation measures are not undertaken for strategic reasons, these can be carried out by the vendor. This generates costs for the client, but reduces also the operation costs and can thus contribute to reduced IT costs in the long run. The contractual anchorage of a baseline reduction (topi-

cal IT costs) makes sense, to bring the vendor striving towards this goal. The success factor description was amended.

Ad. Vendor capability: Staff management

A professional personnel management in terms of staff quality, capacity, working conditions and allocation was evaluated as a mandatory success factor within the scope of the multiple case studies. However, low employee fluctuation was evaluated as partly necessary because, in the case of a joint venture, staff from the companion's banks must be placed at the disposal of the joint venture.

The evaluation has confirmed the assessment from multiple case studies. The experts confirmed that the meaning of a low employee fluctuation on the vendor side depends on how company-specific the required professional knowledge is, and consequently how simply it can be covered by the market. One expert recommended the arrangement of a maximum fluctuation rate in % and the notable naming of key players in the contract. The description of the success factor was amended.

Ad. Vendor capability: Attraction of customers

The ability to win new customers is evaluated as partly necessary within the multiple case studies. The need exists only if the cost / benefit relation of the outsourcing can be improved and if the vendor acts also acts outside a bank group.

One expert mentioned that a vendor should have an established clientele. If the vendor still needs to acquire customers to be competitive, this is a high risk.

The partly necessary assessment of acquisition competencies of the vendor was confirmed within the evaluation. This makes sense with an improvement possibility of the cost / benefit relation and with an open customer circle.

At the time of the outsourcing the vendor must already have an adequate established clientele to be able to offer a competitive cost / benefit relation. The competitiveness is treated within an own success factor (“Regular check of market standards”), hence a change of the success factor is not necessary.

Ad. Vendor capability: Short response time in case of problems

The mandatory assessment of a short response time of the vendor to problems during operation was confirmed within the evaluation. One expert mentioned that this is one of many SLA measuring dimensions to be fulfilled. Also all the other SLA components are to be fulfilled by the vendor. The short response time in case of problems was therefore integrated into the success factor "Definition of SLAs, measures and reports“. Hence, a separate naming of the success factor in the ITO Model is renounced subsequently.

Ad. Contract: Individual contract

The negotiation of an individual contract with the vendor was evaluated with internal and external ITO cases as necessary. It was mentioned that the contract must meet the demand, no matter whether this was already considered in the standard contract or whether this had to be negotiated. In the case of the joint venture the success factor was not relevant, because the contracts were developed by the partners’ banks together.

The experts believe unanimously that an ITO contract will always be individual, because company-specific components are always included there. The contract must be

tailored to the company's needs. The experts recommended incorporating external advisors in contract negotiations (part of the success factor "external experts").

The partly necessary assessment of the success factor was thus confirmed within the evaluation.

Ad. Contract: Escalation procedures / Process for resolution of performance disputes

The arrangement of escalation processes and of processes for the resolution of performance disputes was evaluated as partly necessary within the scope of the multiple case study. This had been evaluated for external and internal outsourcings as mandatory, though not for the joint venture. In the case of a joint venture it is planned to come to a solution within the common partners' committees.

One expert believed that the arrangement of these processes would also be advantageous for the joint venture and, hence, that the success factor is mandatory.

Finally, the author agrees with the experts' opinions. A solution of problems within partners' committees of the joint venture assumes good communication and a good relationship between the partners. This is, of course, desirable. Nevertheless, it cannot be guaranteed. The definition of formal processes for problem cases helps to standardise and fix problem solution in tense problem situations.

Ad. Contract: Renegotiation clause / Contract renegotiations

The contractual arrangement of post-negotiation possibilities was evaluated as partly necessary within the multiple case studies. This was not relevant in cases without profit

achievement intention (internal ITO, joint venture) and in a case where no prize negotiations were possible (external ITO to a vendor acting only within a banking group).

According to expert opinion, vendors with no profit achievement intention (joint venture, internal ITO), as a rule, also build up buffers, which is why in these cases a regular benchmarking exists and, based on this, post-negotiations were viewed as meaningful.

Regular post-negotiations serve to move the vendor, in spite of a sure order situation, towards a performance in line with market requirements. This supports the competitiveness of the outsourcing enterprise. Hence, the author agrees finally with the expert opinion, and judges a post-negotiation possibility also as mandatory in the cases without the intention of making a profit. However, the success factor is only relevant if the vendor admits post-negotiation possibilities.

Ad. Contract: Communication channels

The arrangement of communication channels in the ITO contract was evaluated as mandatory within the multiple case studies. For example, the notable naming of the account manager on the vendor side was mentioned.

The arrangement of communication channels in the ITO contract was confirmed within the evaluation. One expert still believed that the role of the account manager and contact data must be anchored by contract; however, a notable naming can be renounced. The success factor description was adapted.

Ad. Contract: Termination clause

The arrangement of notice clauses in the ITO contract is mandatory to avoid a dependence situation on the vendor. This was also confirmed within the scope of the evaluation. One expert added that vendors would often like to anchor distance payments in case of a notice by contract. It should be made certain that sinking distance payments are agreed the further advanced the project is. The success factor description was adapted with this aspect.

Ad. Contract: Contract review

The inclusion of external experts within the contract negotiations was evaluated as mandatory in the multiple case studies. The choice of the experts should be made dependent on the degree of the individual experience with ITO.

The experts believed that external advisers should be included independent of the degree of individual experience with ITO. External experts consult several ITO clients and can thus profit from experience which an outsourcing bank cannot have to the same extent.

The polled experts are management consultants. The support of ITO clients at contract negotiations belongs to their commercial model. Hence, the rating of the success factor is not changed. The inclusion of experts is mandatory. The kind of experts consulted should be chosen depending on the individual level of ITO experience.

Ad. Contract Due diligence

The multiple case studies had the result that a due diligence check is not necessary if the vendor is certain of strategic reasons.

From the point of view of all the experts, the realisations of a due diligence check is always necessary to guarantee the efficiency of the vendor and the market justice of the contract conditions. A precondition is that the requirements allow for a market comparison.

The author concurs finally with the expert's opinion: the realisation of a due diligence check is evaluated as mandatory. The market justice of the price / performance relation is checked and guaranteed thereby. This strengthens in the long term the competitiveness of the outsourcing bank. The condition is the possibility of a market comparison. The success factor description was adapted.

Ad. Contract: Contract amendments

The multiple case study had the result that separate contract appendices only make sense if a big ITO extent is given and if no standardised product catalogue of the vendor is applied.

According to expert opinion, separate contract appendices are basically recommended to be able to specify every performance in detail and to be able to give notice.
A detailed specification of the requirements and costs as well as the possibility of giving notice to single performances must be guaranteed. This is possible either by use of a standardised product catalogue of the vendor or with separate contract appendices, for

example, performance notes. The separation of performance description and accompanying costs from the general contract regulations also makes sense in case of changes, as the complete contract cannot be adapted in this case and because additional performance notes can simply be annexed to the general contract. Hence, separate contract appendices or a standardised product catalogue of the vendor become finally a mandatory success factor.

Neu: Ad. Contract

The mandatory contract components contained in the ITO Model were amended within the evaluation by an expert with the following aspects: disaster recovery concept and planning, regulatory demands for data security, approval of subcontractors (liability, data protection, etc.), directives of the bank to be kept, position-fixing and, if necessary, transformation, maximum fluctuation rate and key players among the employees transferred to the vendor. These aspects are added as mandatory contract components relevant for ITO success to the ITO Model.

Ad. Stakeholder involvement: Instruction of client staff

The partly necessary assessment of the success factor was confirmed within the scope of the evaluation. One expert added that the inclusion of external advisers in the make or buy analysis makes sense, to guarantee the neutrality of the investigation. The success factor description was amended.

Ad. Stakeholder involvement: Long-term client employees

The transference of long-term staff to the vendor was evaluated as necessary within the multiple case studies if necessary know-how cannot be covered by the market. With the

use of standard applications a personnel transfer is not necessary as a rule, because enough knowledge can be covered in the market. This assessment was confirmed within the evaluation. One expert added that a personnel transfer on the vendor is often necessary to realise the business case of the outsourcing. This aspect is added to the success factor description.

Ad. Roles and responsibilities: Relationship manager

The introduction of the role of relationship manager on the client and vendor sides as a mandatory condition for ITO success was confirmed within the scope of the evaluation. According to expert opinion, this role is often taken on by the account manager on the vendor side.

Ad. Roles and responsibilities: Service level manager
Ad. Control: Monitoring and controlling

The mandatory need for strict vendor control during external operation and the role service level manager linked with it were both confirmed within the scope of the evaluation.

Ad. Control: Check of market standards

According to expert opinion, the renunciation of a regular examination of the outsourcing contract concerning market justice (benchmarking) can affect the competitiveness of the outsourcing enterprise on a continuing basis.

Within the scope of the multiple case studies it was found that a regular check of the competitiveness of the ITO contract was not relevant in all cases. In the case of the

joint-venture no comparable offer existed in the market. This was also given in the beginning of the outsourcing H. In the case of an external outsourcing, the vendor as a family enterprise was certain; for this reason, no market comparison has been carried out up till now. In another external outsourcing case a market comparison was only possible for parts of the ITO contract for economic reasons. It was mentioned that a 1:1 market comparison is not altogether possible and auxiliary dimensions must be used.

A price / performance relation in line with market requirements reinforces the capital strength of the outsourcing enterprise and guarantees a performance corresponding to the market standard. This serves to strengthen the competitiveness of the outsourcing enterprise. Hence, the success factor is classified finally as mandatory for the achievement of success with ITO if a comparable market offer exists.

Neu: Ad. Roles and responsibilities: Service manager

Within the scope of the evaluation a new role emerged as relevant to ITO success: the service manager on the vendor side. The service manager is the counterpart of the service level manager on the client side. The service manager has to make sure that the daily operation of the application functions smoothly from takeover in the transition phase. This role is amended in the ITO Model.

Ad. Co-work: Knowledge transferring and sharing

Knowledge transfer between client and vendor was judged as mandatory for the achievement of success with ITO within the multiple case studies. This was confirmed during evaluation. One expert added that a knowledge transfer in particular is of great

importance when no staff members are transferred to the vendor and if cultural differences exist. The success factor description was amended.

Ad. Co-work: Change project management

The compulsory need for professional change management for the implementation of requirement changes in the outsourced application during the external operation was confirmed within the evaluation. One expert added a list of especially relevant aspects of change management, especially the following abilities: change data base, tools to track the changes. This was amended in the success factor description.

Ad. Dependency: Environment ↔ Contract/Relationship

The dependency Environment <-> Contract / Relationship was confirmed within the evaluation. One expert added that an unstable environment is often the motivation for an outsourcing, because vendors have often better possibilities to move necessary changes economically on account of the scale effects.

7.2 Final ITO Model

Figure 9 (page 209) shows the novel ITO Model developed in this thesis in overview, with its three parts - success factor rules, temporal relevance of success factor rules and levels of environment - explained in Chapter 1. The success factor rules (part I) are summarised in this figure in the related success factor categories of the ITO success factor taxonomy (see Chapter 5.1.1). The temporal relevance of the success factor rules (part II) is shown by assignment of the success factor categories to the ITO process phases. And part III, the different levels of environment of the success factor rules, is displayed by the frames in Figure 9 (page 209). Appendix E shows the same figure, with the difference that here the success factor categories are broken down and show

every single success factor and its weighting. The red coloured success factors in Appendix E are mandatory success factors, while the success factors whose relevance depends on certain basic conditions (partly necessary success factors) are shown in yellow colour.

Finally, Appendix E shows the ITO Model in detail with all the components developed during the course of this thesis. The ITO Model contains the following aspects for each success factor / success factor dependency: the higher success factor category (see Chapter 5.1.1), the derived success factor rules with their use cases (see Chapter 6.1 in connection with Chapter 7), a detailed description (see Chapters 5.2.2 and 5.2.3 in connection with Chapter 7), the relevance of the success factor / success factor dependency within the ITO process (see Chapter 6.2 in connection with Chapter 7) and the allocation of the success factor / success factor dependency to the relevant environmental levels (see Chapter 6.3 in connection with Chapter 7).

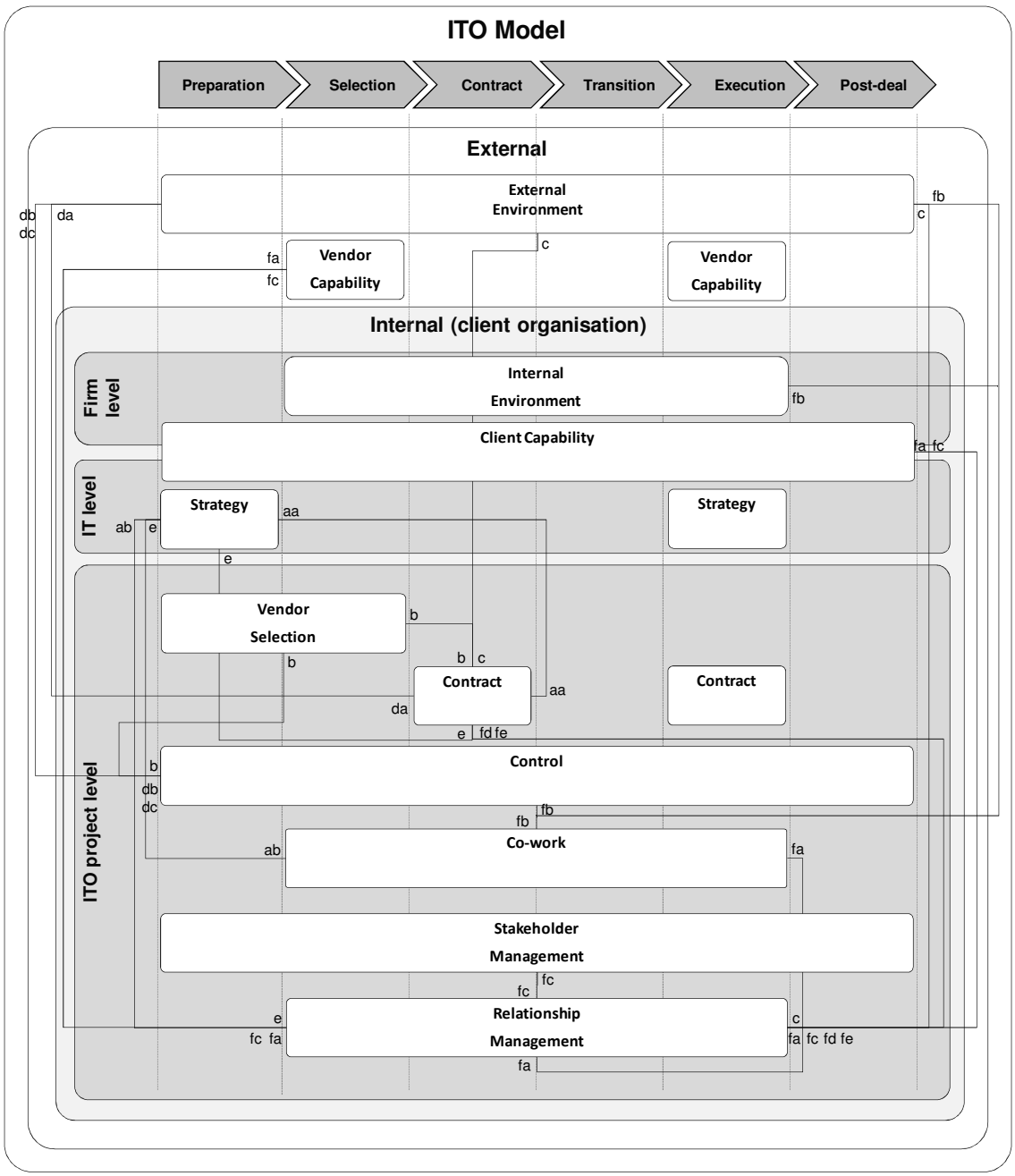


Figure 9: ITO Model – overview –

7.3 Summary

The results the ITO model validation and evaluation can be summarised as follows:

Rules and weighting

5 new ITO success factor rules were defined (2.14, 5.15, 6.17, 6.18, 7.18). One success factor rule (6.19) resulted from success factor rule 2.3 and dependency a. In one case

(6.12) the success factor rule was adapted. One success factor rule was deleted (2.5 – part IT management). One success factor rule (5.14) was integrated into another success factor rule (6.2).

Success factor use cases and the related description of the success factor rules have changed in the following cases: 3.2 / 7.4, 4.1, 4.4, 4.5, 6.7 / 6.16, 6.14, 6.15, 7.5, 8.3.

In the following cases the judgement of the success factor was not changed, just further information was given: 1.11, 2.2, 2.7, 3.9, 3.10, 4.7, 5.7, 6.8, 6.10, 7.5, 7.8, 9.2, 9.3.

Two previously irrelevant success factor rules emerged as partly relevant within the evaluation (4.6, 6.5). In the case of 4 success factors the weighting changed from partly relevant to mandatory (1.12, 4.3, 6.2, 6.3).

Temporal relevance

The enlarged description of success factor rule 2.12 during evaluation required the enhancement of the temporal relevance on an additional ITO process phase. Other changes did not result for the temporal relevance of success factors and success factor interdependencies of the ITO Model.

Levels of environment

The possibility of influencing the ITO success factor rules, which was made clear with the help of their allocation to 4 environmental phases, has been confirmed by the experts.

Success factor dependencies

The success factor dependencies were confirmed by the experts.

The **novel ITO Model** consists of weighted success factor rules which were derived from empirically validated and evaluated ITO success factors and ITO success factor interdependencies. The rules weighted as mandatory are generally relevant for the achievement of application outsourcing success. The relevance of the rules weighted as partly necessary depends on the existence of certain surrounding conditions which are presented as use cases. The rules generally embody action recommendations, which are sorted chronologically according to their temporal relevance within the ITO process phases (preparation, selection, contract, transition, execution, post-deal). Additionally, the rules were assigned to four levels of environment (external, internal at firm level, internal at IT level, internal at ITO project level) in order to make the influencing possibility of the success aspects by the outsourcing enterprise clear.

These components allow the novel ITO Model to be a handbook for application outsourcing in the banking industry, aiding banks in planning and implementing ITO solutions by guiding them through the ITO process steps of preparation, selection, contract, transition, execution and post-deal, comprising all the relevant aspects necessary to achieve ITO success.

CHAPTER 8

Discussion: ITO Model in comparison with existing models

8 Discussion: ITO Model in comparison with existing models

In the literature, different studies can be found which try to explain the preconditions for success with information technology outsourcing. In this chapter, the uniqueness of the ITO Model within the current body of knowledge is explained. It also looks at how the ITO Model differs from other models in explaining ITO success, and in which aspects the ITO Model comes to similar or different conclusions and why, in comparison, it is more suitable for use in practice.

8.1 Uniqueness of the ITO Model within the current body of ITO knowledge

The ITO Model is based on empirical data of eight long running successful ITO cases from five European banks which were collected and evaluated in the form of a multiple case study. The empirical study was grounded on a preliminary ITO Model which encompasses known success factors derived from 48 empirical studies. The ITO theory consisted of taxonomies for success factors and success factor dependencies. The success factors were clustered in 10 success factor categories which form the success factor taxonomy. Additionally, by qualitative content analysis of the success factor descriptions, dependencies between the success factors were extracted and clustered into three types of dependencies which form the success factor dependency taxonomy. With the investigation of the eight ITO cases it was examined whether these success factors and accordingly success factor dependencies are relevant in the examined case. Therefore, a semi-structured interview of well-chosen IT representatives from the banks was carried out. The basis of the interviews was a semi-structured interview field manual, which contained pre-formulated success factors and success factor dependencies. In addition,

success factors / success factor dependencies that were not listed should be mentioned by the interview partners. And indeed, new success factors, not previously discussed, did appear. The ITO Model was formed based on the success factor knowledge gained empirically from the multiple case studies. To further strengthen the external validity of the ITO Model it was discussed with three leading IT advisory companies in detail. Thus, it can be said that this study summarises all the empirical knowledge so far gained about the successful application outsourcing cases. This approach differs substantially from present empirical ITO studies (see Chapter 3.7.1) which have limited themselves to the investigation of single or smaller groups of success factors (Grover et al., 1996; Lee and Kim, 1999) or to success factors in certain phases of the ITO process (e.g. Lacity and Hirschheim (1993) focused on the contracting phase; Cullen and Willcocks (2003), Koh et al. (2004) and Pei et al. (2007) focused on the execution phase).

Studies which have the investigation of dependencies between success factors as their object are not known. Some authors started to discuss possible dependencies (see Saunders et al. (1997), Lee at al. (2004), Marcolin and McLellan (1998) as examples). The development of a comprehensive picture of the known success factors with the ITO Model and their empirical test is necessary, because dependencies exist between the success factors, as the results of this thesis show.

Beyond this, scientists are of the opinion that the contradictory results of previous research and inability so far to fully explain ITO success is due to the missing modelling of the totality of the factors responsible for ITO success, amongst other aspects (see Chapter 1.2). The ITO Model is based on a preliminary ITO Model summarising the ITO success factor knowledge of 48 empirical studies covering several decades. The preliminary ITO model was tested on the basis of an intensive multiple case analysis of

eight successful long-running application outsourcing cases of five European banks and was evaluated by four ITO experts of three leading ITO advisory companies. Hence, it presents a major contribution to summarising the current state of the art in ITO research. The empirical basis of the ITO Model guarantees, furthermore, a high correspondence to reality and suitability for daily use.

Finally, the ITO Model helps to achieve ITO success in the long-term and with lasting effect, as it is predominantly based on long-running ITO cases. This enriches the scientific results of the research in the ITO field, because so far very few scientific investigations exist into long-term ITO experiences.

Another aspect which adds the ITO Model to the current state of the art of ITO research is the investigation of the weightings of the relevant success factors. This has not occurred in the scientific literature before.

8.2 ITO Model in comparison

8.2.1 ITO Model versus ITO process models

In Chapter 3.1 the procedural description of Lacity and Willcocks (2009c) and Cullen et al. (2005) of the execution of ITO is shown. In these process models, the activities to be carried out and the objectives linked with them are described. These ITO process models and the success factor-based ITO Model can be compared with each other, because in both model kinds – in the ITO Model not exclusively – the duties to be carried out within the scope of an ITO are described.

The descriptions of the duties in the ITO process models and the ITO Model do not correspond one to one. The ITO Model is more detailed in the description of ITO contract

clauses; however, the ITO process models are more detailed in other aspects and contain additional duties. Parts of the duties described in the ITO process models are not relevant for ITO success according to the ITO Model. Nevertheless, it is to be noted that in particular the duties described in the ITO Model, which are found to be relevant for the achievement of ITO success, should be carried out to guarantee a successful ITO.

In the ITO process models duties are described exclusively. The ITO Model contains not only duties, but also other kinds of success factors like capabilities, behaviour patterns (in particular: communication, relationship building), organisational aspects (necessary roles, project management aspects, etc.), the basic internal and external conditions (corporate culture, corporate terms) as well as aspects within the scope of the decision for or against an ITO and accordingly for the kind of ITO to be outsourced. One exception is the ITO process model of Cullen et al. (2005) which contains, besides duties, the behaviour patterns described as duties to be planned.

This difference can be explained by the different objectives of each model kind. The ITO process models have their focus on step-by-step descriptions of duties to be carried out from the start to the end of an ITO project; the ITO Model is the result of an investigation of which factors are responsible for the achievement of success with ITO. Thereby, it has turned out that not only are certain duties vital for ITO success, but also the additional aspects outlined above which are missing in the ITO process models. In addition, the ITO Model contains a weighting of relevant success factors as well as the dependencies between success factors and special success factors relevant for ITO by banks, which is also absent from the ITO process models.

Hence, the ITO Model is more suitable for use in practice as it contains all the success relevant aspects for long-term ITO success, which goes beyond the duties to be carried out during ITO described in ITO process models.

8.2.2 ITO Model versus ITO maturity models

In Chapter 3.2 the ITO maturity models of the Carnegie Mellon Software Engineering Institute (SEI) and Raffoul's OMM model are described.

These maturity models illustrate best practices for the effective outsourcing of software, systems, and IT and guide stepwise process improvement efforts with the aim of achieving business success with better IT products produced by external vendors. To fulfil this claim, these models must be guaranteed to contain all the factors responsible for the achievement of success with ITO.

But can the existing maturity models really govern a company's outsourcing IT functions towards outsourcing success, if it is still the case that no common opinion exists among researchers about the requirements necessary for success? And if the probability of success with ITO is not yet estimated higher than 50:50, what do the reports about backsourcing and ITO difficulties prove (see Chapter 1.2)? The author questions this and claims that, first of all, the aspects responsible for sustained ITO success need to be explored, before these factors can be sequenced and consequently can be integrated in an ITO maturity model. If one compares the ITO maturity models CMMI (Hofmann et al., 2007) and OMM (Raffoul, 2002) with the ITO Model it becomes obvious that the ITO maturity models do not illustrate all the aspects relevant to success (see Table 46).

In the following, the different success aspects of the ITO Model are explained. Table 46 gives an overview of these and marks with "Yes" or "No" whether these aspects are

included in the ITO maturity models CMMI (Hoffmann et al., 2007) and OMM (Raffoul, 2002).

	ITO Model	CMMI	OMM
Type of success factor			
• Duties and responsibilities	Yes	Yes	Yes
• Capabilities	Yes	No	No
• Behaviour patterns	Yes	Yes	Yes
• Basic conditions	Yes	No	No
• Organisational aspects	Yes	(Yes)	(Yes)
• Decision aspects	Yes	(Yes)	No
Use cases	Yes	No	No
Temporal relevance	Yes	No	No
Dependencies	Yes	Yes	No
Banking specifics	Yes	No	No

Table 46: Success aspects of the ITO Model in ITO maturity models

If one looks at the types of success factor illustrated in the ITO Model it becomes clear that different kinds of success factor exist. Some success factors are duties to be carried out during the ITO process (e.g. the definition and contractual definition of service levels, measures and reports). Then there are two big blocks with necessary capabilities on the client and vendor sides (e.g. ITO knowledge, flexibility, interpersonal skills). Furthermore, necessary behaviour patterns are included, like effective communication and relationship building and management. Also basic internal and external conditions like corporate culture, corporate terms and an existing vendor market are success relevant. Success factors related to the organisational and operational structures are also stated (e.g. certain roles and responsibilities, change project organisation). Finally, success factors are included which refer to the decision for or against ITO, i.e. recommendations for which type of ITO to choose or not. The ITO Model also contains banking-specific success factors, i.e. conditions for the compliance with regulatory requirements.

Not all of these types of success factor are part of the ITO maturity models CMMI (Hoffmann et al., 2007) and OMM (Raffoul, 2002), as indicated in Table 46. The maturity models seem to be primarily duty-oriented, in the sense of which tasks to perform and when during the ITO process (e.g. definition of service levels, measures and reports). The CMMI model (Hoffmann et al., 2007) defines, in addition, typical work products resulting from the tasks. The ITO Model shows that not only duties but also other aspects are success relevant, which is partly missing in the ITO maturity models. The necessary capabilities of client and vendor and the consideration of internal and external basic conditions are missing in the ITO maturity models. The organisational and decision aspects are only partly considered. For example, the ITO maturity models describe how roles and responsibilities need to be defined, but do not state which roles (e.g. service level manager) are necessary to achieve ITO success. Or the process for decision finding is described, but no decision recommendations are given regarding the choice of the type of ITO.

The ITO Model determines for each success factor the point or period of time when it needs to be considered within the ITO process phases of preparation, selection, contract, transition, execution and post-deal. This is also missing in ITO maturity models.

In addition, the ITO Model makes clear, that not all success factors are relevant in each ITO case. General and specific success factors exist. The success factor use cases are also absent in the ITO maturity models.

The ITO Model also contains dependencies between success factors. The explanation of success factor interdependencies could be found in the CMMI model (Hofmann et al., 2007) but not in the OMM model (Raffoul, 2002).

In order for the ITO maturity models to fulfil their purpose, which is to illustrate best practices leading to better ITO results, it is necessary that all the aspects relevant to success are considered there.

The empirically validated core success factors of the ITO Model show the basic totality of the factors responsible for success with application outsourcing in the banking industry which can serve as the basis for the development of a success-effective ITO maturity model for banks in the future.

Hereby, questions needs to be answered like: Must the success factors be assigned to a certain maturity level or does each success factor go through every maturity level and become optimised thereby? SEI's "CMMI for Outsourcing" (Hofmann et al., 2007) consists of six core competence process areas of successful acquirers. Each process area is assigned to a single maturity level, whereas only maturity levels 1-3 were occupied; levels 4-5 have not yet been described. In Raffoul's (2002) OMM model, both variations appear. Some qualifiers of ITO success were assigned to a single maturity level; others were further developed in each maturity level. If each success factor is assigned to a single maturity level, how can we decide about the appropriate level? Another question to answer will be how many maturity levels make sense?

The enhancement of existing ITO maturity models in future research is to be recommended because they help enterprises to bring orientation to the huge number of success relevant aspects and to develop step-by-step in the direction of ITO process excellence.

To sum up, if one compares the ITO maturity models and the ITO Model, the ITO Model appears to be more suitable for explaining ITO success, because it focuses on

success-explicatory contents and contains more success relevant aspects than the ITO maturity models.

8.2.3 ITO Model compared to theories explaining ITO success

In the literature, not only can success factor studies be found which derive the success factors on the basis of empirical investigations, but also studies which try to explain ITO success by deriving success factors from management theories. This is the case with the study by Gottschalk and Solli-Saether (2005) described in Chapter 3.7.2. Some of these success factors coincide with those in the ITO Model, some factors are not part of the ITO model, and with some success factors the ITO Model comes to different conclusions. Table 47 shows the success factors derived by Gottschalk and Solli-Saether (2005) from 11 management theories and how they match to the success factors of the ITO Model.

Various success factors derived from management theories coincide with the success factors of the ITO Model (see Table 47, column "same"). However, success factors also appear for which the ITO Model comes up with another result (see Table 47, column "different") or which are absent in the ITO Model (see Table 47, column "no component"). Because the ITO Model was developed on the basis of an investigation of eight real ITO cases, more confidence can be placed in the ITO Model than the management theories. This can be explained by the fact that management theories are, on the one hand, general theories and do not refer specifically to the ITO area, and on the other they were developed on the basis of theoretical considerations with no relation to practice. The ITO Model is based on a validation of success factors and success factor dependencies which were derived from 48 empirical studies. Hence, one can assume that the ITO Model is more trustworthy from a practice point of view.

Success factors derived from management theories (Gottschalk and Solli-Saether, 2005)					ITO Model
Management theory	**Success factors**	**Same**	**Different**	**No component**	**Success factor rules**
Theory of core competencies	The organisation has to define its IT needs and manage IT services from the vendor	X			• ITO strategy: Develop a clear and detailed ITO strategy in terms of "a plan of what IT to source, how and why currently and in the future", but be aware that changing surrounding conditions can prevent the implementation of the strategy. • Monitoring and control: Regularly monitor and control vendor performance based on a measurement system able to track tangible and intangible expectations over a long time-scale.
Resource-based theory	The organisation has to integrate and exploit strategic IT resources from the vendor together with its own resources to produce competitive goods and services.	X			• ITO strategy: Develop a clear and detailed ITO strategy in terms of "a plan of what IT to source, how and why currently and in the future", but be aware that changing surrounding conditions can prevent the implementation of the strategy. • Partnership's potential: Exploit the partnership's long-term potential on the client and vendor side in case of an external ITO with the possibility of improving the cost/benefit relation, a joint venture or an internal ITO to a vendor owning decision rights.
Transaction cost theory	The organisation has to minimise transaction costs by • reducing the need for lasting specific IT assets • increase transaction frequency • reduce complexity and uncertainty in IT tasks • reduce dependence on other transactions • improve performance measurements	 X	 X X	 X X	 • No component of the ITO Model. • No component of the ITO Model. • IT function: Outsource highly interconnected IT functions, if the technical complexity can be encapsulated on the vendor side. • IT function: Outsource only to a strategic partner with a flexible, long-term ITO contract in case of environmental dynamism. • Monitoring and control: Monitoring and control: Regularly monitor and control vendor performance based on a measurement system able to track tangible and intangible expectations over a long time-scale.
Contractual theory	The organisation must have a complete IT outsourcing contract. The contract should prevent opportunistic behaviour in an efficient collaborative environment with balance of power between client and vendor.	X			• ITO contract contents: Measurable service requirements, measures and reports, escalation procedures / process for resolution of performance disputes, financial penalties, improvement targets, flexibility terms, renegotiation / benchmarking clause, communication channels, termination clause, staff regulations / guarantees, regulatory requirements, directives outsourcing company, fluctuation rate / key players, ITO objectives.
Neoclassical economic theory	The organisation has to integrate and exploit IT services from the vendor in a cost effective way to produce competitive goods and services.	X			• ITO strategy: Develop a clear and detailed ITO strategy in terms of "a plan of what IT to source, how and why currently and in the future", but be aware that changing surrounding conditions can prevent the implementation of the strategy. • Partnership's potential: Exploit the partnership's long-term potential on the client and vendor side in case of an external ITO with the possibility of improving the cost/benefit relation, a joint venture or an internal ITO to a vendor owning decision rights.

Table 47: Comparison of success factors derived from management theories with the success factors of the ITO Model

Partnership and alliance theory	The organisation has to • develop experience with alliances • develop alliance managers and • develop the ability to identify potential vendors.	X X X		X	• No component of the ITO Model. • Relationship manager: Leverage active relationship managers on the client and vendor side. • Tendering process: Execute a rigorous tendering process if a vendor market exists. Invite internal bids alongside external bids if the ITO strategy still allows for an internal production of IT goods and services. • Evaluation of bids: Evaluate bids thoroughly if a vendor market exists.
Relational exchange theory	The organisation has to develop and ensure common norms that are relevant to both parties.	X			• Corporate culture: Ensure a shared culture with respect to determining and managing cultural differences between you and the vendor in the cases of a nearshore delivery model, joint venture or onshore delivery model with restricted communication. • Corporate terms: Define common terms and communicate based on common terms. • Communication: Communicate clearly and effectively. • Knowledge transferring and sharing: Mutually transfer and share knowledge with the vendor.
Social exchange theory	The organisation has to enable social and economic outcomes in the exchange between the vendor and itself such that these outcomes outperform those obtainable in alternative exchanges.	X			• Partnership's potential: Exploit the partnership's long-term potential on the client and vendor side in case of an external ITO with the possibility of improving the cost/benefit relation, a joint venture or an internal ITO to a vendor owning decision rights. • In-house capabilities: Fully leverage in-house capabilities before ITO if the ITO strategy still allows for an internal production of IT goods and services.
Agency theory	The organisation has to make it easy and inexpensive for it to find out what the vendor is actually doing. In addition, both outcome-based and behaviour-based incentives can be used to reduce and prevent opportunistic vendor behaviour.	X			• Monitoring and control: Regularly monitor and control vendor performance based on a measurement system able to track tangible and intangible expectations over a long time-scale. • Contract clause: Include financial penalties for non-performance into the ITO contract in the cases of an internal ITO or an external ITO sourcing no standard functionality and without equity holding.
Theory of firm boundaries	The organisation has to implement a strict and rigid division of labour between the vendor and itself.			X	No component of the ITO Model.
Stakeholder theory	The organisation must create efficient and effective communication with and between stakeholders to ensure continued support from all stakeholders, to balance their interests and to make the IT outsourcing arrangement so that all stakeholders achieve their goals.	X			• Communication: Communicate clearly and effectively. • Stakeholder involvement: High-level management: Ensure the commitment of the high level management on the business and IT side. • Stakeholder involvement: staff affected by ITO: Inform directly affected employees before execution of the ITO openly and honestly about upcoming decision points, schedules, the influence on their job and possible options. • Stakeholder involvement: IT user: Consider the IT users' requirements for satisfaction if a user interface exists and if no standard functionality is sourced or if a core/strategic IT function is sourced. • Stakeholder involvement: Long-term employees: Ensure long-term client employees join the vendor if knowledge necessary for the external execution of the outsourced IT function is not available in the market. • Stakeholder involvement: Functional departments: Involve relevant functional departments in the forefront of the ITO.

Table 47 (cont.): Comparison of success factors derived from management theories with the success factors of the ITO Model

Gottschalk and Solli-Saether (2005) came to the conclusion that the success of outsourcing relationships depends mainly on the management theories "core competence management" and "stakeholder management" and recommended focusing future research on one or two management theories and investigating the contradictions in the existing theory. This does not coincide with the results of this study. The ITO Model shows that, for the achievement of lasting success with application outsourcing, it is not constituent success factors but the interaction of a huge number of success factors which plays the determining role. Hence, a focus on two management theories for further investigation of ITO success cannot be agreed to. In addition, the ITO Model also contains success factors which cannot be derived from management theories. Thus, it might be more beneficial to develop a specific ITO theory entirely explaining the ITO phenomenon instead of dealing with incomplete management theories which give contradictory recommendations in some aspects (for details please see Chapter 3.7.2). Also Lacity and Willcocks (2009b) argued that, instead of explaining exceptions through a general administrative, economic or organisational theory, a theoretical framework should be developed that addresses specific IT sourcing decisions and outcomes. The ITO Model can serve as a starting point for the development of such a specific ITO theory.

In addition, the ITO Model contains the weighting and influence of the success factors as well as the dependencies between success factors and special success factors relevant to ITO by banks, which is absent from the success factor study based on management theories from Gottschalk and Solli-Saether (2005). Also this underpins the better suitability of the ITO Model in comparison to management theories for explaining ITO success.

CHAPTER 9

Conclusions

9 Conclusions

9.1 Achievements of the research programme

The research programme has met all of the objectives originally specified in Chapter 1.3), with new conceptual and practical work being undertaken in a number of areas. The specific achievements were:

1. The importance of a successful ITO as an integral part of information management in the past, present and future and with current challenges in the achievement of ITO success was shown (see Chapters 1, 2, 3). The state of the art in ITO success factor research and ITO success models has been surveyed and current ITO success know how has been categorised into two taxonomies (an ITO success factor taxonomy and an ITO success factor dependency taxonomy), the current state of the art has been critically reviewed and limitations have been identified (see Chapters 3 and 8).

2. Based on the initial investigation, a preliminary study was conducted into the determinants of ITO success, using case studies in eight successful long-running application outsourcing cases of five European banks. For relevant success factors, the weighting and temporal relevance to the ITO project phases of preparation, selection, contracting, transition, execution and post-deal were identified (see Chapter 5).

3. Based on the results of the preliminary study, the ITO success Model was designed by formulation of understandable rules for relevant success factors, by sorting of these rules in chronological order according to their temporal relevance and by assignment of these rules to four levels of environment (external, internal at enterprise level, internal at IT level, internal at ITO project level) (see Chapter 1).

4. The ITO success Model was empirically evaluated by obtaining expert opinion from four IT consultants of three leading advisory companies (see Chapter 7.1), substantiating its suitability for use in practice. The final novel ITO success Model is presented in Chapter 7.2 and Appendix E.

Several papers relating to the research programme have been presented at refereed research conferences and journals (please refer to the List of publications). As such, it is believed that the research has made valid and useful contributions to the ITO field.

9.2 Central findings of the research and implications for scientists and practitioners

Finding 1: Outsourcing of applications by European banks is successful in the long-run ⇨ industrialisation of the IT sector's further progress

The results of the empirical studies in this thesis show that applications of banks can be successfully operated externally by IT vendors in the long run. Eight application outsourcing cases of five well-known European banks were evaluated as successful.

This result points in the direction that the industrialisation of the IT sector is progressing, because only if enterprises are satisfied with their IT outsourcings in the long-term can these contribute to the evolution towards IT industrialisation.

The contract terms of the investigated ITO cases at the time of the investigation amounted to: 2, 4.5, 6.5, 7, and 14, 16 and 17 years.

Four external ITOs, three internal ITOs and one joint venture were the organisational forms of the examined ITO cases.

Different kinds of applications were outsourced: Core banking systems, a rating system, a customer relationship management system, a standard system for accountancy, personnel management and goods economy, and others.

Strategic, economic, technological and social benefits were achieved by these ITOs: reduction of costs, improvement of cost control, and improvement of business support, improvement of the availability and quality of service, focus on core competencies, access to necessary or new technology and skills, etc.

Finding 2: General and specific factors responsible for sustainable ITO success exist

Considering the empirical work undertaken in this thesis, it became evident that success factors exist which are basically relevant to all examined ITO cases (general success factors, see Table 39, page 168). These core factors responsible for sustained ITO success are:

- No outsourcing of vendor management.

- Client capabilities: business and ITO knowledge, interpersonal skills, organisational learning capability, flexibility in case of business changes, vendor acceptance, problem management.

- Vendor capabilities: Business knowledge about the client's industry, IT and ITO knowledge, interpersonal skills, organisational learning capability, staff management in terms of quality, capacity, working conditions and allocation, flexibility in case of business and technology changes, reliable and professional job completion, financial stability/cost and financial management, IT architecture of vendor.

- The use of uniform terms within the communication between client and vendor.

- Detailed requirements specification.

- Contract clauses: measurable service requirements, measures and reports, processes for escalation and resolution of performance disputes, flexibility terms, communication channels, termination clause, clauses for the fulfilment of regulatory require-

ments, contract review by external experts, directives of the outsourcing bank to be met.

- Stakeholder involvement: high level business and IT management, staff affected by ITO, functional departments.

- Roles and responsibilities: project manager, account manager, relationship managers, service level manager, service manager.

- Regular monitoring and reporting of vendor performance.

- Vendor payment on time in case of satisfaction.

- Effective communication and knowledge transferring and sharing.

- Good change project management practices in case of changing requirements during ITO.

- Risk assessment and risk management.

- Relationship building and management.

- Renegotiation and restructuring of critical ITO contracts before implementing another solution

- The possibility of switching the vendor.

- Regulatory compliance regarding ITO in general and outsourced applications in particular.

The relevance of the other part of the success factors depended on the existence of different basic conditions (specific success factors). Certain types of ITOs require, for example, certain success factors. In particular the kind of the outsourced IT function, the organisational form of the ITO, the degree of ITO, the delivery model and the type of vendor are amongst others triggers for specific success factors. Companies who want to outsource applications are recommended to check if these triggers (see Table 40, page 170) exist in their case, requiring the consideration of the specific success factors during the ITO process.

Furthermore, previously not mentioned (general and specific) success factors could be determined.

Finding 3: The ITO Model

This thesis presents the novel ITO Model (see Chapter 7) which contains a comprehensive picture of the core factors responsible for ITO success: the general success factors and specific success factors per ITO process phase. The ITO Model can aid banks in planning and implementing successful application outsourcing solutions by guiding them through the ITO process steps of the preparation, selection, contract, transition, execution and post-deal of an application outsourcing project.

The ITO Model has a strong impact for researchers and practitioners in the ITO field:

- The ITO Model was built based on a multiple case study of eight successful application outsourcing cases which had been running already between 2 and 17 years at the time of investigation, with seven of these eight cases running between 4,5 and 17 years. Thereby evidence was compiled that application outsourcing can be successful in the long-term. This result shows, on the one hand, a valuable contribution to success factor research, because only very few studies of the long-term results exist on ITO projects worldwide, in particular in Germany (see Chapter 1.2). If one considers the still low estimated success rate of of 50:50 for ITO projects, the high costs linked with it and the often existence-endangering consequences in case of an ITO project´s failure (see Chapter 1.2), the ITO model offers a valuable instrument for practitioners (banks) to guarantee the success of their own application outsourcing projects. Banks are urged among other things to increase yields and to lower costs because of the financial crisis (see Chapter 2.4.1). Hence, the failure of an ITO project and the financial losses linked with it cannot be taken lightly in such a situation.

- Banks outsourcing IT applications achieve a higher likelihood of success when following the ITO Model, as it constitutes a comprehensive picture of the determining factors of application outsourcing success and interdependencies. This conclusion can be drawn as the ITO Model was derived based on a multiple case study of 8 successful long-running application outsourcing cases in banks and by evaluation of the so achieved model on the basis of the expert opinion of four IT consultants from leading management consultancies providing advice to a multitude of ITO customers. The preliminary ITO Model underlying the multiple case study was built by the author based on the ITO success factor knowledge of 48 empirical studies of the last

few decades dealing with success relevant aspects of ITO in the banking industry. This complete picture of ITO success and its determining factors has been missing up to now, as existing empirical success factor research mainly investigated the contribution of one or a few factors to ITO success in their studies or they concentrated on constituent phases of the ITO process (see Chapter 3.7.1). The existing ITO process models and ITO maturity models (see Chapters 3.1 and 3.2) also contain not all the success relevant aspects and hence are not suitable for explaining ITO success.

- The ITO Model contains the determining factors for application outsourcing success in the banking industry in the form of simple understandable rules which were allocated to the ITO process phase (preparation, selection, contracting, transition, execution and post-deal) where they need to be considered. Herewith the ITO Model offers valuable assistance to ITO project managers, because the ITO model exactly shows at which point(s) in time within the application outsourcing project´s life cycle the success factor must be considered. The neglecting of certain success factors in the project course is counteracted by it. In addition, the weighting of the success factors within the ITO Model helps ITO project managers to realise which success factors are generally relevant (general success factors) and which success factors depend on the existence of certain basic conditions (specific success factors) requiring a check as to whether these conditions exist.

- The ITO model shows that the triggers for specific success factors are to be found amongst others in the type of the outsourcing (see Figure 2 (page 14) and Table 1 (page 15)). For example, the aspects of organisational form (internal ITO, joint-venture, external ITO) and the extent of the outsourcing (part or full ITO) play a role. Previous studies hardly consider the type of the outsourcing in their discussions

about the relevance of success factors. This could explain the partly contradictory research results regarding the relevance of success factors (see Chapters 1.2 and 3.5). Future researchers in the ITO area can consider this knowledge in their data collection, evaluation and discussion.

- The ITO Model uncovered success factors which had not previously been discussed linked with the organisational form of a joint-venture as ITO vendor.

- The ITO Model explaining application outsourcing success in the banking industry supports the demand for development towards a specific ITO theory (see Chapter 3.7.2). Future researchers can build on the ITO Model and test if it is applicable in other branches and for other types of IT functions (infrastructure, business processes). This supports its generalisation beyond application outsourcing in the banking industry and thus the development of a success factor theory in the IT outsourcing context.

Finding 4: Application outsourcing is a suitable instrument to guarantee the competitiveness of banks in the future

Banks face numerous challenges in the future (see Chapter 2.4). The data obtained in the empirical part of this study shows that, by outsourcing of applications, it was amongst other things possible to reduce costs, to improve cost transparency, to improve the business support, to improve the availability and quality of service and to focus on core competencies, which coincides with measures seen as necessary to meet the challenges of banks in the future (see Chapter 2.4). The reduction of the manufacturing depth at banks by sourcing of IT products and services from the market is even seen as fundamental to guarantee the bank's competitiveness in the future (BankersCom, 2009;

Fraunhofer IAO, 2009; Kaib, 2003). The results of the thesis show further that the upcoming bank consolidations, the need to implement new regulatory demands on account of the financial crisis, the sustainability trend and the need for the parallel conversion of many IT changes do not need to distract banks from outsource applications. These challenges can be mastered externally.

But banks should avoid a dependence situation regarding vendors by keeping the ability to backsource or further outsource the outsourced IT applications.

9.3 Limitations of the research

Despite having met the overall objectives of the research programme, it is nevertheless possible to identify limitations associated with the work. The main limitations are listed below:

- This study has focused on the investigation of application outsourcing by European banks. Banks of different sizes (19.000 m – 360 bn assets) and with different business models (retail, mixed, wholesale) participated in this research. Also the complete range of organisational forms (internal ITO, joint venture, and external ITO) and ITO degrees (part and full ITOs) was covered. The preliminary ITO Model underlying this study was constructed based on a review of 48 empirical studies on ITO in banks worldwide. Hence, the ITO Model can be generalised for application outsourcing by banks. The applicability of the ITO Model for all types of organisations and IT functions requires testing it for other types of IT functions (infrastructure, business processes) and for other branches.

The focus on one branch and one type of IT function was necessary in order to ensure the comparability of the research results (see Chapter 4). Success factors in the ITO field differ for different branches (Matiaske and Mellewigt, 2002). The empirical research results of this thesis show that, even within the banking branch, the relevance of success factors depends on certain basic conditions, in particular the chosen kind of ITO (organisational form, delivery model, degree of ITO, etc. For details, see Figure 2 (page 14) and Table 1 (page 15)). Hence, the ITO Model cannot be used 1:1 in other environments - other IT function within the banking branch, other branches in general. As the ITO Model is based on empirical data from the banking branch, a basic applicability to other IT functions in the banking business can be assessed. For added value steps below application outsourcing (e.g. infrastructure) the ITO Model might be less complex; for added value steps above application outsourcing (e.g. business process outsourcing) it might be more complex. For other use cases it is advisable to first follow the ITO Model and to question every aspect critically whether it is relevant in the respective case. After finishing the ITO project it is recommended to complement the ITO Model on the basis of one's own experience while using it for other IT functions. In order to anchor the ITO Model within an organisation and to allow for these learning curves, a dedicated person should be entrusted with this job. During the project this job is done ideally from the project manager, because he or she is responsible for the ITO process until transition of the outsourced IT function to the external daily operation. After transition, a dedicated person should be nominated to take overall responsibility for the success relevant aspects in the execution and post-deal phase. Often, so called retained organisations exist in outsourcing enterprises which serve as interface units between the outsourcing enterprise and the vendor. The responsibility for following the ITO Model in the execution and post-deal phase could be put there. Each operationally responsible role (ITO project manager, service level manager, etc.) should hand over all their experience to a dedicat-

ed employee from the IT governance unit. There, normally, the competence lies for prescribing any methodology standard. The responsible person in the IT governance unit can then adapt the ITO Model with aspects for other use cases. Thereby it can be ensured that the knowledge gained is passed on to future ITO projects. The ITO Model should always be a "living" Model, so that the continuously emerging new trends in the ITO field (see Chapter 2.2.2) are adequately reflected there.

Also outsourcing enterprises to other branches can and should test and handle the ITO Model in this way. Because the aspects of the ITO Model are predominantly not branch specific, a basic applicability can be assessed. In these cases, parts specific to banks (e.g. compliance) can be taken out from the start and can be complemented with other aspects specific to the respective branch. The investigation of the ITO Model with ITO cases from other areas in future research supports the development of an ITO theory.

Beside the adaptation of the ITO Model to different contexts, the merging of the ITO Model with the existing process models of an organisation could also be a challenge. As pointed out in Chapter 8.2.1 in detail, the ITO Model goes far beyond an ITO process model. The author recommends pointing out the interlocking of the ITO Model with existing method standards of an organisation in writing. Furthermore, it is recommended to anchor the general obligation of the ITO Model via working instructions and to examine regularly by control units if it is applied in practice. On the basis of one's own experiences a regular control is necessary, because existing regulations are often not followed because of time pressure, habits, etc. The establishment of regular meetings for the collection of one's own ITO experiences after an ITO project appears also to be a sensible instrument to allow the learning curve outlined above and the regular adaptation of the ITO Model to different contexts. Thus an organisation can transmit valuable

experiences to future ITO projects and can achieve step-by-step an outsourcing process excellence.

- The empirical research uncovered new success factors previously not discussed in research literature. New success factors emerging from the multiple case studies are marked with "NEW_C" within Table 44, page 182. The new success factors emerging within the evaluation of the ITO model are marked with "NEW_E" in Table 44, page 182. The testing of these new success factors with further application outsourcing cases is recommended in future research to support their generalisation.

9.4 Implications for future research

The following recommendations are given for future success factor research in the IT outsourcing field:

- This study has shown that eight IT applications of different strategic significance could be outsourced successfully in the long-term. This result points in the direction of the industrialisation of the IT sector's further progress. But the detection and examination of other long-term ITO cases is necessary, since only if a bigger number of enterprises outsource successfully in the long term can this increase the likelihood of a lasting production of IT goods and services by IT vendors.

- The ITO Model constitutes an empirically validated and evaluated comprehensive picture of the determining factors for success with application outsourcing in the banking industry, their weighting and temporal relevance within the ITO process. These success factors are partially dependent on each other as the ITO Model shows. Hence, future research should renounce the investigation of single success factors or smaller groups of success factors as happened in the past (see Chapter

3.7.1). Instead, a comprehensive approach is to be applied which considers the test of all determined success factors and success factor dependencies to be able to explain ITO success.

- In previous success factor research the opinions about the relevance of certain factors for the achievement of ITO success differ (see Chapter 3.5). This study has shown that the relevance of a part of the success factors (specific success factors) depends on the existence of certain basic conditions, in particular on the chosen kind of the ITO (organisational form, delivery model, degree of ITO, etc.; for details see Figure 2 (page 14) and Table 1 (page 15)). Former studies do not consider these use cases, which could explain the divergences. Hence, future success factor research should take into account the chosen ITO options (see Figure 2, page 14) and the other determined success factor use cases (see Table 40, page 170) in the discussions about the relevance of success factors.

- The ITO Model is based on the empirical investigation of successful long-running application outsourcing cases in the banking industry in order to guarantee a comparability of the research results. The test of the ITO Model for other types of IT functions (infrastructure, business processes) and for other branches would support the generalisation of the ITO Model beyond application outsourcing by banks, which is an important step towards the development of the ITO theory that is needed (see Chapter 3.7.2).

9.5 ITO as successful strategy to cope with current banking challenges

Banks are confronted with major internal and external challenges at the moment which it is necessary for them to master (for details see Chapter 2.4). Within the scope of this study it was examined which aims the banks have pursued with application outsourcing, and whether these aims could be realised in the long run. By comparison of the challenges (see Chapter 2.4.1) with the achieved ITO result of the examined application outsourcing cases (see Table 36, page 121) it is discussed in this chapter whether the outsourcing of IT applications is a suitable or counter-productive way to master the challenges and to guarantee with it the competitiveness of the banks in the future.

In the following pages, the challenges banks are faced with currently are repeated and the assessment of the positive or negative influence originating from application outsourcing for each aspect is pointed out.

Challenge 1: Bank integration and data takeover

As a result of the global financial and economic crisis, a progressive consolidation on the bank side can be observed among other things (Mang, 2010; BankersCom, 2009). This requires the takeover of data from a bank to be integrated (Mang, 2010).

Influence of application outsourcing at challenge 1:

Case G shows that an IT technical consolidation of banks can be successfully done by an ITO partner. The history of the outsourcing bank has been marked during the last years by the purchase and integration of several banks. The bank group has currently > 20 juridically independent units. To utilise synergetic effects in the group, competence centres were founded depending on the strengths and weaknesses of the single institutes

which pursue specialist services for all the banks in the bank group. Thus the IT needs of the bank group are also covered by a group-internal IT service society (internal ITO). With enlargement of the bank group the IT needs of the "new member" are analysed and it is decided whether these are covered by the "new member" because of high individual needs or by the IT service provider of the bank group.

Cases B and E show that also a consolidation on the service provider's side does not lead to a failure of an ITO. The vendor which pursued the core banking system of bank B merged several times with other vendors. Finally, even a migration to another core banking system was necessary, which is currently being carried out successfully. The vendor pursuing the standard system for accountancy, personnel management and goods counselling in case E also merged several times with other vendors, which had no negative effect on the existing application outsourcing.

Challenge 2: Cost reduction and process optimisation

The banks increasingly get under cost pressure because of several external basic conditions:

- High competitive intensity by the reinforced bank consolidation (Mang, 2010), by the market entry of foreign banks (Fraunhofer IAO, 2009; Mang, 2010) and by distribution of bank products through non-banks (Fraunhofer IAO, 2009).
- Customers are no longer willing to pay fees for services taking for granted, as for example the payments (Kaib, 2003).
- Customers increasingly lose their loyalty and instead show vagrancy behaviour in order to gain the best possible return for their money (Fraunhofer IAO, 2009).
- European law harmonises the financial market which has led to directives like the foreign payment transactions directive. This prescribes that, for transfers in the EU

space, only the same fees may be raised as in the domestic payment transactions (Kaib, 2003).

For the improvement of the cost structure also the IT will have to contribute by the need for the optimisation of cost structures and process optimisation through innovative information and communications technology (Fraunhofer IAO, 2009).

Influence of application outsourcing at challenge 2:

In the cases A, B, D, E, F, G and H the reduction of IT expenditure was among the objectives connected with ITO which could be achieved in varying degrees. In case A, the cost reduction goals were exceeded. In cases B, D and F the favoured cost reduction goals were met. In cases H and E cost reductions could be realised, but not to the planned extent. In case H the reason was the higher controlling expenditures than expected, triggered by cultural and mentality differences. In case E, generates the vendor no synergies as he pursues specific system entities exclusively for the outsourcing bank and as he charges money for the conversion of small technical changes.

Furthermore, in cases B, C, and D the capability of IT to support the needs of the business operations could be improved by ITO.

Challenge 3: Competitiveness

In order to cope with the increased competitive pressure banks must position themselves competitively in the market, promote customer loyalty and improve the cost-income ratio. The measures for banks are, for example:

- Strategy processes, e.g. integration of banking brand in target group communication
- Use of IT-driven innovations on the customer interfaces
- New applications in client counselling

- Extension of services sold over the internet connected with the application of biometrical data to minimise security risks
- IT solutions for the obtainment, evaluation and management of greater knowledge about the customer
- Concentration on classical financial products and individually adapted products

Influence of application outsourcing at challenge 3:

In case D a customer relationship management system was successfully outsourced.

In cases A, B and F a standard core banking system is used whose functionality is available to all users, hence a product-sided differentiation was not possible in these cases.

From the point of view of the consulted ITO experts, within the evaluation phase the use of ITO as an innovative source can be partly possible. For example, if the vendor has know-how that the outsourcing enterprise did not have or innovations by more efficient processes on the vendor side. With outsourcing of standard software the potential for innovations is also estimated as low. If the outsourcing is connected with a change of own development into standard software, flexibility can be won thereby; for example, innovative products can originate from a combination of standard bank products.

Challenge 4: Competitive distortion by political influence

Released by provided state assistance and guarantees, the reinforced influence of politics on banks is to be expected as a result of the financial crisis.

State assistance and guarantees, on the other hand, from the point of view of regulation authorities like the EU Commission, lead to competitive distortion in the bank market

which leads to a high influence of the authorities on the structuring and the continuity of these banks.

Influence of application outsourcing at challenge 4:

The relevant investigated ITO cases were not influenced by the existing state guarantees.

Nevertheless, reorganisations, M&A or enterprise splittings can influence the extent of existing ITOs. Mergers could be moved successfully externally, for example in case G.

Challenge 5: Loss of image and trust

The financial crisis led, among other things, to a loss of image for the banking economy (Mang, 2010) and to a loss of trust on the customer and investor side (Fraunhofer IAO, 2009; Mang, 2010).

Influence of application outsourcing at challenge 5:

There are no signs to suggest that the image of the banks or the trust of customers and investors in banks are negatively influenced by ITO in the investigated cases. On the contrary, rising stock market prices are reported in the literature from the announcements of the ITO of listed enterprises (Koh et al. (2007); McLellan (1993)).

If banks outsource IT, this could be evaluated as a refocusing on core competencies (see also ITO objectives in cases A and B). The full grouping of the forces in the banking business as a measure for coping with the negative effects of the financial crisis could even serve to regain the lost trust of customers and investors.

Challenge 6: New regulatory demands

Legal regulations will be sharpened, which should help to avoid the renewed appearance of a financial crisis. The new regulatory demands need to be managed with IT support (Fraunhofer IAO, 2009).

Influence of application outsourcing at challenge 6:

Case C shows that the application of specific regulatory requirements can be managed successfully by an IT vendor. In this case, a joint venture with other banks in the banking group was founded to centrally manage the Basel II requirements on customer ratings for the participating banks.

In case B, the technical support of regulatory reporting has been successfully pursued by ITO partners for many years.

Challenge 7: Transparency

In order to counteract against the rise in customer mistrust as well as to conform to the requirements of politics and the supervision authorities, it will become important to provide transparency in the banking business (Mang, 2010).

Influence of application outsourcing at challenge 7:

The contractual anchorage of the IT goods and services to be performed by the IT vendor and the related costs serve to raise the cost transparency (see ITO outcome in cases A, B and D).

Challenge 8: Sustainability

Sustainability has taken on more significance in the economy. A uniform opinion exists about the dangers of global warming and climate change which requires transparency and lasting management for all market participants. Banks have started to care about the environment by checking the procurement chain for sustainability or by evaluating energy efficiency.

Influence of application outsourcing at challenge 8:

To guarantee the sustainability of the procurement chain, the ITO partner will be obliged to pay due attention to these principles, for example in the form of a contractually anchored sustainability agreement. Bank 1, for example, is currently concluding a sustainability agreement with all its external partners. Outsourcing in general helps to create synergies on the vendor side in terms of replacing decentralised IT units by services of large scale vendors, which basically supports the ideas of sustainability.

Challenge 9: Heterogeneous and highly interconnected IT landscape

The application landscape of banks has grown historically, is very heterogeneous and marked by a huge number of own-developed systems with complicated interfaces which led to incur high costs in system maintenance and further development no longer possible without the support of externals. This has resulted in

- high costs for externals
- high internal control costs
- knowledge dependencies on externals

Companies used a huge number of vendors in the past which made the realisation of scale effects impossible.

Influence of application outsourcing at challenge 9:

Through ITO, a permanent consolidation of IT vendors to a few strategic ITO partners is possible. This allows better prices and a better quality by standardisation of services and action models (Mang, 2010). By reducing the vendor portfolio the internal control costs may go down as well.

Nevertheless, the permanent production of the outsourced IT good or service by the IT vendor can lead to a knowledge loss on the client side and with it to a dependence situation. In order to avoid a dependence on the IT vendor the outsourcing enterprise must be able to carry out a backsourcing or further outsourcing during the external execution and a regular check of market standards before and during ITO is inevitable to be able to judge the cost / benefit relation of the ITO as a basis for counteracting disadvantageous situations.

Challenge 10: Reorganisation of core banking system

The reorganisation of the core banking systems is one measure to tackle the existing complexity of the application landscape.

Influence of application outsourcing at challenge 10:

Cases A, B, F, G and H show that the external execution of a core banking system can be done successfully by the internal or external IT service provider of a bank group. In addition, several established software products exist on the market, which have a big clientele.

Challenge 11: Outdated infrastructure

An outdated infrastructure often exists, which is mostly not used to capacity. This is caused by differing business volumes.

Influence of application outsourcing at challenge 11:

Infrastructure ITOs were not investigated within this study. Nevertheless, it is conceivable that outsourcing vendors are compared to internal IT departments more able to compensate for capacity variations by the grouping of demand about the totality of their customers and thus to achieve an efficient use of infrastructure resources. The use of infrastructure "on demand" like cloud computing supports this thesis, as these concepts allow the obtaining of IT goods and services on demand and therefore achieve an optimum extent of utilisation (Mang, 2010).

Challenge 12: Huge number of simultaneous IT changes

Looking at the various challenges banks face currently it becomes obvious that many IT changes needs to be made within a short time which will, overall, demand good IT test management (Mang, 2010).

Influence of application outsourcing at challenge 12:

A good test management within the scope of ITOs was not mentioned directly in this study. But the ability of the vendors to move technical and business changes in the outsourced application was evaluated as a mandatory success factor. Beyond this, a high-class change management during the external execution (in particular the re-planning of change projects and the management of project risks and construction of an efficient project organisation) was also evaluated as mandatory for ITO success. Changes could be implemented successfully by IT vendors in the investigated cases.

The reduction of the manufacturing depth at banks in terms of an increasing sourcing of IT products and services from the market is seen as fundamental to guarantee the banks' competitiveness in the future (BankersCom, 2009; Fraunhofer IAO, 2009; Kaib, 2003). The data obtained in the empirical part of this study shows that, by outsourcing of applications (core banking systems, rating system, customer relationship management system, standard system for accountancy, personnel management and goods economy and others) it was, amongst other things, possible to reduce costs, to improve cost transparency, to improve the business support, to improve the availability and quality of service and to focus on core competencies which coincide with measures seen as necessary to meet the challenges of banks in the future.

Mergers and acquisitions on the customer and vendor side could be successfully pursued externally in the investigated cases, which allows for the conclusion that the expected bank consolidations are no reason to avoid ITO.

The expected increase in the stringency of the law to avoid another financial crisis in the future is also no reason to renounce an ITO, because regulatory demands could be successfully moved within the scope of the examined ITO studies.

The increasing need for the sustainability of the procurement chain can easily be met by using ITO partners through the conclusion of sustainability agreements.

Coping with the challenges banks are faced with requires, among other things, a huge number of IT changes. In the examined studies, changes could be moved in the outsourced systems successfully, which allows us to draw the conclusion that unstable requirements are not necessarily a reason to avoid ITO.

Hence, it can be concluded that application outsourcing is a suitable instrument to guarantee the competitiveness of banks in the future.

But the following aspects need to be carefully considered when doing ITO: the necessity to differentiate from competitors and the danger of a dependence on vendors.

If banks wish to differentiate themselves from competitors, the use of external standard systems would have disadvantages with this differentiation strategy. The enlargement of the product portfolio of standard systems is often dependent on the approval of a bigger user's circle which can lead to a longer and perhaps unacceptable "time to market". Besides, new products are available after introduction to all users, which contradicts the differentiation in the market, unless innovative products can be generated by combination of standard bank products. A differentiation from competitors is also possible in case the vendor owns knowledge which is missing internally or efficient and innovative processes.

The permanent production of the outsourced IT good or service by the vendor can lead to a dependence situation. In order to counteract this, the outsourcing enterprise must be able to carry out a backsourcing or further outsourcing during the external execution and a regular check of market standards before and during ITO is obligatory to be able to judge the cost / benefit relation of the ITO.

List of abbreviations

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AM	Acquisition Management process area
ARD	Acquisition Requirements Development process area
ASP	Application Service Providing
ATS	Acquisition Technical Solution process area
AVAL	Acquisition Validation process area
AVER	Acquisition Verification process area
BCBS	Basel Committee on Banking Supervision
CEO	Chief Executive Officer
CIO	Chief Information Officer
CMMI	Capability Maturity Model Integration
CRM	Customer Relationship Management
ECB	European Central Bank
IS	Information Systems
IT	Information Technology
ITO	Information Technology Outsourcing
KWG	Kreditwesengesetz
M&A	Mergers & Acquisitions
OMM	Outsourcing Management Maturity Model
PAT	Principal Agency Theory
RBV	Resource Based View
RFP	Request for Proposal
SaaS	Software as a Service
SEI	Software Engineering Institute
SLA	Service Level Agreement

SSAD	Solicitation and Supplier Agreement Development process area
TCE	Transaction Cost Economics
UC	Utility Computing
UK	United Kingdom
US	United States
V.A.T.	Value Added Tax

List of references

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Achenbach, W., Moormann, J. and Schober, H. (2004). Sourcing in der Bankwirtschaft. Frankfurt am Main, Bankakademie-Verlag GmbH.

Agrawal, M., Kishore, R. and Rao Raghav, H. (2006). "Market reactions to E-business outsourcing announcements: An event study." Information & Management 43: 861-873.

Aldrich, H. (1976). "Resource dependence and interorganizational relations: Relations between local employment service office and social services sector organizations." Administration and Society 7(4): 419-455.

Aspray, W., Mayadas, F. and Vardi, M. Y. (2006). Globalization and Offshoring of Software, Association for Computing Machinery (ACM).

Aubert, B. A., Dussault, S., Patry, M. and Rivard, S. (1999). "Managing the Risk of IT Outsourcing". 32nd Annual Hawaii International Conference on System Sciences.

Aubert, B. A., Patry, M. and Rivard, S. (1998). "Assessing the Risk of IT Outsourcing". Proceedings of the 31st Annual Hawaii International Conference on System Sciences.

BankersCom (2009). Die Bankenbranche in turbulenten Zeiten - Die Finanzplätze Europas vor grossen Herausforderungen.

Barney, J. (1991). "Firm Resources and Sustained Competitive Advantage." Journal of Management 17(1): 99-121.

BCBS. (2004). "Outsourcing in Financial Services: Consultative document." Retrieved 11.11.2009, from http://www.bis.org/publ/joint12.htm.

BCBS. (2010 a). "Strengthening the resilience of the banking sector." Retrieved 20.03.2010, from http://www.bis.org/bcbs/.

BCBS. (2010 b). "International framework for liquidity risk measurement, standards and monitoring." Retrieved 20.03.2010, from http://www.bis.org/bcbs/.

Benbasat, I., Goldstein, D. K. and Mead, M. (1987). "The Case Research Strategy in Studies of Information Systems." MIS Quarterly 11(3): 369-386.

Bertschek, I., Müller, B., Ohnemus, J. and Schleife, K. (2006). IT-Outsourcing, Internationalisierung und flexible Arbeitsorganisation: Strategien im Zeitalter der Globalisierung, MFG Stiftung Baden-Württemberg.

Boonlert, W. (2005). "Determinants of IS sourcing decisions: A comparative study of transaction cost theory versus the resource-based view." Journal of Strategic Information Systems 14: 389-415.

Brockhaus, F. A. (1989). Brockhaus-Enzyklopädie.

Buyya, R., Yeo, C. S., Venugopal, S., Broberg, J. and Brandic, I. (2009). "Cloud computing and emerging IT platforms: Vision, hype, and reality for delivering computing as the 5th utility." Future Generation Computer Systems 25(6): 599-616

Caldwell, B., De Souza, R., Young, A., Silliman, R. and Goodness, E. (2004). Forecast for IT Outsourcing Segments Shows Strong Growth, Gartner Dataquest Alert

Cheon Myun Jong (1992). Outsourcing of Information Systems Functions: A contingency model, University of South Carolina.

Clark Jr., T. D. (1992). "Corporate systems management: An overview and research perspective." Communications of the ACM 35(2): 61-75.

Clark Jr., T. D. (1995). "The outsourcing of information services: transforming the nature of business in the information industry." Journal of Information Technology 10: 221-237.

CMMI Product Team (2010). CMMI for Acquisition, Version 1.3. (CMU/SEI-2010-TR-032). Software Engineering Institute, Carnegie Mellon University. Retrieved 15.04.2013, from: http://www.sei.cmu.edu/library/abstracts/reports/10tr032.cfm

Collins, J. S. and Millen, R. A. (1995). "Information Systems Outsourcing by Large American Industrial Firms: Choices and Impacts." Information Resources Management Journal 8(1).

Cullen, S., Seddon, P. and Willcocks, L. (2005). "Managing Outsourcing: The Lifecycle Imperative." MIS Quarterly Executive 4(1): 229-246.

Cullen, S. and Willcocks, L. (2003). Intelligent IT outsourcing. Eight building blocks to success, Butterworth-Heinemann an imprint of Elsevier.

Dahlberg, T. and Nyrhinen, M. (2006). "A New Instrument to Measure the Success of IT Outsourcing". Proceedings of the 39th Hawaii International Conference on System Sciences.

De Looff, L. A. (1995). "Information systems outsourcing decision making: a framework, organizational theories and case studies." Journal of Information Technology 10: 281-297.

Diamond Cluster. (2005). "Global IT Outsourcing Study." Retrieved 28.10.2005, from www.diamondcluster.com.

Dibbern, J., Goles, T., Hirschheim, R. and Jayatilaka, B. (2004). "Information Systems Outsourcing: A Survey and Analysis of the Literature." The DATA BASE for Advances in Information Systems 35(4): 87.

ECB (2004). Report on EU Banking Structure, European Central Bank.

Encyclopedia Britannica (1991). Encyclopedia Britannica. Chicago.

Feeny, D. and Willcocks, L. (1998). "Core IS Capabilities for exploiting Information Technology." Sloan Management Review 39(3): 9-21.

Franze, F. (1998). Outsourcing: Begriffliche und kostentheoretische Aspekte. Bern.

Fraunhofer IAO (2005). Bank & Zukunft 2005: Trends und Entwicklungen im Front- und Back-Office-Bereich von Banken in Deutschland: Trendstudie. Stuttgart, Fraunhofer-Institut für Arbeitswirtschaft und Organisation.

Fraunhofer IAO (2009). Bank & Zukunft 2009 - Innovationsstrategien in turbulenten Zeiten.

Fritsch, M., Hackethal, A. and Wahrenburg, M. (2008). The Impact of Business Process Outsourcing on Bank Performance. efl quarterly. Frankfurt am Main, efinancelab: 6-8.

Fuß, C. and Jaeger, A. (2005). "Messung des Outsourcing-Erfolgs bei einer deutschen Großbank." HMD 245: 85-95.

Gable, G. G. (1996). "A Multidimensional Model of Client Success When Engaging External Consultants." Management Science 42(8): 1175 - 1198.

Gallivan, M. J. and Oh, W. (1999). "Analyzing IT Outsourcing Relationships as Alliances among multiple Clients and Vendors". 32nd Annual International Conference on System Sciences, Hawaii.

Gartner Group (2002). Strategic Sourcing: the Book. Stamford, CT.

Gartner Group (2013). "Forecast Analysis: IT Outsourcing, Worldwide, 2Q13 Update". Retrieved 15.09.2013,from http://www.gartner.com/DisplayDocument?id=2543715&ref=clientFriendlyUrl

General Accounting Office (2001). Information Technology: Leading Commercial Practices for Outsourcing of Services.

Gerigk, J. (1997). Outsourcing in der Datenverarbeitung. Wiesbaden, Gabler Verlag, Deutscher Universitäts-Verlag.

Gilley, K. M. and Rasheed, A. (2000). "Making more by doing less: An analysis of outsourcing and its effects on firm performance." Journal of Management 26(4): 763-790.

Gottschalk, P. and Solli-Saether, H. (2005). "Critical success factors from IT outsourcing theories: an empirical study." Industrial Management & Data Systems 105(6): 685-702.

Greschler, D. and Mangan, T. (2002). International Journal of Network Management 12(6): 339-345.

Grover, V., Cheon, M. J. and Teng, J. T. C. (1996). "The Effect of Service Quality and Partnership on the Outsourcing of Information Systems Functions." Journal of Management Information Systems 12(4): 89-116.

Hambrick, D.C. (1984). "Taxonomic Approaches to Studying Strategy: Some Conceptual and Methodological Issues". Journal of Management, 10(1): 27-41.

Heckman, R. and King, W. (1994). "Behavioral Indicators of Customer Satisfaction with Vendor-Provided Information Systems". 15th International Conference on Information Systems, Vancouver, Canada.

Heinrich, L. J. (2002). Informationsmanagement. Planung, Überwachung und Steuerung der Informationsinfrastruktur. Oldenbourg, München, Wien.

Heinzl, A. (1993). Die Ausgliederung der betrieblichen Datenverarbeitung: eine empirische Analyse der Motive, Formen und Wirkungen. Schriftenreihe der Wissenschaftlichen Hochschule für Unternehmensführung Koblenz Forschung/7.

Hirschheim, R. and Lacity, M. (2000). "The myths and realities of information technology insourcing" Communications of the ACM 43(2): 99-107.

Hirschheim, R. and Smithson, S. (1988). A critical analysis of information systems evaluation. Information Systems Assessment: Issues and Challenges. N. Bjorn-Andersen, G. B. D. Amsterdam, North Holland: 17-37.

Hofmann, H. F., Yedlin, D. K., Mishler, J. W. and Kushner, S. (2007). CMMI for outsourcing guidelines for software, systems and IT acquisition, SEI series in software engineering.

Huber, R. L. (1993). "How Continental Bank Outsourced its Crown Jewels." Harvard Business Review 71(1): 121-129.

Jouanne-Diedrich, H. v. (2009). Die ephorie.de IT-Sourcing-Map. Eine Orientierungshilfe im stetig wachsenden Dschungel der Outsourcing-Konzepte, ephorie.de – Das Management-Portal.

Kaib, B. (2003). Outsourcing in Banken. Wiesbaden, Verlag Dr. Th. Gabler, GWV Fachverlage.

Kaiser, M. (2008). "BFH zur Umsatzsteuer beim “Outsourcing” bei Banken." Retrieved 21.03.2010, from http://www.steuerechtblog.de/umsatzsteuer/2008/bfh-zur-umsatzsteuer-beim-outsourcing-bei-banken/.

Kass, P. (1990). "The Dollars and Sense of Outsourcing." Information Week (259): 26-31.

Kearney, A.T. (2007). "IT Kehraus in der Industrie – Chance und Herausforderungen für deutsche IT-Dienstleister und den IT-Arbeitsmarkt." Retrieved 08.07.2008, from http://www.atkearney.de/content/presse/pressemitteilungen_practices_detail.php/id/49882/practice/sitp.

Kern, T., Willcocks, L. and Heck, E. (2002). "The winner´s curse in IT outsourcing: strategies for avoiding relational trauma." California Management Review 44(2): 47-69.

Kern, T. and Willcocks, L. P. (2001). The Relationship Advantage: Information Technologies, Sourcing, and Management. Oxford, Oxford University Press.

Kern, T. and Willcocks, L. P. (2009). Contracting and Relationship Theories Applied to IT Outsourcing. Information Systems and Outsourcing. Lacity, M. C. and Willcocks, L. P., Palgrave Macmillan.

Kim, S. and Chung, Y.-S. (2003). "Critical success factors for IS outsourcing implementation from an interorganizational relationship perspective." Journal of Computer Information Systems 43(4): 81-90.

Kleppler, R. and Jones, W. O. (1998). Outsourcing Information Technology Systems & Services. New Jersey, Prentice Hall.

Koh, C., Ang, S. and Straub, D. W. (2004). "IT Outsourcing Success: A Psychological Contract Perspective." Information Systems Research 15(4): 356-373.

Koh, C., Ang, S. and Yeo, G. (2007). "Does IT Outsourcing create firm value?" 2007 SIGMIS Computer Personnel Doctoral Consortium and Research Conference, United States.

Kluge, S. (1999). Empirisch begründete Typenbildung. Zur Konstruktion von Typen und Typologien in der qualitativen Sozialforschung. Opladen: Leske und Budrich.

Krcmar, H. (2011). Einführung in das Informationsmanagement. Berlin, Springer-Verlag

Lacity, M. and Hirschheim, R. (1993). "Implementing Information Systems Outsourcing: Key Issues and Experiences of an Early Adopter." Journal of General Management 19(1).

Lacity, M. and Willcocks, L. (1998). "An empirical investigation of information technology sourcing practices: lessons from experiences." MIS Quarterly, September: 363-409.

Lacity, M. C. and Hirschheim, R. (1993). "The Information Systems Outsourcing Bandwagon." Sloan Management Review Fall: 73-86.

Lacity, M. C. and Hirschheim, R. A. (1995). Beyond the information systems outsourcing bandwagon: the insourcing response. Chichester; New York, Wiley.

Lacity, M. C. and Willcocks, L. P. (1995). "Interpreting Information Technology Sourcing Decisions from a transaction cost perspective: findings and critique". Accounting, Management & Information Technology, Vol. 5: 203-244.

Lacity, M. C. and Willcocks, L. P. (2001). Global Information Technology Outsourcing. In Search of Business Advantage. Chichester, John Wiley & Sons Ltd.

Lacity, M. C. and Willcocks, L. P. (2009a). Outsourcing Research: Towards More Informed Practice. Information Systems and Outsourcing: Studies in Theory and Practice. Lacity, M. C. and Willcocks, L. P. Basingstoke, Hampshire, Palgrave Macmillan.

Lacity, M. C. and Willcocks, L. P. (2009b). Transaction Cost Economics Applied to IT Outsourcing: Findings and Critique. Information Systems and Outsourcing: Studies in Theory and Practice. Lacity, M. C. and Willcocks, L. P. Basingstoke, Hampshire, Palgrave Macmillan.

Lacity, M. C. and Willcocks, L. P. (2009c). Managing Relationships across the Life Cycle of an Outsourcing Arrangement. Information Systems and Outsourcing: Studies in Theory and Practice. Lacity, M. C. and Willcocks, L. P. Basingstoke, Hampshire, Palgrave Macmillan.

Lacity, M. C. and Willcocks, L. P. (2009d). IT Sourcing: Reflections on Practice. Information Systems and Outsourcing: Studies in Theory and Practice. Lacity, M. C. and Willcocks, L. P. Basingstoke, Hampshire, Palgrave Macmillan.

Lacity, M. C., Willcocks, L. P. and Feeny, D. F. (1996). "The Value of Selective IT Sourcing." Sloan Management Review 37(3): 13-25.

Lacity, M. C. and Willcocks, R. (2000). "Survey of IT Outsourcing experiences in US and UK organisations." Journal of Global Information Management, Apr-June.

Landis, K., Mishra, S. and Porrello, K. (2005). Calling a Change in the Outsourcing Market: The realities for the world´s largest organisations. Deloitte Consulting.

Lee, J.-N. (2001). "The impact of knowledge sharing, organizational capability and partnership quality on IS outsourcing success." Information & Management 38: 323-335.

Lee, J.-N., Huynh, M. Q., Kwok, R. C.-W. and Pi, S.-M. (2003). "IT Outsourcing Evolution - Past, Present and Future." Communications of the ACM 46(5): 84-89.

Lee, J.-N. and Kim, Y.-G. (1999). "Effect of Partnership Quality on IS Outsourcing Success: Conceptual Framework and Empirical Validation." Journal of Management Information Systems 15(4): 29-61.

Lee, J.-N., Miranda, S. M. and Kim, Y.-M. (2004). "IT Outsourcing Strategies: Universalistic, Contingency, and Configurational Explanations of Success." Information Systems Research 15(2): 110-131.

Loh, L. and Venkatraman, N. (1995). "An Empirical Study of Information Technology Outsourcing: Benefits, Risks, and Performance Implications". Proceedings of the Sixteenth International Conference on Information Systems, New York, ACM Press.

Mahnke, V., Overby, M. L. and Vang, J. (2005). "Strategic Outsourcing of IT services; Theoretical Stocktaking and Empirical Challenges." Industry and Innovation June.

Mang, F. (2010). "Herausforderungen für die IT im Bankensektor 2010." IT-Management (1): 10-12.

Marcolin, B. L. and McLellan, K. L. (1998). "Effective IT Outsourcing Arrangements". 31st Annual Hawaii International Conference on System Sciences.

Matiaske, W. and Mellewigt, T. (2002). Viel Lärm um Nichts - Rückblick auf ein Jahrzehnt empirischer Outsourcing-Forschung. Organisatorische Veränderung und Corporate Governance. Egbert, K. Wiesbaden, Deutscher Universitäts-Verlag GmbH. 1: 288.

McLaughlin, D. and Peppard, J. (2006). IT Backsourcing: From ´make or buy´ to ´bringing IT back in-house´. European Conference on Information Systems, Information Systems Research Center, Cranfield School of Management: 6.

McLellan, K. (1993). Outsourcing Core Skills Into Non-Equity Alliance Networks. Faculty of Graduate Studies. London, Ontario, University of Western Ontario. Doctor of Philosophy.

McMullen, J. (1990). "New allies: IS and service suppliers." Datamation 36(1 March): 42-46 and 51.

Mitchell, V. and Fitzgerald, G. (1997). "The IT Outsourcing Market Place: Vendors and their Selection." Journal of Information Technology 12: 223-237.

Nagengast, J. (1997). Outsourcing von Dienstleistungen industrieller Unternehmen - eine theoretische und empirische Analyse. Hamburg.

Ngwenyama, O. K. and Bryson, N. (1999). "Making the information systems outsourcing decision: a transaction cost approach to analyzing outsourcing decision problems. "European Journal of Operational Research" 115(2): 351-367.

Nicklisch, G., Borchers, J. and Krick, R. (2008). IT-Near- und Offshoring in der Praxis, dpunkt-Verlag.

Nolan, R.L. (1973). "Managing the computer resource: a stage hypothesis." Communications of the ACM 16: 339-405.

OECD (1992). Banks under Stress, Organization for Economic Cooperation and Development.

Office of Technology Assessment (1987). International Competition in Services. Washington, D.C.

Pei, Z., Zhen-xiang, Z. and Chun-ping, H. (2007). "Study on Critical Success Factors for IT Outsourcing lifecycle." IEEE.

Poppo, L. and Lacity, M. C. (2009). The Normative Value of Transaction Cost Economics in IT Outsourcing. Information Systems and Outsourcing. Lacity, M. C. a. W., L.P., Palgrave Macmillan.

Poppo, L. and Zenger, T. (1998). "Testing Alternative Theories of the Firm: Transaction Cost, Knowledge-Based, and Measurement Explanations for Make-or-Buy Decisions in Information Services." Strategic Management Journal 19(9): pp. 853-877.

Porter, M. E. (1996). "What is Strategy?" Harvard Business Review 74(6): 61-78.

Pütter, C. (2007). "Banken beim IT-Outsourcing vorn." CIO IT Strategie für Manager. Retrieved 01.06.2008, from http://www.cio.de/it_berater/837242/index.html.

Raffoul, W. (2002). "The road to outsourcing success." ZDNet Tech. Update March 4. Meta Group.

Rich, P. (1992). The organizational taxonomy: Definition and design. Academy of Management Review, 17(4), 758.

Gonzales, R, Gasco, J., Llopis, J. (2006). "Information systems outsourcing: A literature analysis". Information & Management 43: 821-834.

Saunders, C., Gebelt, M. and Hu, Q. (1997). "Achieving Success in Information Systems Outsourcing." California Management Review 39(2): 63-79.

Straub, D. (1989). "Validating Instruments in MIS Research.", MIS Quarterly 13(2), June: 147-169.

Van Lier, J. and Dohmen, T. (2007). "Benefits Management and Strategic Alignment in an IT Outsourcing Context." IEEE.

Veltri, N., Saunders, C. S. and Kavan, C. B. (2008). "Information Systems Backsourcing: Correcting Problems and Responding to Opportunities." California Management Review 51(1).

Venkatraman, N. and Loh, L. (1992). "Determinant of information technology outsourcing: a cross sectional analysis." Journal of Management Information Systems 9(1): 7-24.

Vocke, C. (2008). "Innovationen im Direktvertrieb." diebank (9): 72-74.

Wallmüller, E. (2007). SPI software process improvement with CMMI, PSP/TSP und ISO 15504. München Wien, Carl Hanser Verlag

Weinert, S. and Meyer, K. (2005). The Evolution of IT Outsourcing: From its Origins to Current and Future Trends. Wuppertal, University of Wuppertal.

Wilder, C. (1989). Bank hands keys to IBM. ComputerWorld. November: 8.

Willcocks, L. and Fitzgerald, G. (1993). "Market as opportunity? Case studies in outsourcing information technology and services." Journal of Strategic Information Systems 2(3): 223-242.

Willcocks, L. and Fitzgerald, G. (1994). A Business Guide to Outsourcing IT. A Study of European Best Practice in the Selection, Management and Use of External IT Services. London, Business Intelligence.

Willcocks, L., Fitzgerald, G. and Lacity, M. (1996). "To outsource IT or not? Recent research on economics and evaluation practice." European Journal of Information Systems 5(3): 143-160.

Willcocks, L., Lacity, M. and Fitzgerald, G. (1995a). "Information Technology Outsourcing in Europe and the USA: Assessment Issues." International Journal of Information Management 15(5): 333-351.

Willcocks, L. P., Fitzgerald, G. and Feeny, D. (1995b). "Outsourcing IT: The Strategic Implications." Long Range Planning 28(5): 59-70.

Yin, R.K. (1989). Case Study Research: Design and Methods, Revised Edition. Beverly Hills, Sage Publications Inc.

Yin, R.K. (1993). Applications of Case Study Research. Applied social research methods series. 34, Sage Publications Inc., Newbury Park, California.

Zarnekow, R., Brenner, W. and Grohmann, H. H. (2004). Informationsmanagement dpunkt.verlag GmbH.

List of publications

List of publications

1. Kronawitter, K., “IT-Outsourcing in Banking Industry – Stage of Maturity Model as Strategic Approach”, in Bayreuth Reports on Information Systems Management, No. 40, Eymann Thorsten, University of Bayreuth, Bayreuth, February 2009, ISSN 1864- 9300, pp. 95-104.

2. Kronawitter, K., Wentzel, C., Turetschek, G. and Papadaki, M., “Critical Success Factors in IT-Outsourcing: a Literature Analysis”, in proceedings of the Fifth Collaborative Research Symposium on Security, E-learning, Internet and Networking (SEIN 2009), Darmstadt, Germany, 25-29 November 2009, ISBN: 978-1-84102-236-9, pp. 110-122.

3. Kronawitter, K., Wentzel, C. and Papadaki M., “ITO success factor model – first steps towards a guide for IT outsourcing (ITO) success”, in proceedings of the Eighth International Network Conference (INC 2010), Heidelberg, Germany, 06-08 July 2010, ISBN: 9781841022598, pp. 355-359.

4. Kronawitter, K., Wentzel, C., Papadaki, M. and Andelfinger, U., “Application Outsourcing in Europe: Long-term Outcomes, Success Factors and Implications for IT Industrialisation”, Issues in Information Systems, Volume 13, Issue 2, pp. 369 - 379.

5. Kronawitter, K., Wentzel C., Papadaki M. and Andelfinger U., “IT Application Outsourcing in Europe: Long-term Outcomes, Success Factors and Implications for ITO Maturity”, in proceedings of the Hawaii International Conference on Systems Science (HICSS-46), IEEE Computer Society, Grand Wailea, Maui, Hawaii, 07-10 January 2013, pp. 4456 – 4465.

APPENDIX A

Success factors for ITO derived from empirical literature

Appendix A – Success factors for ITO derived from empirical literature

Success / Failure factor	Reasoning of author(s)	Author(s)
Environment		
Stable external and internal business environment	"...firms operating in relatively **stable environments** may also achieve performance increases through outsourcing". Environmental dynamism was defined with marketing practices, product obsolescence, competitors' actions, and consumer demand and technology changes.	Gilley and Rasheed (2000)
	Significant changes in business were identified as an **outsourcing failure factor.**	Willcocks and Fitzgerald (1994)
	"**A business strategy undergoes modifications as environments change**, which can lead to the repositioning and restructuring of internal and external competencies...**In the assessment of outsourcing, the client company may have to adjust and backsource IS activities to match the changing environment**." In addition, **new executives can create internal changes in the management or organisational structure** that can **affect** the definition of the role of IS and decisions about **sourcing arrangements**.	Veltri et al. (2008)
	"Many of the early outsourcing contracts were negotiated ... when the economic climate was depressed. The **upturn in business obviated the need**..."	McLaughlin and Peppard (2006)
	Backsourcing occurred "as a result of a merger where significant new or enhanced skills and capabilities are now available to the new entity". "Restructuring due to merger and acquisition activities can lead to the reconsideration of the continued usefulness of an IT outsourcing deal when the **entity resulting from the merger or acquisition has significantly greater economies of scale or IT skills**."	McLaughlin and Peppard (2006)
	External business changes like mergers, divestitures or acquisitions change the size of the company and creates a **new corporate entity with new IS requirements and capabilities** which can make a company reflect the make-or-buy decision again.	Veltri et al. (2008)
	A **reasonable business certainty through environmental change and changing requirements across the life of a contract** is essential for effective outsourcing decisions as it feeds into the **ability to identify IS / IT requirements.** High business uncertainty would suggest retaining flexibility through an in-house function or a flexible long-term contract with a strategic partner.	Willcocks, Fitzgerald and Feeny (1995), Willcocks and Fitzgerald (1993)
	"For a market **to be efficient**, **parties must be able to predict with enough certainty the activities to be performed in a contract and to measure the value of the elements exchanged**". **Uncertainty can lead to costly contractual amendments.**	Aubert (1998; 1999)
	"Unanticipated events, such as **changes in business direction or replacement of the chief executive officer (CEO) or board members**, which can result from mergers or poor financial results, **can** also **eat into the health of an outsourcing deal**"	Cullen et al. (2005)
	"**A new management team, or individual changes particularly at CEO or CIO level,** have also led to a **decision**	McLaughlin and Peppard (2006)

	to reconsider the value being obtained from the IT outsourcing contract"	
	"A DiamondCluster International Survey shows that 78 percent of responding executives had to **terminate agreements early due to** poor service, **a change in strategic direction**, or costs."	Landis et al. (2005)
	Reasons for an abnormal termination of outsourcing contracts were amongst others **changes in the strategic direction of the client company and the movement of the function back in-house.**	DiamondCluster (2005)
	"**Extension into new product areas or new markets, or the reverse** contraction due to poor business performance, **can lead to a decision to outsource** functions, **or to cut back on existing outsourcing contracts** when the **need** is **no longer evident**. "	McLaughlin and Peppard (2006)
Sufficient supplier market	**A small number of suppliers** (low competition, lock-in as alternative sources of services are difficult to find) and an inadequate financial stability on the part of the vendor **can result in service debasement**.	Aubert (1998; 1999)
	"The case studies show that **outsourcing is advisable only in situations where... sufficient suppliers are available**..."	De Looff (1995)
Regulatory compliance	"An additional **factor that helped smooth the way for outsourcing was the bank's early consideration of regulatory issues**. ….Regulators had focused closely on accounting treatment, asset valuations, fees, and service levels in banks. We attended to these issues from the outset and consulted frequently with regulators as the outsourcing decision progressed."	Huber (1993)
Corporate cultures	An **important factor is to make sure that the vendor's culture fits with your organisation. In this** respect, a poor culture fit between vendor and client was identified as a major reason for outsourcing failure.	Willcocks and Fitzgerald (1994)
	A lesson learned from ITO experiences was: "**Cultural differences need to be acknowledged and managed**".	DiamondCluster (2005)
Corporate terminology	Without a **common terminology and a common basis of understanding**, an outsourcing relationship is likely to refer back to the contract which results in a cost intensive and cumbersome situation.	Gerigk (1997)
Strategy		
Long-term strategy planning	The **outsourcing strategy must go beyond the period of an actual or planned outsourcing contract.**	Willcocks, Fitzgerald and Feeny (1995)
	No long-term planning was identified as an outsourcing **failure factor.**	Willcocks and Fitzgerald (1994)
	A lesson learned from ITO experiences was: "Give providers the chance to be successful… **Transitions take time**."	DiamondCluster (2005)
	"**Outsourcing decisions have long term impacts and must be based on a long term strategy**. This strategy should include: analysis of the IS activities to be performed, evaluation of the internal IS services, the possibility for internal improvement and the evaluation of all the expected effects of IS outsourcing."	De Looff (1995)
ITO strategy	Companies with a **clear IT and outsourcing strategy** were more satisfied with the vendor.	Gerigk (1997)
	"Having a **detailed strategy and objectives for IT outsourcing**, and **setting outsourcing in the context of a clear overall policy**" is drawn as a lesson learned from researching outsourcing experiences.	Willcocks and Fitzgerald (1994)
	A reason for the dramatic rise in abnormal terminations is due the fact that "**buyers still view outsourcing relationships as transactional rather than strategic**. As more buyers begin to develop **comprehensive sourcing strate-**	DiamondCluster (2005)

	gies that include views into internal and external resource allocation, they will become more efficient in their use of outsourcing and develop more successful relationships".	
	"**Informed buying" in terms of managing the IS/IT sourcing strategy** that meets the interests of the business was described as part of nine core IS capabilities which "are required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". This involves **analysis of the external market for IS/IT services, selection of a sourcing strategy to meet business needs and technology issues, and leading the tendering, contracting and service management processes.**	Feeny and Willcocks (1998)
	The **outsourcing strategy must include plans for how to manage the IT supply and services market and how to choose, relate to, manage, and retain leverage with vendors**.	Willcocks, Fitzgerald and Feeny (1995)
	The more a client organisation conducts a **rigorously developed, structured and detailed process for outsourcing** well, the greater is the probability of outsourcing success, regardless of its outsourcing objectives. "Client organisations can have more successful outcomes and ITO/BPO deals that operate in a cost-effective manner when they **proactively manage the entire outsourcing life cycle**" and "**outsourcing** will be most successful if it is **viewed as a strategy with a life cycle rather than as a one-off transaction**".	Cullen et al. (2005)
	A lesson learned from outsourcing experiences was that "a **standardised process of planning and decision making**" is necessary.	Landis et al. (2005)
	An **inadequate preparation** was identified as an outsourcing **failure factor.**	Willcocks and Fitzgerald (1994)
	A proven practice differentiating successful sourcing decisions from failures is: "implementing **post-contract management processes and structures** to enable supplier success".	Lacity and Willcocks (2001)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is then to recover costs by e.g. decreases in service quality, charging additional costs for the client ("winners curse"). To avoid a "winner's curse" one learning point was: "**Renegotiation and restructuring may be better options than termination and high switching costs**". "Relational trauma in IT outsourcing can be overcome by initiating **early contract renegotiations**. Such a strategy will change service performance and the nature of the relationship, will affect the management structure and will improve operational efficiency."	Kern (2002)
Business – IT alignment	An **outsourcing strategy fitting with business and information management, information systems and IT strategies** must exist in order to answer the question "how do we use, if at all, the opportunity of what is available on the IT and services market to leverage business advantage?"	Willcocks, Fitzgerald and Feeny (1995)
	"…a **higher level of strategic alignment** … is **coupled with increased IT outsourcing success** in terms of benefit achievements"	Van Lier and Dohmen (2007)
	The following lessons were drawn from an experience of fully outsourcing IT in a bank: "**Focus on business, not technical decisions**. Technology issues can easily confuse the basic question of whether outsourcing is feasible at a realistic cost." "Rather than react to what vendors were offering, **management first re-examined the bank's strategic objectives and listed the benefits outsourcing would provide**…"	Huber (1993)

	"**Integrating IS/IT effort with business purpose and activity**" was described as part of nine **core IS capabilities** which "are required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". Hereby, the IS/IT leader plays a central role to "determine the values and culture of the IS function and instil the belief that an **IS staffs' first duty is to contribute to achieving business solutions**" "**Envisioning the business process that technology makes possible**" was described as part of nine **core IS capabilities** which "are required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". Hereby **business development and IT capability need to be integrated** by including IS in significant business development initiatives to avoid IS/IT investments supporting aging and inefficient processes or new processes designed without considering current IT capability.	Feeny and Willcocks (1998)
Clear, detailed, realistic and suitable ITO objectives	A reason why ITO contracts only partially met expectations was due to "**unrealistic or poorly defined expectations** established at the outset of the relationship".	DiamondCluster (2005)
	A lesson learned from ITO experiences was "**clearly define your goals**, measurement metrics and exit strategies up front".	DiamondCluster (2005)
	Vague objectives and purposes, unrealistic ambitions, poorly understood IT needs, thinking of outsourcing as a panacea and doing it just to save money were identified as outsourcing failure factors.	Willcocks and Fitzgerald (1994)
	"...**having an IT strategy, good planning, a full and detailed specification and using outsourcing to improve the focus of work done by in-house staff"** was described as a key critical success factor.	Willcocks and Fitzgerald (1994)
	A lesson learned from ITO experiences was "**cost saving alone is not a good reason to outsource**"	DiamondCluster (2005)
	Certain kinds of electronic commerce projects are more likely to increase the firm's stock market value than others. "We found that **stock markets reacted positively to E-business outsourcing announcements with the strategic intent of commercial exploitation**. **Also**, such **projects as were planned to be swiftly executed to overcome the potential risks of business requirements obsolescence and technology change and obsolescence** triggered positive stock market reactions. Finally, outsourced E-business projects with high task complexity achieved positive abnormal returns."	Agrawal et. al (2006)
	"In all our studies, assessment issues emerged strongly as critically affecting levels of success and failure in IT outsourcing. In particular... **limitations in the economic assessment of vendor bids... A detailed analysis of in-house IT performance together with assessing all the likely costs of outsourcing IT – these help whether the vendor's bid is more favourable than any likely bid by the internal IT department. IT is also useful to ask whether an internal IT department can achieve similar results without vendor assistance**." **Mass production efficiencies** in terms of lower data centre processing costs are often negligible from a certain MIPs range. Mass production efficiencies in terms of lower hardware and software purchasing costs enabled by the ability of vendors to buy in bulk can often be achieved by in-house IT functions as well; and smaller companies can save costs by using older technology or cheaper networked technology.	Willcocks, Lacity and Fitzgerald (1995)

	Labour specialisation efficiencies in terms of a wider access of vendors to technical and business talent often does not materialise because clients experience that they are supported by the same staff sometimes at lower costs, additional vendor expertise is expensive and sometimes vendors move experienced staff and the better transferred staff off onto new contracts or to assist in attracting other customers. **Often cost reductions can be realised internally by consolidating data centres, optimising resource use, implementing strict cost controls and by upskilling existing staff rather than seeking access to more expensive technical staff available on the market.** **Overall, the cost advantage needs to be significant to cover the vendor's profit margin**.	
Congruent ITO strategies	A **winning combination of the perception of the service provider** (strategic partner or service supplier), the **nature of the contract** (loose or tight) and the **view of the IS function** (commodity or core) is important for achieving success in information systems outsourcing. **Tight contracts** were in general seen as an important ingredient for outsourcing success. **Outsourcing was most successful if IS was viewed as a core function.** Outsourcing failures were more prevalent in companies were IS was viewed as a commodity, especially in the case of loose contracts. And **partnership relationships are more successful than supplier relationships**, especially in the case of detailed contracts.	Saunders et al. (1997)
	The study explored the effects of universal vs. contingency perspectives in explaining the **relationship between IT outsourcing strategies and outsourcing success**. Therefore, **three IT outsourcing strategies were developed: independent (minimal outsourcing, buy-in contract, short-term duration), arm's-length (selective outsourcing, detailed specification of obligations, medium-term duration) and embedded (comprehensive outsourcing, unspecified contract, long-term duration) strategies**. Success was measured in three dimensions: strategic competence, cost efficiency and technology catalysis. It was hypothesised that independent gestalts will outperform other gestalts on strategic competence, arm's length gestalts will outperform other gestalts on cost efficiency and embedded gestalts will outperform other gestalts on technology catalysis. "**This study emphasised the benefits of congruent outsourcing strategies over noncongruent actions… Specifically**, our results suggest that **firms desiring cost efficiency in their outsourcing relationships may best be served by arm's length relationships. Those wishing to derive strategic competence or technology catalysis may need to develop network type relationships with their providers**".	Lee et al. (2004)
	"A company can successfully manage an outsourcing relationship in any situation, no matter how uncertain its environment, so long as it chooses **the right combination of business objectives, contractual stances** (service bureau type transactional processing, buyer/seller contractual stance, strategic partnership) **and relationship management** (transaction oriented, relationship oriented)… **Strategic partnerships** are ideally suited for an unknown journey, or else an uncertain environment, where few details are known so could never be written down, and the ensuing path is nowhere in sight at the beginning, or a more stable environment where management wants to push the envelope, shake up their environment and pursue more ambitious business-wide improvements and changes. Building trust through every action will take reciprocal, sharing solutions, forgoing certain pursuits, and never taking advantage of the partner. A high level of asset specificity, or unique IS activities, is not always a deterrent to outsourcing IS activ-	Marcolin and McLellan (1998)

	ities, and can even include strategic ones, if a strategic partnership is formed properly." **Buyer/sellers** are characterised by a tight, well managed, cost-focused contract as basis, a certain environment where conditions are not changing and where business objectives are narrowly set, specifications easy to determine and maintain, low asset specificity). This is "ideally suited to the pursuit of efficiency as its primary focus, where cost control is paramount. These firms usually needed predictability in the performance, cost and role of IS. They got it. However, if more objectives were desired then a move towards developing a strategic partnership is needed. **Contractual squabbles lead to a downward spiralling effect toward defending the contractual positions. "**	
	For the attainment of the expected business advantages from ITO, **customers must be able to manage four continual processes:** 1. "Assess the in-house IT portfolio to determine which activities are best outsourced". 2. "Evaluate market options for the best sourcing models and best suppliers to achieve customer objectives" 3. "Craft contracts to align customer and supplier expectations and incentives" 4. "Continually manage supplier relationships". Seven lessons were drawn most frequently associated with ITO success for the evaluation of market options, regarding the organisation of certain types of IT activities. Relevant lessons for congruent ITO strategies are: 1. "Consider **time and materials** contracts when **business or technical requirements** are **uncertain**" 2. "Consider **exchange-based contracts** for **stable, non-core activities** requiring **some customisation**" 3. "Consider **netsourcing** for **highly standardised, non-core activities**" 4. "Consider customer-supplier **joint ventures** only if there is a **proven market for the partners' complementary capabilities**".	Lacity and Willcocks (2009d)
	The **cost/service trade-off needs to be considered when setting ITO objectives**. Senior management often go for cost reduction when outsourcing IT, and users demand service excellence. IT can either provide a premium service for premium costs or a minimal service for minimal costs.	Hirschheim and Lacity (2000)
Suitable choice of ITO options		
IT subject	**Strategic issues controlled by vendor** and an **over-dependence on vendor** were identified as **outsourcing failure factors.**	Willcocks and Fitzgerald (1994)
	"... information management and IT/IS strategy should probably not be outsourced but a wide variety of other IT/IS services can be".	Willcocks and Fitzgerald (1994)
	"…whether or not a firm decides to outsource its IS function**, the management of IS cannot be outsourced**".	Lacity and Hirschheim (1993)
	Control should be maintained in-house for strategic activities integral to the firm's achievement of goals and critical to its existing and future business directions. **Differentiators should not be outsourced** and are defined with the following characteristics: highly sensitive to competitive exposure, strong need to retain intellectual property, high business knowledge in the IT products/service	Willcocks, Fitzgerald and Feeny (1995), Willcocks and Fitzgerald (1993)

	and a very competitive business environment, whereas **commodities** do not differentiate a company from a competitor and **can** therefore **be outsourced** if an external agency can do it cheaper than the in-house IT function.	
	Management and control of core IT activities (e.g. strategic planning, scanning the environment for new technologies applicable to business needs, development of business-specific applications, and supporting critical systems) **should be kept in-house.**	Lacity et al. (1996)
	A discovered reason for backsourcing formerly outsourced IT functions was the "realisation that the previous **decision to outsource was based on the assumption that IT was a commodity, whereas it is now realised to be core to business strategy**".	McLaughlin and Peppard (2006)
	"In all outsourcing arrangements, **key management capabilities needed to be retained in-house**. At a minimum these were: strategic thinking on IT in relation to the business, systems integration, eliciting business demand for IT, spotting business opportunities for the use of IT, an informed buyer role, contract monitoring and the ability to lever vendor relations to advantage."	Willcocks, Fitzgerald and Feeny (1995)
	Proximity of core competencies can lead to a loss of organisational competencies. **Outsourcing core-activities might impede organisational learning and lower the competitiveness of the organisation** as the vendors will either supplant the client in its own domain, or move in directions different from the ones the client chose.	Aubert (1998; 1999)
	It is possible to successfully **outsource core IS activities, if a tight contract is written** to restrict the vulnerability of the strategic activities and to gain control over the vendor.	Saunders et al. (1997)
	A lesson learned from outsourcing experience was "**a clear definition of core and strategic functions that are not to be outsourced to retain competitive advantage**" is needed	Landis et al. (2005)
	A proven practice differentiating successful sourcing decisions from failures is: "**identifying core IT capabilities to keep in-house and non-core IT capabilities for potential outsourcing**".	Lacity and Willcocks (2001)
	Outsourcing of peripheral and core activities had both a positive effect on financial and accordingly innovation performance. The business strategy of the outsourcing company (either cost leadership or differentiation strategy) had no influence on this relationship.	Gilley and Rasheed (2000)
	Asset specificity (degree to which an asset can be redeployed without sacrificing its productive value if the contract is to be interrupted or prematurely terminated) **can lead to a lock-in situation**. The investor would lose part of its investment if the transaction was not completed, thus the other party could extract an advantage from the investor by threatening to withdraw from the transaction.	Aubert (1998; 1999)
	Asset specificity was found to have a **negative influence on the success of IS outsourcing**. Asset specificity was defined as assets that only serve a particular transaction and cannot be transferred to any other transaction. Three types of asset specificity were described: **technical resource specificity** (hardware, software and communications architecture or platforms are uniquely developed for the client), **human resource specificity** (IS staff trained to handle only company-specific applications) and **technical procedure specificity** (unique technical procedures for system design, operation and maintenance).	Kim and Chung (2003)
	"**Increasing asset specificity leads to the diminishing effectiveness of market governance**". Significant performance losses accrued, as firms chose to coordinate firm-specific IS activities by the market due to coordination	Poppo and Zenger (1998)

	problems and opportunism which arose from this specialised exchange.	
	Outsourcing of systems operations and telecommunications showed a strong positive relationship with ITO success; thus the greater the outsourcing of theses functions, the greater is the achievement of benefits from ITO. Outsourcing of more asset-specific IT functions like applications development, end-user support or systems management did not lead to increased satisfaction.	Grover et al. (1996)
	The **degree of interdependence** (or technological indivisibility) **of the activities to be outsourced can lead to service debasement** as the source of the problem might be very difficult and costly to determine.	Aubert (1998; 1999)
	"The case studies show that **outsourcing is advisable only in situations where... activities are not highly interconnected**".	De Looff (1995)
	Systems to be outsourced should be discrete systems with simple interfaces with the rest of the organisation's systems and business users in order to ensure an easy isolation and contracting out. The impact on business users can be isolated from large parts of normal business activity if something goes wrong. Systems with complex and extensive interactions with a wide range of other systems imply that there will be high switching costs involved.	Willcocks, Fitzgerald and Feeny (1995), Willcocks and Fitzgerald (1993)
	An **outsourcing subject too complex with no clear boundaries** was identified as an **outsourcing failure factor.**	Willcocks and Fitzgerald (1994)
	High technology maturity. "**Outsourcing should be restricted to situations where IT is well understood and unproblematic to the organisation**, and where a specialist focus can be suitably applied by the vendor".	Willcocks, Fitzgerald and Feeny (1995), Willcocks and Fitzgerald (1993)
	Technological discontinuity in the sense of **technological changes and breakthroughs may make obsolete the technology which is part of the contract and can therefore incur costly contractual amendments.**	Aubert (1998; 1999)
	"**Technology change** and the associated dramatic reductions in cost and improvements in performance **washed out the cost advantages of those early outsourcing deals**".	McLaughlin and Peppard (2006)
	A success factor is the "**degree of stability/certainty associated with the technology**".	Willcocks and Fitzgerald (1993)
	"Increases in the level of **technological uncertainty had no effect on performance**."	Poppo and Zenger (1998)
	A lesson learned from ITO experiences was: "**outsourcing your problems won´t solve them**. You should fix potential problems first before you hand over the process to someone else."	DiamondCluster (2005)
	"The degree of **outsourcing success is related to the change in the degree of outsourcing of specific types of IS functions**. For example, outsourcing success is highly related to changes in the degree of outsourcing of both systems operation and telecommunication management and maintenance."	Cheon Myun Jong (1992)
	"The case studies show that **outsourcing is advisable only in situations where the advantages of scale can be ascertained**...."	De Looff (1995)
	Small number bargaining can lead to a lock-in situation. If a transaction is unique, the necessary governance structure will be too costly to establish within the firm; the firm, instead, will likely prefer to bear the cost of the risks associated with investments or uncertainty rather than invest in internalisation. The firm is therefore dependent on the vendor.	Aubert (1998; 1999)

	For the attainment of the expected business advantages from ITO, customers must be able to manage four continual processes: 1. "Assess the in-house IT portfolio to determine which activities are best outsourced". 2. "Evaluate market options for the best sourcing models and best suppliers to achieve customer objectives" 3. "Craft contracts to align customer and supplier expectations and incentives" 4. "Continually manage supplier relationships". Three lessons were drawn most frequently associated with ITO success for the assessment of the in-house IT-portfolio: 1. "Treat IT as a portfolio" to support the decision which activities to insource in order to ensure flexibility and current and future business advantage and which activities to outsource safely. **Selective ITO had a higher relative frequency of success than total ITO**. 2. "Identify core capabilities for insourcing". Scientific studies found support for the transaction cost economics theory principle **not** to **outsource activities with high asset specificity** (Lacity and Willcocks, 1996; Poppo and Zenger, 1998). The resource-based view suggests **retaining valuable, rare, non-imitable, and non-substitutable activities in-house to ensure a good competitive position in the future** (Barney, 1991). Feeny and Willcocks (1998) defined **four IT activities which must be kept in-house: IT governance** (IT strategy, mission, and coordination), **business requirements** (relation of business needs and IT and the relationship management between management, users and IT), **technical ability** (control over architecture design and know-how to assess supplier claims and performance), **external supplier management** (informed buying decisions, monitoring and facilitation of contracts and agreements on value-added opportunities with suppliers). **3.** "Best source non-core capabilities". **Non-core activities should not be outsourced if they are expected to become core in the future, if no supplier can do it cheaper or if these activities are highly integrated with other core activities.**	Lacity and Willcocks (2009d)
Mode	A lesson learned from ITO experiences was: "**Working with multiple vendors to reduce vendor dependency**" is recommended.	Landis et al. (2005)
	By **utilisation of more than one vendor**, the risk exposure from a potential lock-in situation with ITO can be reduced.	Aubert (1999)
	As a lesson learned from ITO experiences it was recommended to **handle multi-vendor situations** (e.g. utilise multiple vendors, avoid having subcontractors to a principal contractor, and encourage competition between vendors).	Willcocks and Fitzgerald (1994)
	"Arrangements that **minimise dependency**, such as **multiple suppliers and different suppliers for consecutive phases, appear to give the best results**".	De Looff (1995)
	The possibility of accomplishing **joint projects together with companies from the same or different industry positively influences ITO efficiency** attributes (cost reduction, increased motivation of employees).	Heinzl (1993)

Degree of ITO	A "**targeted rather than a total outsourcing route** reduces risk".	Willcocks, Fitzgerald and Feeny (1995)
	"Managers realise higher performance when they apply the TCE principle to not outsource the most specialised activities". Thus, total outsourcing would likely not be optimal for most firms. "**Managers that use selective outsourcing experience higher levels of met expectations than those that use total outsourcing**."	Poppo and Lacity (2009)
	A proven practice differentiating successful sourcing decisions from failures is "**the use of a selective sourcing strategy rather than all-or-none outsourcing strategies**"	Lacity and Willcocks (2001)
	Companies experienced **problems with total outsourcing** and thus the authors conclude that **long-term total outsourcing is only a possible option for companies highly experienced in ITO and in managing major, long-term relationships**. They stress the benefits of selective outsourcing: "When companies properly select and contract for specific IT activities by treating IT as a dynamic portfolio, they maintain management and control of core activities... while still accessing vendor expertise and economies of scale for well-defined, isolated, or mature IT activities".	Lacity et al. (1996)
	"**Selective outsourcing decisions achieved expected cost savings with a higher relative frequency than total outsourcing or total insourcing decisions**." Selective sourcing was defined as "the decision to source selected IT functions from external provider(s) while still providing between 20% and 80% of the IT budget internally". Total outsourcing was defined as "the decision to transfer the equivalent of more than 80% of the IT budget for IT assets, leases, staff, and management responsibility to an external IT provider". Total insourcing was defined as "the decision to retain the management and provision of more than 80% of the IT budget internally after evaluating the IT services market".	Lacity and Willcocks (1998)
Time horizon	**Long-term contracts** were identified as an **outsourcing failure factor.**	Willcocks and Fitzgerald (1994)
	A **3 – 5 year detailed contract** was evaluated as a **proven practice in ITO**.	Lacity and Willcocks (2001)
	"**The longer the contract duration, the higher the operational cost savings achieved** by BPO".	Fritsch and Wahrenburg (2008)
	Companies experienced problems with total outsourcing and thus the authors conclude that **long-term total outsourcing is only a possible option for companies highly experienced in ITO and in managing major, long-term relationships.**	Lacity et al. (1996)
	"**Short(er)-term contracts achieved expected cost savings with a higher relative frequency than long-term contracts"**. The study differentiated between three categories: "less than four years", "between four and seven years", "more than seven years". This is explained with 3 reasons: 1. Business and thus **information technology requirements cannot be predicted past a three-year time horizon**. Often changing requirements should be addressed in long-term contracts with a partnership approach, but this often fails because client and vendor don´t share risks and rewards. Thus, vendors see changing requirements as an opportunity to get a financial advantage by charging excess fees or hidden contractual costs. 2. Short term contracts ensure **that fixed prices correlate with market prices.** 3. Short term contracts **motivate vendor performance and reduce the monopolistic power of the vendor**, be-	Lacity and Willcocks (1998)

	cause after contract expiration the customer may switch to another vendor if it is not satisfied.	
	A **lesson learned from past outsourcing deals was: "Short-term contracts** with renegotiation and cancellation clauses and with comprehensive SLAs in place, including both quantitative and qualitative metrics to maintain flexibility and avoid vendor complacency".	Landis et al. (2005)
Incremental ITO	"Consider **incremental outsourcing to develop experience with outsourcing**" and to keep up to date on emerging sourcing practices.	Lacity and Willcocks (2009d)
Client capability		
IT skills and expertise	The **retention of enough in-house capability** was seen as a critical determinant of ITO success.	Willcocks and Fitzgerald (1993)
	A **mature active in-house capability** was evaluated as a proven practice in ITO, especially for large-scale deals. This is in particular required **to "post-contract manage suppliers and retain control over the organisation's IT destiny**".	Lacity and Willcocks (2001)
	A **high in-house experience with the technology to be outsourced** is a critical determinant for ITO success.	Willcocks and Fitzgerald (1993)
	A critical success factor for IT outsourcing implementation is **organisational IT capability**.	Pei et al. (2007)
	"**Identify and retain essential in-house management and technical skills**".	Willcocks and Fitzgerald (1994)
ITO skills and expertise	A **lack of experience and expertise of the client with the outsourced activity and outsourcing in general has a negative impact on the ability of the client to manage the contract as difficulties exist in assessing the quality and the costs of the service rendered.** A **lack of experience and expertise of the client with contract management can lead to cost escalation** as an inexperienced principal is more likely to underestimate transition and management costs and to be vulnerable to the agent's opportunistic behaviour.	Aubert (1998; 1999)
	A lesson learned from ITO experiences was "**leverage resources with experience and skills in outsourcing to help you develop your own sourcing strategies and execution roadmaps**".	DiamondCluster (2005)
	Ability to make decisions as to what IT services to outsource and what to source in other ways. **Process and management capacity to select a suitable vendor**. **Management and specialist capacity to negotiate and draw up an outsourcing contract**. **Human resource plan** in place to deal with the decision, transition and subsequent phases of outsourcing. **Sufficient management and technical capacity retained in-house to manage the vendor, monitor contract performance** and keep strategic business and technical options under review.	Willcocks, Fitzgerald and Feeny (1995)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in service quality, additional costs for the client ("winners curse"). To avoid a "winner's curse" one learning point was: "**ensure that the contract management culture is conducive to supporting superior supplier performance**".	Kern (2002)
	A factor leading to successful ITO arrangements is **good contract management skills (e.g. management capability of relationship, outcomes, contract, overall management retained in-house, staff capable of monitoring**	Cullen and Willcocks (2003)

	performance, good project manager).	
Business, technical and interpersonal skills	A critical success factor for IT outsourcing implementation is **dual-role skilled people on the client side**. Client employees need to have a combination of business knowledge, technical skill and personal traits that enables them to work effectively with the vendor. This ability positively influences the (technical) fulfilment of the outsourcing task, knowledge sharing and inter-organisational relationships.	Pei et al. (2007)
Market	"Companies need to have a **good understanding of the IT services market in order to evaluate (vendor) bids** properly".	Willcocks and Fitzgerald (1994)
Organisational learning capability	"...**knowledge sharing is one of the major predictors for outsourcing success**, organisational capability to learn or acquire the needed knowledge from other organisations is a key source of successful knowledge sharing..."	Lee (2001)
Flexibility	"Flexibility appears to be a very strong predictor of success, as it is significantly related to two success measures, satisfaction and non-economic benefits. The finding of flexibility is consistent with the IS literature which suggests that **flexibility is a key for outsourcing success to cope with evolving technology and changes in business needs**." Flexibility means the ability to "smooth alterations in practices and policies in the event of unexpected or changing conditions". And as IT outsourcing contracts have a long-term nature; it is impossible to pre-specify everything in detail.	Kim and Chung (2003)
	A factor leading to successful ITO arrangements is a flexible ITO arrangement (e.g. a win-win flexible contract, ability to change and to vary resources)	Cullen and Willcocks (2003)
Architecture Know-how	"**Creating a coherent blueprint for a technical platform that responds to current and future business needs**" was described as part of nine core IS capabilities which "are required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". A vision of an appropriate technical platform is **developed by the architecture planner considering technology, suppliers and business directions**. Despite ITO, this in-house expertise needs to exist, because it **protects the ability to exploit IT and the ability to negotiate architecture evolution** with suppliers. Without in-house experience about architecture planning "a company cannot understand the viability of addressing new demands or the potential for meeting existing demands on a new technology platform with better economics. Nor will an external supplier place priority on moving to a lower-cost platform, unless it results in higher profits, rather than lower revenues for the supplier."	Feeny and Willcocks (1998)
Problem solving & satisfaction of specific business needs	"Making technology work" was described as part of nine core IS capabilities which "are required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". **In a complex, networked, multisupplier system it needs people who can rapidly trouble-shoot problems that are disowned by others across the technical supply chain and who can address business needs that cannot be properly satisfied by standard technical approaches.** These "technical fixers" have rather fundamental than specific IT know-how.	Feeny and Willcocks (1998)
Vendor selection		
Choice of the right vendor	"A critical success factor … was **selection of a suitable vendor**".	Willcocks and Fitzgerald (1994)

	One main problem for the achievement of satisfaction with ITO results was the **choice of the right vendor**.	Nagengast (1997)
	The opportunism of the vendor can result in cost escalation. Sources of opportunism are: • Morale hazard: As the client cannot directly observe the vendor, it cannot tell whether a problem is due to negligence on the part of its vendor or to an unforeseeable event. Thus, poor performance can be blamed by the vendor on circumstances beyond its control. • Adverse selection: The **client must validate that the supplier has the required characteristics to perform the activity to be outsourced**. An excess of confidence will lead into a contractual agreement which cannot be respected by the vendor. • Imperfect commitment: Client and vendor may be tempted to renege on their commitments (e.g. vendor refuses to adapt applications because it claims that such adaptations had not been foreseen, or the contract is not clear, etc.)	Aubert (1998; 1999)
	A proven practice differentiating successful sourcing decisions from failures was: "conducting a **rigorous evaluation of market options and supplier offerings**" and the "**careful selection of suppliers for tasks they are most suitable for.**"	Lacity and Willcocks (2001)
Rigorous tendering process	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recovering costs by e.g. decreases in service quality, additional costs for the client ("winners curse"). To avoid a "winner's curse" learning points were: ▪ "**Reassess the cost/service baseline before outsourcing, and make detailed disclosures** to the bidders." ▪ "Carefully consider the **bidding format**. In different circumstances, a single-round or a multiple round sealed bid will be more appropriate." ▪ "Supplier information gathering activities are vital. The **client should check to ensure that the bidders are undertaking the detailed information gathering activities necessary** to present a bid that will be effective in operational terms." ▪ "**Conceive the bid as being about a relationship over time**, rather than as a one-off win or loss."	Kern (2002)
	"In all our studies, **assessment issues emerged strongly as critically affecting levels of success and failure in IT outsourcing. In particular... failure to establish adequate measurement of the pre-existing in-house performance". This has a knock-on effect of setting up... "inadequate ...measurement systems to monitor vendor performance".** **Difficulties in assessing vendor bids against each other and against internal bids emerged because of a poor pre-existing evaluation of in-house performance.** The following weaknesses were mentioned: "not fully investigating risk and its potential cost, understating knock-on operating, maintenance and human and organisational costs; budgeting practices that conceal full costs, lack of metrics to assess the business contribution of IT, use of inappropriate metrics, given the objectives set for specific IT projects, inadequate approaches to dealing with intangible benefits and for tracking benefits over long time-scales." But understanding the costs and benefits of the existing IT is necessary to be able to compare against vendor bids. **Postponing this analysis after the contract has been**	Willcocks, Lacity and Fitzgerald (1995)

	signed can result in hidden costs and opportunistic behaviour of the vendor. Hidden costs can be caused by inadequate measurement systems and by "the failure to fully define present IT requirements, failure to fully define future requirements, or failure to create mechanisms for protecting price in the face of contingencies, loopholes or ambiguities in the contract, not allowing the vendor a reasonable profit and unforeseen, rising, in-house contract management costs as a result of weak contracting practice." A detailed analysis of in-house performance is necessary even where organisations operate already with in-house charging systems, detailed in-house service level agreements and/or operate in-house IT as a cost or profit centre. The client-vendor relationship can be adversely affected because of problems with operationalising the contract.	
	The careful investigation of vendor claims and promises was described as a lesson learned from ITO experiences (e.g. thorough reference site visits, investigation of people, products and financial stability, enough time for vendor selection, testing vendor claims on service levels, anticipating hidden costs).	Willcocks and Fitzgerald (1994)
	A detailed financial and quantitative evaluation is important. This was described as a lesson learned from ITO experiences. "This included: internal and external benchmarking; more time detailing in-house costs; and setting clear cost/benefit targets." The full costs of in-house IT should be taken into account when evaluating internal services and effective in-house SLA should already exist before external benchmarking or evaluation of vendor bids.	Willcocks and Fitzgerald (1994)
	For the attainment of the expected business advantages from ITO, customers must be able to manage four continual processes: 1. "Assess the in-house IT portfolio to determine which activities are best outsourced". 2. "Evaluate market options for the best sourcing models and best suppliers to achieve customer objectives". 3. "Craft contracts to align customer and supplier expectations and incentives". 4. "Continually manage supplier relationships". Seven lessons were drawn most frequently associated with ITO success for the evaluation of market options. A relevant lesson for the tendering process is to "ensure that all layers of the service stack are adequately provided". The service stack starts with network connectivity and subsequently increases the level of functionality up to the delivery of a whole business process**. It is important to know, how the supplier will manage all layers of the service stack to identify its capabilities and sources for cost reduction** (e.g. direct contracting of lower layers instead of contracting over business process supplier).	Lacity and Willcocks (2009d)
Invitation of internal and external bids	"**Organisations that invited both internal and external bids achieved expected cost savings with a higher relative frequency** than organisations that merely compared external bids with current IT costs."	Lacity and Willcocks (1998)
	For the attainment of the expected business advantages from ITO, customers must be able to manage four continual processes: 1. "Assess the in-house IT portfolio to determine which activities are best outsourced". 2. "Evaluate market options for the best sourcing models and best suppliers to achieve customer objectives". 3. "Craft contracts to align customer and supplier expectations and incentives". 4. "Continually manage supplier relationships".	Lacity and Willcocks (2009d)

	Seven lessons were drawn most frequently associated with ITO success for the evaluation of market options. **Regarding the bidding process it is recommended to compare request-for-proposals with internal bids, as organisations doing so had a higher relative frequency of success** than organisations comparing external bids to current IT performance.	
	"Information systems outsourcing decisions should start with **analysing the current situation thoroughly, by examining the problems that gave rise to considering outsourcing and evaluating all available internal and external alternatives**".	De Looff (1995)
Make or buy evaluation	**Companies may be pressured to out-/backsource by external forces** like e.g. trade groups, government, parent organisation. The dependent organisation may **have to act in accordance with powerful others even if the result of the outsourcing deal is not satisfying**.	Veltri et al. (2008)
	"**Sourcing decisions should follow a market logic**", it should not be done out of despair with in-house IT.	Willcocks, Fitzgerald and Feeny (1995)
	A general condition for effective ITO arrangements is a vendor offering a better deal compared with the in-house IT department.	Willcocks, Fitzgerald and Feeny (1995), Willcocks and Fitzgerald (1993)
	"The case studies show that **outsourcing is advisable only in situations where the advantages of scale can be ascertained**...."	De Looff (1995)
	"In all our studies, assessment issues emerged strongly as critically affecting levels of success and failure in IT outsourcing. In particular... **limitations in the economic assessment of vendor bids... A detailed analysis of in-house IT performance together with assessing all the likely costs of outsourcing IT – these help whether the vendor's bid is more favourable than any likely bid by the internal IT department. IT is also useful to ask whether an internal IT department can achieve similar results without vendor assistance**." **Mass production efficiencies** in terms of lower data centre processing costs are often negligible from a certain MIPs range. Mass production efficiencies in terms of lower hardware and software purchasing costs enabled by the ability of vendors to buy in bulk can often be achieved by in-house IT functions as well; and smaller companies can save costs by using older technology or cheaper networked technology. **Labour specialisation efficiencies** in terms of a wider access of vendors to technical and business talent often does not materialise because clients experience that they are supported by the same staff sometimes at lower costs, additional vendor expertise is expensive and sometimes vendors move experienced staff and the better transferred staff off on to new contracts or to assist in attracting other customers. **Often cost reductions can be realised internally by consolidating data centres, optimising resource use, implementing strict cost controls and by upskilling existing staff rather than seeking access to more expensive technical staff available on the market.** **Overall, the cost advantage needs to be significant to cover the vendor's profit margin**.	Willcocks, Lacity and Fitzgerald (1995)

	The **larger market and competitive orientation within ITO positively influences ITO efficiency** attributes (better service mentality, innovative ability, motivation of employees). The **increasing specialisation of ITO vendors positively influences ITO efficiency attributes** (quality of products and services, innovative ability).	Heinzl (1993)
Leverage of internal IT capabilities before ITO	"A **sourcing decision should be based on in-house rationalisation**".	Willcocks, Fitzgerald and Feeny (1995)
	"The economics of IT outsourcing uncovered by our research suggests that **organisations need to pursue in-house improvements first, identify full IT costs and establish performance benchmarks, pursue further in-house improvements, and only then make in-house vs. outsourcing comparisons**".	Willcocks, Lacity and Fitzgerald (1995)
	"…do not outsource merely because vendor bids are more desirable than internal IS bids. **Ask yourself: Why is the vendor's bid better? Could we achieve these results on our own?**"	Lacity and Hirschheim (1993)
Vendor profit	**Loss-leader deals** were identified as an **outsourcing failure factor.**	Willcocks and Fitzgerald (1994)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in service quality, additional costs for the client ("winners curse"). To avoid a "winner's curse" one learning point was: "**Analyse carefully the reasons for a low supplier bid and whether the bid can result in a reasonable profit for the supplier**." "An **outsourcing contract will rarely be delivered satisfactorily where the supplier stands to make a loss**, because this will tend to have detrimental effects on the service delivered and will sour what could otherwise have been a synergistic relationship".	Kern (2002)
Baseline period	"The contract is the only mechanism that establishes a balance of power in the outsourcing relationship". "By a tight contract, the client can ensure that outsourcing expectations are realised." Amongst other things it is **important to measure everything during the baseline period to determine what services the vendor must provide** to the customer at a fixed price. Everything not covered in this bundle must be disbursed with excess fees. The **service requirements** in the request for proposal are just high level descriptions. Service requirements **must be measured in detail in a defined baseline period**. To capture seasonal differences, a baseline period of 6 months is recommended.	Lacity and Hirschheim (1993)
Vendor capability		
Vendor performance	"Problems arising in the contract or **failure to achieve key business objectives can be a (failure) factor."** The **failure to perform certain obligations in accordance with the terms of the agreement** leads to the termination of an outsourcing contract.	McLaughlin and Peppard (2006)
	A reason why ITO contracts only partially meet expectations is due to "**provider deficiencies in delivering against expectations**". Otherwise, a reason for the abnormal termination of ITO contracts is "poor provider performance".	DiamondCluster (2005)
	"**The quality and promptness of the provided outsourcing services** affect the client's business and outsourcing effectiveness." Backsourcing cases suffered from inadequate service quality (poor responsiveness, lack of profes-	Veltri et al. (2008)

	sionalism, service delays).	
	"A DiamondCluster International Survey shows that 78 percent of responding executives had to **terminate agreements early due to poor service**, a change in strategic direction, **or costs**."	Landis et al. (2005)
	"Vendors and organisations **enhance their chances of success by increasing service quality**, particularly in the case of asset-specific transactions such as end-user support and systems planning and management."	Grover et al. (1996)
	Major reasons for outsourcing failure are a vendor failing to understand the client's business and a rigid service supply in the face of changes in business and user requirements. **A lower service level for non-priority clients** influences ITO failure as well.	Willcocks and Fitzgerald (1994)
	A reported **reason for backsourcing was quality defects**.	Bertschek (2006)
	The **quality of the outsourcing service provider** is an implementation factor determining the degree of outsourcing success.	Cheon Myun Jong (1992)
	A **factor leading to ITO failure is "the expertise gap between that expected from the supplier or promised to the organisation and that actually delivered**" and accordingly a factor influencing ITO success is "the supplier must provide quality technical expertise".	Cullen and Willcocks (2003)
	From 50 problem **deals**, 74% **failed due to vendor underperformance and/or cost overruns**.	Landis et al. (2005)
	Opportunism of the vendor can result in cost escalation. Sources of opportunism are: • Moral hazard: As the client cannot directly observe the vendor, it cannot tell whether a problem is due to negligence on the part of its vendor or to an unforeseeable event. Thus, poor performance can be blamed by the vendor on circumstances beyond its control. • Adverse selection: The client must validate that the supplier has the required characteristics to perform the activity to be outsourced. An excess of confidence will lead to a contractual agreement which cannot be respected by the vendor. • Imperfect commitment: Client and vendor may be tempted to renege on their commitments (e.g. vendor refuses to adapt applications because it claims that such adaptations had not been foreseen, or the contract is not clear, etc.)	Aubert (1998; 1999)
	A factor leading to successful ITO arrangements is "the **services must be** delivered not only to expectations and specifications, but **improved continuously**".	Cullen and Willcocks (2003)
Skills and expertise	The vendor should have generic qualities dependent on the need of the client organisation, e.g. ▪ understanding of client business ▪ vendor flexibility in the face of changes in business and IT needs ▪ ability to deliver required technical expertise ▪ ability to communicate and relate to client IT and user staff ▪ degree of partnership and objectives shared with client ▪ shared culture / integration with in-house staff ▪ credibility with and acceptance by users ▪ reliability and professionalism	Willcocks and Fitzgerald (1994)

	▪ ability to report progress accurately	
IT/ITO skills and expertise	The **lack of experience and expertise of the vendor with the outsourced IT activity** can lead to **service debasement.** The **lack of experience and expertise of the vendor with outsourcing contracts** can lead to **disputes, litigation and to escalating costs.**	Aubert (1998; 1999)
	A **high level of trust in the know-how of the service provider** has a positive influence on profitability with BPO.	Fritsch and Wahrenburg (2008)
	A critical success factor for IT outsourcing implementation is **organisational IT capability**. For the vendor this means the **capability to attract clients, to deliver IT special service based on understanding client's requirements and to add value to the client.**	Pei et al. (2007)
Understanding of Client's industry	A factor leading to successful ITO arrangements is "the supplier must understand and listen to the customer organisation and react to its needs" and accordingly **a factor influencing ITO failure is "the inability of the supplier to understand the organisation, its needs and its priorities**".	Cullen and Willcocks (2003)
	Major reasons for outsourcing failure are a **vendor failing to understand the client's business** and a rigid service supply in the face of changes in business and user requirements. A lower service level for non priority clients influences ITO failure as well.	Willcocks and Fitzgerald (1994)
	A reason for the **dramatic rise in abnormal terminations is due to the fact that "providers need to continue to focus on understanding real buyer needs and expectations**. The days of simple wage arbitrage are almost over. Providers need to **understand complex industry processes, develop deep areas of technical expertise and, most importantly, establish a better pattern of exceeding buyer expectations**".	DiamondCluster (2005)
Track records	"**Vendor capability was found to be strongly and significantly related to success**..." **Vendor capability includes "experience and track record, technical competence and financial status".** Companies outsourcing amongst others in case they have a lack of internal resources or capabilities, thus **competent vendors** are needed to satisfy this outsourcing need. And as outsourcing has a long-term focus, it is difficult to change the vendor or to backsource, thus **vendors need to be able to cope with changing technology** and its **financial stability should be high** to maintain disrupted services.	Kim and Chung (2003)
High quality staff	A factor leading to successful ITO arrangements is "**the supplier must have quality staff and good staff management**" and accordingly a factor influencing ITO failure is "deficient staffing arrangements by the supplier, beginning with the supply of the wrong type of staff and continuing with poor staff management".	Cullen and Willcocks (2003)
	"…information generated in this survey indicates the importance of factors such as the **skills of the outside staff**… for outsourcing if it is to be successful."	Collins and Millen (1995)
	The increased **motivation of outsourced IT employees** (reasoned with the possibility to show one's own initiative in a legally independent company) **positively influences ITO efficiency attributes** (better service mentality).	Heinzl (1993)
	A wrong vendor expertise and **variable staff quality** were identified as outsourcing **failure factors.** It is recommended to ensure vendor staff quality, for example as part of the ITO contract (e.g. named personnel, guarantees).	Willcocks and Fitzgerald (1994)
	"Outsourcing success showed a significant positive relationship with supplier obligation(s) for • ..."effective human capital management". This is defined as "**assign high-quality staff to work on the pro-**	Koh et al. (2004)

	ject, and to minimise staff turnover during the project" • ..."taking charge" This is defined as "complete the job and solve problems independently, with minimal customer involvement"	
Staff management	An **inadequate management by vendor** and **too much off-site work** were identified as outsourcing **failure factors.**	Willcocks and Fitzgerald (1994)
	A **reason for a backsourcing decision** was the vendor's goal to maximise profits which resulted in a **disadvantageous vendor staff management** for the client: "…the vendor **reduced staff and over-worked remaining employees, and the vendor siphoned the best talent to two other customers**".	Hirschheim and Lacity (2000)
	"Outsourcing success showed a significant positive relationship with supplier obligation(s) for • ..."effective human capital management". This is defined as "assign high-quality staff to work on the project**, and to minimise staff turnover during the project**" • ..."taking charge". This is defined as "**complete the job and solve problems independently, with minimal customer involvement**"	Koh et al. (2004)
Cost and financial management	A factor leading to successful ITO arrangements is: "**Both parties must have capable cost and financial management**" (e.g. meeting/exceeding cost saving targets, profitable supplier, understanding of real costs)	Cullen and Willcocks (2003)
	"**Vendor capability was found to be strongly and significantly related to success**..." **Vendor capability includes** "experience and track record, technical competence and **financial status".**	Kim and Chung (2003)
Organisational learning capability	**"...knowledge sharing is one of the major predictors for outsourcing success**, organisational capability to learn or acquire the needed knowledge from other organisations is a key source of successful knowledge sharing..."	Lee (2001)
Flexibility	"Flexibility appears to be a very strong predictor of success, as it is significantly related to two success measures, satisfaction and non-economic benefits. The finding of flexibility is consistent with the IS literature which suggests that **flexibility is a key for outsourcing success to cope with evolving technology and changes in business needs**." Flexibility means the ability to "smooth alterations in practices and policies in the event of unexpected or changing conditions". And as **IT outsourcing contracts have a long-term nature it is impossible to pre-specify everything in detail.**	Kim and Chung (2003)
	A lesson learned from ITO experiences was: "**buyer expectations and objectives** are always **evolving**. **Make sure you understand them at the outset and are nimble enough to satisfy them when they change".**	DiamondCluster (2005)
	A reason for a backsourcing decision was the vendor's goal to maximise profits which resulted in a disadvantageous vendor staff management for the client: "…**the vendor failed to introduce new technology without a stiff excess fee**…"	Hirschheim and Lacity (2000)
	Major reasons for outsourcing failure are a vendor failing to understand the client's business and a **rigid service supply in the face of changes in business and user requirements.** A lower service level for non priority clients influences ITO failure as well.	Willcocks and Fitzgerald (1994)
	The **provider needs to be able to respond to changing clients needs to create additional value for the client.** Providers who do not have the competencies to respond to change and add value hinder the client's business success.	Veltri et al. (2008)

	As outsourcing has a long-term focus, it is difficult to change the vendor or to backsource, thus **vendors need to be able to cope with changing technology** and its financial stability should be high to maintain disrupted services.	Kim and Chung (2003)
Long-term potential of partnership	"**Vendor development in terms of identifying the potential added value of IS/IT service suppliers"** was mentioned as one of nine core IS capabilities "required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". As changing a supplier is connected with substantial switching costs, it is in the client's interest "to maximise the contribution of existing suppliers". Hereby client and supplier look beyond the existing contracts to explore the long-term potential for a win-win situation in which the supplier increases its revenues by providing services that increase business benefits. This requires a supplier understanding the client's business.	Feeny and Willcocks (1998)
Contract		
Individual	"**...never accepting a vendor's contract**".	Willcocks and Fitzgerald (1994)
	"**Individually negotiated outsourcing contracts help to improve the cost efficiency as well as the profitability** of the banks. Banks benefit from individual contracts as the services provided by the service provider are tailored to the specific needs of the banks."	Fritsch and Wahrenburg (2008)
	"The **contract is the only mechanism that establishes a balance of power in the outsourcing relationship**". By a tight contract, the client can ensure that outsourcing expectations are realised. Amongst other things it is **important to discard the vendor's standard contract**.	Lacity and Hirschheim (1993)
Complete / Detailed	In all our studies, **assessment issues emerged strongly as critically affecting levels of success and failure in IT outsourcing**. In particular "...**failures in contracting in sufficient detail**"... The outsourcing contract is the only certain way to ensure that expectations are realised. In practice, "**weak contracting, based on inadequate assessment of a vendor bid and backed up by poor monitoring systems not only results in unanticipated higher costs, it can create major problems for client organisations**". The contract is the fundamental building block for a measurement system.	Willcocks, Lacity and Fitzgerald (1995)
	Performance ambiguity can lead to service debasement.	Aubert (1998; 1999)
	"Outsourcing success showed a significant positive relationship with **customer obligation(s) for clear specification.**..." This is defined as "**understand and articulate explicitly and comprehensively the requirements** for the services covered by the outsourcing project."	Koh et al. (2004)
	"The contract is the only mechanism that establishes a balance of power in the outsourcing relationship". By a **tight contract**, the client can ensure that outsourcing expectations are realised. The following lessons were drawn on how clients should negotiate contracts in order to achieve a balance of power: discard the vendor's standard contract, **do not sign incomplete contracts**, hire outsourcing experts, measure everything during the baseline period, **develop service level measures, develop service level reports, specify escalation procedures, include cash penalties for non-performance, determine growth rates, adjust charges to changes in business**, **select your account manager, include a termination clause, watch out for "change of character" clauses**, take care of your people.	Lacity and Hirschheim (1993)
	Critical areas to get right are contracts and service level agreements. It is seen as important to achieve clarity	Willcocks and Fitzgerald (1994)

	and clear expectations before the contract is signed; especially service requirements need to be defined clearly and comprehensively and service levels should be made contractually binding. A lack of a clear, detailed contract and poorly defined service requirements were identified as major reasons for outsourcing failure. Make more time available to define more closely the requirements specification and involve key staff in the process. **Tight contract terms with full and accurately defined service levels are considered as very important** (the need to spend time on the contract details; detailed contracts, the need to ensure the vendor has agreed contractual requirements before the contract is awarded; and the need for more detailed contracts). Put **detailed escalation procedures with financial penalties for non-performance** into the contract**.** **Build flexibility into the contract for changing business and IT requirements**.	
	To prevent the client from service debasement through ITO, it should **include penalty clauses for underperformance in the contract.**	Aubert (1999)
	The careful definition of all aspects of the outsourcing arrangement is seen as important for achieving success in IS outsourcing (e.g. **service levels, resolution of performance disputes, termination clause, growth rates, specified account manager on vendor side, baseline period measures, cash penalties for non-performance, service volume fluctuations, change of character clauses**). But not all recommended outsourcing clauses are required by every organisation. In general, "**tight contracts were an important ingredient for outsourcing success**". Underspecified or forgotten aspects in the contract will inevitably occur, thus a **re-negotiation option** should be built into the contract. For example, a technology price index (TPI) allows for renegotiating the contract when the client's computer processing workload changes by a specified percentage within a specified time period or if benchmark studies show data centre operating costs have dropped by a specified percentage.	Saunders et al. (1997)
	A lesson learned from ITO experiences was: "Short-term contracts with **renegotiation and cancellation clauses, and with comprehensive SLAs in place, including both quantitative and qualitative metrics to maintain flexibility and avoid vendor complacency**" are recommended.	Landis et al. (2005)
	To avoid a lock-in problem with the vendor, the client should include an **exit term** in the contract stating specific measures that define the cases in which the client can terminate the agreement (e.g. rendering inadequate services, negligence of respecting contract terms).	Aubert (1999)
	The more precisely the goods and services to perform and the interrelated costs can be specified at the time of contract conclusion, the higher are the chances of success. Contracts which do not reflect the requirements or an inflexible contract constitute a risk for the client as its actionability is dependent on IT support. Contract adaptation bears the risk of high compensation costs if adaptations are possible at all.	Gerigk (1997)
	"The case studies show that **outsourcing is advisable only in situations where the... requirements for services can be specified in advance and measured afterwards**..."	De Looff (1995)
	A **factor leading to successful ITO arrangements** is "**the vital use of SLAs and the principles SLAs are de-**	Cullen and Willcocks (2003)

	signed to achieve (clear service definitions, KPIs and performance measurement, etc.)"	
	A lesson learned from ITO experiences was: "**Establishing very specific and measurable SLAs is crucial for evaluating performance.**"	DiamondCluster (2005)
	A reason for why **ITO contracts only partially met expectations** is **due to "poorly defined metrics and measures for gauging benefits and success**".	DiamondCluster (2005)
	A practice differentiating successful sourcing decisions from failures was: **"clearly define IT outsourcing expectations and mitigating risk in a contract"** and **keep "the arrangements flexible over realistic time-scales**."	Lacity and Willcocks (2001)
	"…**consider trying to figure out how a successful project should be billed from start to finish**. How do you pay for projects that are changed in midstream or cancelled? How do you ensure the bank receives full value from the technology alliance? The solution we arrived at was based on function point analysis."	Huber (1993)
	"**Detailed contracts** achieved expected cost savings with a higher relative frequency than other types of fee-for-service contracts." The authors distinguish between standard, detailed, loose and mixed fee-for-service contracts; other types of contracts like strategic alliance/partnership or buy-in contract were not analysed in detail.	Lacity and Willcocks (1998)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in service quality, additional costs for the client ("winners curse"). To avoid a "winner's curse" one learning point was: • "Fixed price contracts will create inflexibilities, possibly disadvantageous to both parties...**Consider flexible-pricing options, including cost plus, market pricing, fixed fee adjusted by volume fluctuations, and benefit sharing**. Track supplier costs via "open book" accounting. **Allow for biannual assessment of pricing adjustments**." • "Check market prices regularly and **build price recalculations into the contract".**	Kern (2002)
	A **factor influencing ITO failure is an "inadequate cost management, particularly when there is little flexibility within the arrangement** with regard to scope."	Cullen and Willcocks (2003)
	Guaranteed price rates by the vendor connected with a tolerable error margin (e.g. 10%) can help to avoid cost escalation. This demands an ex ante agreement on the evaluation method to determine this price and relies on e.g. a detailed inventory of components, languages, platforms, size, complexity, testing environments, interconnectedness with other systems.	Aubert (1999)
	For the attainment of the expected business advantages from ITO, customers must be able to manage four continual processes: 1. "Assess the in-house IT portfolio to determine which activities are best outsourced". 2. "Evaluate market options for the best sourcing models and best suppliers to achieve customer objectives" 3. "Craft contracts to align customer and supplier expectations and incentives" 4. "Continually manage supplier relationships". Two lessons were drawn most frequently associated with ITO success for crafting the ITO contract:	Lacity and Willcocks (2009d)

	1. "Detailed contracts, including responsibilities of both parties and mechanisms of change." **Detailed contracts achieved ITO success with a greater relative frequency than other types of contracts** (standard, loose, mixed). **Mechanisms of change can be planned contract realignment points for adaptation, contingency prices for fluctuation in volume of demand, negotiated price and service level improvements over time, external benchmarking of best-of-breed suppliers to reset prices and service levels.** 2. "Keep contracts short enough to retain relevance and control, but long enough for suppliers to generate a profit margin". **Shorter term contracts have a higher relative frequency of success than long-term contracts.**	
	Reasons for backsourcing decisions were a poorly negotiated contract resulting in rising costs and dropping service level and excess charges.	Hirschheim and Lacity (2000)
	A lesson learned from experiences with ITO was: "**structure your vendor relationships as win/win propositions**"	DiamondCluster (2005)
	Achieving success in IS outsourcing is seen to be dependent on **establishing partnerships via profit sharing**. "Even if the outsourced IS activities are perceived as a commodity, profit sharing with the vendor can create a win-win situation. **Revenues from applications, increased efficiencies, and reduced customer costs can benefit both parties in a profit-sharing partnership**".	Saunders et al. (1997)
Contract structure	To avoid a lock-in problem with the vendor, the client can protect itself **by sequential contracting in terms of spitting the work to be done per system in constituent contract addenda with specific specifications and pricing**. Thus the contract length is tied to verifiable vendor performance and the possibility to walk out of certain contract parts is still left open.	Aubert (1999)
Contract review	The obtaining of expert advice is seen as a success factor for IS outsourcing. "**Due to the complex nature of outsourcing issues, it may be worth the additional cost to hire external technical experts to help measure baseline services and performance levels as well as legal experts to write the outsourcing contract and negotiate with the vendor**".	Saunders et al. (1997)
	"The contract is the only mechanism that establishes a balance of power in the outsourcing relationship". By a tight contract, the client can ensure that outsourcing expectations are realised". Amongst other things **it is important to hire outsourcing experts**. Two types of experts are recommended: 1. A **technical expert** during the measurement of the baseline services to create technical measures of the client's information resources and to convert these to the technical idiosyncrasies of the vendor's environment 2. A **legal expert** to ensure a legally adequate contract.	Lacity and Hirschheim (1993)
	"Don't go it alone. Outsourcing IT means more than selecting a vendor. **Organisations need considerable analysis and help, frequently from experienced consultants**; to be sure they choose the right partner and negotiate an agreement that will work well over the long term."	Huber (1993)
	"**Hire help" to keep abreast of emerging sourcing practices**. IT outsourcing consultants, IT outsourcing legal firms or interest groups can provide the customer with experiences other companies have already had with ITO, e.g. content of the contract, post-contract management practices like benchmarking.	Lacity and Willcocks (2009d)
Due diligence	A lesson learned from ITO experiences was: "**Due diligence on providers is essential if you want to avoid surprises**".	DiamondCluster (2005)

	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in service quality, additional costs for the client ("winners curse"). To avoid a "winner's curse" one learning point was: "**Undertake a rigorous due-diligence process before the contract is actually finalised**."	Kern (2002)
Stakeholder Management		
Stakeholder involvement	A lesson learned from ITO experiences was: "internal resistance to outsourcing can be managed but you have to foster **proactive and candid communications** to succeed".	DiamondCluster (2005)
High-level-support for ITO	A **lack of Board commitment was identified as an outsourcing failure factor.**	Willcocks and Fitzgerald (1994)
	"Outsourcing success showed a significant positive relationship with customer obligation(s) for... project ownership". This is defined as "e**nsure that senior management provides strong leadership, support, and commitment toward the project**."	Koh et al. (2004)
	"…information generated in this survey indicates the importance of factors such as …**support of high level management for outsourcing if it is to be successful**."	Collins and Millen (1995)
	For the attainment of the expected business advantages from ITO, customers must be able to manage four continual processes: 5. "Assess the in-house IT portfolio to determine which activities are best outsourced". 6. "Evaluate market options for the best sourcing models and best suppliers to achieve customer objectives". 7. "Craft contracts to align customer and supplier expectations and incentives". 8. "Continually manage supplier relationships". Seven lessons were drawn most frequently associated with ITO success for the evaluation of market options. Regarding the sourcing decision this was to **involve senior management and IT management in sourcing decisions as joint decisions had a higher relative frequency of success than senior executives acting alone, because this decision requires political power for implementation and technical skills to develop request for proposals, evaluate bids, and negotiate and manage the ITO contract.**	Lacity and Willcocks (2009d)
	"**Senior executives and IT managers who made decisions together achieved expected cost savings with a higher relative frequency** than when either stakeholder group acted alone".	Lacity and Willcocks (1998)
	"The banks "employee protection plan" failed to cover one employee (CIO),..., caused the most awkward and painful incident of the whole outsourcing process. I didn´t see that the **bank's chief information officer**…would face a painful **conflict of interest as potential vendors approached him to try to win support for their proposals**".	Huber (1993)
Client Staff	One main problem for the achievement of satisfaction with ITO results was the **acceptance of the vendor in the client company**.	Nagengast (1997)
	To avoid a lock-in problem with the vendor, the client should ensure that their **own employees participate in each**	Aubert (1999)

	stage of the ITO project.	
	"Members of the technical council were the **top technical people** drawn from all the bank's businesses... Unlike senior managers, they were by and large doubting Thomases. But a handful of factors nudged them toward managements' positions": retention of technically literate business people on staff to manage the relationship between bank and vendor, **an open-minded technical council chairman (not CIO)** and detailed instructions about their job: break down IT into separate elements, examine the risks and advantages for each and give recommendations, a vote against ITO not acceptable. Evaluation of tasks on employee level supported the overcoming of resistance.	Huber (1993)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in service quality, additional costs for the client ("winners curse"). To avoid a "winner's curse" one learning point was: "Both the supplier and the client should ensure that **those operationalising the contract are influential in the vendor selection and bidding process**".	Kern (2002)
	A lack of **business customer involvement** and a low in-house morale and staff resistance were identified as outsourcing failure factors.	Willcocks and Fitzgerald (1994)
	"Getting the business constructively engaged in IS/IT issues" was described as part of nine core IS capabilities which "are required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". This involves "**developing users' understanding of IT's potential, helping users and IT specialists work together, and ensuring users' ownership and satisfaction**". Most important for relationship building is the creation of mutual confidence, harmony of purpose, and successful communication. The main task of the so-called relationship builder is to bring technical and business people into a constructive dialogue.	Feeny and Willcocks (1998)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in service quality, additional costs for the client ("winners curse"). To avoid a "winner's curse" one learning point was: "Employ early **end-user** expectation management on the client side, especially during the transition period".	Kern (2002)
Client Staff which need to be outsourced to the vendor	An **appropriate communication with staff before and during ITO** was identified as a success factor.	Willcocks and Fitzgerald (1994)
	"**Open, honest, credible communication** is important, **but to preserve staff morale and productivity, it pays to keep preliminary testing, feasibility studies, and vendor screening quiet** until a plan for outsourcing is relatively advanced."	Huber (1993)
	A **sensitive treatment of staff** was described as a lesson learned from ITO experiences (e.g. involvement of in-house staff in the decision, better guarantees for transferred staff, better communication).	Willcocks and Fitzgerald (1994)
	"The contract is the only mechanism that establishes a balance of power in the outsourcing relationship". By a tight contract, the client can ensure that outsourcing expectations are realised". Amongst other things it is important to **take care of your people. Employees affected by the ITO should be treated fairly. In particular, they should**	Lacity and Hirschheim (1993)

	be informed soon about the final decision and helped to ensure positions if desired.	
	The following lesson was drawn from an experience of fully outsourcing IT by a bank: "While we did a good job of corrective communication, **we should have given the employees who were not directly involved in the decision a clearly defined plan that incorporated the realistic assessment of prospects, decision points and schedules, and the range of options for employees**".	Huber (1993)
	By pledging the interests of IT workers, Continental kept theses people on board: "…**ensure that several of its long-time technical employees joined the outsourcing vendor because they were the only people who knew how Continental's systems actually worked**. Like most systems that have developed over time, Continental's was not well documented. Until the outsourced system is replaced, the employees who carry the documentation in their heads are a critical resource."	Huber (1993)
Functional departments	"As firms consider outsourcing, and proceed in the evaluation of vendors, they should do so with the **active participation of their colleagues in other functional areas, particularly Human Resource Management**. That participation should improve the quality of the evaluation and also facilitate the smooth transition process if the vendors are employed subsequently".	Collins and Millen (1995)
Public	At publicly listed companies, the **public announcement of ITO created value for firms in terms of positive stock market returns**.	Koh et al. (2007), McLellan (1993), Loh and Venkatraman (1992)
Clear roles and responsibilities	**Ill-defined roles and responsibilities** were identified as an outsourcing failure factor.	Willcocks and Fitzgerald (1994)
	A lesson learned from the experience of fully outsourcing IT in a bank was: "**Create ways to ensure technology integration and "ownership" at the business unit level**. Managers must understand that once IT is outsourced, internal buffers will no longer insulate them from technology decisions. These decisions will be their responsibility, like another business decision".	Huber (1993)
	"Outsourcing success showed a significant positive relationship with supplier obligations for clear authority structures..." This is defined as "**delineate the decision making rights and reporting structures in the project**, in terms of the roles and responsibilities off all parties involved".	Koh et al. (2004)
	Role integrity was found to have a negative influence on the success of IS outsourcing. Role integrity was defined as "the extent to which parties maintain highly complex and multi-dimensional roles to deal with the complexity of IS. This can create unattainably high expectations resulting in a lower level of satisfaction with ITO."	Kim and Chung (2003)
	"There needs to be …a **strong project leader**".	Willcocks and Fitzgerald (1994)
	"The contract is the only mechanism that establishes a balance of power in the outsourcing relationship". By a tight contract, the client can ensure that outsourcing expectations are realised". **Amongst other things it is important to select the account manager at the vendor side and name it in the contract**. This can facilitate a good understanding between the parties and prevent vendor opportunism and legal loopholes.	Lacity and Hirschheim (1993)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in	Kern (2002)

	service quality, additional costs for the client ("winners curse"). "**An active relationship management by competent relationship manager**s can facilitate a successful turnaround of such a venture"	
	"Getting the business constructively engaged in IS/IT issues" was described as part of nine core IS capabilities which "are required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". This involves "developing users' understanding of IT's potential, helping users and IT specialists work together, and ensuring users' ownership and satisfaction". **Most important for relationship building is the creation of mutual confidence, harmony of purpose, and successful communication. The main task of the so-called relationship builder is to bring technical and business people into a constructive dialogue.**	Feeny and Willcocks (1998)
	"Contract facilitation in terms of ensuring the success of existing contracts for IS/IT services" was described as part of nine core IS capabilities which "are required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". Within a typical environment where users receive services from multiple internal and external suppliers, this function provides a "**single point of contact through which the user can ensure that problems and conflicts are resolved fairly and promptly within a framework of agreements and relationships**".	Feeny and Willcocks (1998)
Control		
Constant monitoring and control of the vendor	A lesson learned from ITO experiences was: "**well-defined governance structures and proactive management and communication are the keys to success**".	DiamondCluster (2005)
	A lesson learned from ITO experiences was: "a **realistically planning governance system involving the vendors, and budgeting resources and time for deal management to minimise operational complexity**" is recommended.	Landis et al. (2005)
	"…a **higher level of** … **benefits management is coupled with increased IT outsourcing success** in terms of benefits achievements".	Van Lier and Dohmen (2007)
	Regular performance measurement by adequate measures and regular milestones are described as lessons learned from ITO experiences.	Willcocks and Fitzgerald (1994)
	Active management of the vendor was described as lesson learned from ITO experiences. • Retain control of in-house and the staff to fulfil this function. • Train the staff to negotiate and manage the contract on a day-to-day basis • Clearly define in-house management responsibility • Establish the management team before contract conclusion • The agreed contract and budget provide the basis for control • Constant management and evaluation as well as regular measurement and reviews supported by effective management information • Provide a central point of contact	Willcocks and Fitzgerald (1994)

	Poor or intermittent vendor management, a **lack of detailed measurements and the failure to monitor vendor performance** adequately were identified as **major reasons for outsourcing failure**.	
	The **higher ability to measure the success of data processing positively influences ITO efficiency** attributes (cost reduction, better service mentality and motivation of employees).	Heinzl (1993)
	"The case studies show that **outsourcing is advisable only in situations where the... requirements for services can be specified in advance and measured afterwards**..."	De Looff (1995)
	Measurement difficulty has a negative effect both in markets and hierarchies. Market performance was strongly damaged in terms of costs, but was insignificantly damaged in terms of quality and responsiveness by measurement difficulty.	Poppo and Zenger (1998)
	Measurement problems can result in disputes and litigations.	Aubert (1998; 1999)
	"The **ability to control IS resources is crucial** when they prove to be a critical component of client's operations. To prevent significant loss of control, companies should not outsource critical success factors that are necessary... for the success of the company. ...**When a company loses control over an outsourced activity, it reduces its ability to act when things are going poorly**".	Veltri et al. (2008)
	A reason why ITO contracts only partially met expectations is "**buyer deficiencies in managing their providers**".	DiamondCluster (2005)
	One **main problem** for the achievement of satisfaction with ITO results was **control and coordination of the vendor.**	Nagengast (1997)
	Monitoring of the vendor was found to be significantly positively related to predicting the success of IS outsourcing. "Firms need to put more effort into monitoring activities in such areas as **developing performance standards, measuring results, and interpreting them**."	Kim and Chung (2003)
	A **reason** for the dramatic rise in **abnormal contract terminations is due to "buyers still underestimating the complexity and overhead associated with successfully managing outsourcing relationships**. Buyers need to dedicate more time and energy to monitoring and measuring performance in order to **identify and remedy issues before they escalate and jeopardise the entire relationship**."	DiamondCluster (2005)
	A factor leading to successful ITO arrangements is "**the organisation must control the arrangement and processes** and ensure it stays competitive."	Cullen and Willcocks (2003)
	For the attainment of the expected business advantages from ITO, customers must be able to manage four continual processes: 1. "Assess the in-house IT portfolio to determine which activities are best outsourced". 2. "Evaluate market options for the best sourcing models and best suppliers to achieve customer objectives". 3. "Craft contracts to align customer and supplier expectations and incentives". 4. "Continually manage supplier relationships".	Lacity and Willcocks (2009d)

	Two lessons were drawn most frequently associated with ITO success for the management of external suppliers: 1. "Put core customer capabilities in place to protect the customer interests as well as to foster supplier success" These include **informed buying, contract monitoring, and contract facilitation and supplier development capability**. 2. "Embrace the **dynamics of the relationship**".	
	"Contract facilitation in terms of ensuring the success of existing contracts for IS/IT services" was described as part of nine core IS capabilities which "are required both to underpin the pursuit of high-value-added applications of IT and to capitalise on the external market's ability to deliver cost-effective IT services". Contract monitoring consists of "**holding suppliers to account on both existing service contracts and the developing performance standards of the services market**."	Feeny and Willcocks (1998)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in service quality, additional costs for the client ("winners curse"). To avoid a "winner's curse" two learning point were: • "**Check market prices regularly** and build price recalculations into the contract" • "**Maintain tight control initially, but work flexibly where contract and service metrics are outrunning market prices**"	Kern (2002)
	"...**diligent monitoring of the BPO arrangement can improve the cost efficiency**. **Tight control mechanisms will force the service provider to meet the targets and service level agreements** agreed upon."	Fritsch and Wahrenburg (2008)
	"...companies need to **realistically assess the outsourcing arrangement by comparing estimated internal IS costs with the cost of the existing outsourcing arrangement (as negotiated) on an ongoing basis**. ... When original expectations of economic efficiency do not materialise from the outsourcing contracts, the client companies turn to backsourcing for cost savings". The **calculation of the financial expenses for outsourcing must not only consider the direct expenses for outsourcing but also the costs for continuously monitoring the provider** to curb potential opportunism.	Veltri et al. (2008)
	No cost control and **a lack of clarity in the basis for charging** were identified **as outsourcing failure factors.**	Willcocks and Fitzgerald (1994)
	A **reason for** the **abnormal termination** of ITO contracts was "**cost savings not achieved**"	DiamondCluster (2005)
	A reported **reason for backsourcing** was **unrealised cost reductions**.	Bertschek (2006)
	"A DiamondCluster International Survey shows that 78 percent of responding executives had to **terminate agreements early due to** poor service, a change in strategic direction, or **costs**."	Landis et al. (2005)
	"Outsourcing success showed a significant positive relationship with customer obligation(s) for... prompt payment". This is defined as "**pay suppliers on time and do not withhold payments unreasonably**".	Koh et al. (2004)

	To avoid a lock-in problem with the vendor, **payments should be made conditional on approval of the work by the client** as this reduces the probability of opportunistic behaviour by the vendor.	Aubert (1999)
	"Outsourcing success showed a significant positive relationship with customer obligation(s) for... close project monitoring". This is defined as "**be actively involved in overseeing the project progress by attending project meetings and discussions regularly**".	Koh et al. (2004)
Regular management reporting	**Regular measurement and reviews supported by effective management information are important for outsourcing success** and accordingly inefficient reporting was identified as an outsourcing failure factor.	Willcocks and Fitzgerald (1994)
Risk assessment and risk management	**Risk assessment and risk management** are **important contributors to** the **success of** an **ITO** venture.	Aubert (1998; 1999)
	...**success** seems **dependent on taking careful action to minimise the additional risks** to which the conduct of the contract then becomes exposed".	Willcocks, Fitzgerald and Feeny (1995), Willcocks and Fitzgerald (1993)
	A practice differentiating successful sourcing decisions from failures was: **"clearly define IT outsourcing expectations and mitigating risk in a contract"** and "**keep the arrangements flexible over realistic time-scales**."	Lacity and Willcocks (2001)
Co-work		
Ongoing and effective communication	A lesson learned for providers from ITO experiences was: "You´ve got to be able to work closely and **communicate clearly with buyer management to be successful**".	DiamondCluster (2005)
	A lesson learned from ITO experiences was: "**Establishing a mutual understanding** about governance structures, SLAs and performance expectations is critical".	DiamondCluster (2005)
	A factor leading to a successful ITO arrangement is "**there must be ongoing and effective communication between the parties**".	Cullen and Willcocks (2003)
Common terminology	Without a **common terminology and a common basis of understanding**, an outsourcing relationship is likely to refer back to the contract, which results in a cost intensive and cumbersome situation.	Gerigk (1997)
Well-fitting cultures	An **important factor is to make sure that the vendor's culture fits with your organisation,** and accordingly a poor culture fit between vendor and client was identified as a major reason for outsourcing failure.	Willcocks and Fitzgerald (1994)
	A lesson learned from ITO experiences was: "**Cultural differences need to be acknowledged and managed**".	DiamondCluster (2005)
Adequate project management	An **over-aggressive timetable, with deadlines compromising quality,** was identified as **a major reason for outsourcing failure.**	Willcocks and Fitzgerald (1994)
Knowledge sharing	"**Outsourcing success showed a significant positive relationship with** supplier obligation(s) for... **effective knowledge transfer**". This is defined as "educate customer in terms of necessary skills, knowledge, and expertise associated with using the outsourced system or service." Customer obligations for knowledge sharing showed no significant relationship to outsourcing success. That could be explained by an already existing and sufficient supplier knowledge to carry out the project (e.g. in the case of IT standards like transaction processing systems) or suppliers gain their expertise from other sources (e.g. from previ-	Koh et al. (2004)

	ous contracts).	
	A **critical success factor for IT outsourcing implementation is knowledge transferring and sharing**. Vendors can transfer their special IT knowledge to clients, helping clients to improve their IT function, and clients can transfer their business knowledge to vendors, improving the vendor's capability of understanding and implementing. The type of relationship and the quality of the partnership influences knowledge transferring and sharing.	Pei et al. (2007)
	"...**knowledge sharing is one of the major predictors for outsourcing success**".	Lee (2001)
Relationship		
Active and adequate relationship building and management	An **inadequate liaison between vendor, management and users** was identified as a major **reason for outsourcing failure.** A **lack of vendor-client trust** was identified as **a major reason for outsourcing failure**, **as it causes relationships to break down.**	Willcocks and Fitzgerald (1994)
	A lesson learned from ITO experiences was: "**buyers and providers need to be long-term partners**".	DiamondCluster (2005)
	"Managers realise **higher performance** when they **complement their use of customised contracts with supportive relational norms**. They also realise higher performance when investing in just relational norms."	Poppo and Lacity (2009)
	"**Information technology (IT) outsourcing ventures have been termed successful or less successful** in achieving their expected outsourcing objectives **according to the operational effectiveness of the ensuing client-supplier relationship**".	Kern and Willcocks (2009)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in service quality, additional costs for the client ("winners curse"). To avoid a "winner's curse" one learning point was: "**Ensure that the relationship dimension is managed to advantage. A contract is not a substitute for effective relationship management**".	Kern (2002)
	A **critical success factor for IT outsourcing implementation is building an inter-organisational relationship**. The ITO contract defines the parameters of the relationship. **Generating a successful relationship requires time, knowledge and resources from both sides of the ITO contract**.	Pei et al. (2007)
	In a study where behavioural dimensions of customer satisfaction with Vendor-Provided Information Services were investigated, it appeared that **behaviours that are most strongly related to satisfaction are not system-oriented but deal with the relationship between the vendor and the client**. "The findings should suggest to practitioners (vendors) the relative importance of social versus technical factors in creating satisfactory relationships with their customers. Recruitment, training and evaluation of staff members should be based as much on their ability to establish positive and cooperative relationships with customers as on their technical excellence."	Heckman and King (1994)
	A factor leading to a successful ITO arrangement is "**the relationship must be strong, with a team approach supported by a good understanding between the parties**".	Cullen and Willcocks (2003)

	"...knowledge sharing is one of the major predictors for outsourcing success... **partnership quality is a significant intervening factor** between knowledge sharing and outsourcing success."	Lee (2001)
	"Outsourcing success showed a significant positive relationship with supplier obligation(s) for... building effective inter-organisational teams". This is defined as "**invest time and effort to foster a good working relationship among the team of customer and supplier staff working on the project**".	Koh et al. (2004)
	Partnership, measured by solidarity and continuity expectation**, was significantly positively related to predicting the success of IS outsourcing**. The extent to which a relationship between client and vendor can be created and sustained (solidarity) is important for exhibiting a partnership mentality between parties. If continuity is expected, faithfulness is enhanced and opportunism can be punished.	Kim and Chung (2003)
	Elements of partnership like trust, communication, satisfaction and cooperation **are important determinants of outsourcing success**. In addition, strategic alliances through partnership can result in consistent service quality. A good relationship is also important for supporting flexibility in dynamic and technologically unpredictable environments.	Grover et al. (1996)
	"The result shows that **partnership quality and outsourcing success have a strong relationship**. It indicates that fostering a cooperative relationship based on trust, business understanding, benefit and risk share, and commitment is critical to reap the greatest benefits from outsourcing. Partnership quality was found to be positively influenced by factors such as participation, communication, information sharing, and top management support."	Lee and Kim (1999)
	The **nature of partnerships with service providers is an implementation factor determining the degree of outsourcing success**. Hereby a productive team communication, reliable team trust and a cooperative relationship is important.	Cheon Myun Jong (1992)
	"**Decide early how you will manage the relationship** with your outsourcer. **Define the organisation and roles for the partnership early in the process**, not after the agreement has already been reached".	Huber (1993)
	If a vendor underbids the real value of the ITO contract because its bidding aim is to win the deal, this can result in trade-offs that disadvantage the client because the primary aim of the vendor is to recover costs by e.g. decreases in service quality, additional costs for the client ("winner's curse"). To avoid a "winner's curse" one learning point was: "**Identify the relationship implied by the contract and how it can support the service and value-added that is expected from a supplier."** The author distinguishes between four contract types with certain characteristics: • "Business service: underpinning business requirements, supporting internal business improvements, pay-per-supply and on business results • Business alliance: profit generation, competitive edge/strategic contribution, shared risk/reward • Technical supply: cost/service trade-off, cost minimisation • Technology partnering: world-class capability, innovation/development, technology risk sharing Many companies want to achieve cost efficiency but thus cannot expect the value-added that can only be obtained from a business service relationship or the technical innovation that can only be obtained from technology partner-	Kern (2002)

	ing. Even technical supply arrangements need relationship management.	

Table 48: Success factors for ITO derived from empirical literature

APPENDIX B

Interview field manual multiple case study

IT OUTSOURCING IN BANKING INDUSTRY – ITO MODEL

Interview field manual

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1 Identification of the type of long-running ITO contracts

Please specify the type of IT Outsourcing (ITO) contracts of your company already running approximately 5 years in table 1. Each ITO contract will be typified on the basis of different criteria (please refer to column 1). The possible values of the typification criteria can be found in column 2.

Typification criteria:	Possible Values:	**Contract 1:**	**Contract 2:**	**Contract 3:**
IT subject	• Infrastructure • Application • Business process • Knowledge process	Application	Application	Application
Contract duration	Years			
Years into contract	Years			
Client/Vendor Combination	• 1 client / 1 vendor • Multiple clients / 1 vendor • 1 client / Multiple vendors • Multiple clients / Multiple vendors			
Financial Dependency	• Internal/captive • Joint-venture • External			
Type of vendor	• Company of the same branch • Generic outsourcer • Hardware vendor • Evolved bureau • Niche service player • Systems house • IS Consultancy			
Delivery model	• Onsite • Onshore • Nearshore • Offshore			

Table 1: Type of ITO contracts already running approximately 5 years

1.1 Changed the Type of ITO over time? Yes ☐ No ☐

If yes, please explain the changes and the drivers of change.

2 ITO contract 1

First, please explain freely your outsourcing story (background, outcome, success/failure factors etc.) from your point of view.

The following semi-structured questions will be asked to get specific information about the ITO arrangement if absent from the reported ITO story.

2.1 Background

Please explain the background or trigger of the ITO decision.

2.2 Outcome

Please indicate in table 2 the outcome of the ITO contract qualitatively by comparison of the objectives set for ITO versus the objectives achievement based on a 7-point-Likert scale (from 1: totally disagree to 7: totally agree). Please mark appropriate answers with a cross.

ITO objective(s)	Our objective was to*2							Objective reached*2						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Strategic														
Focus on core competencies														
Improve the capability of IT to support the needs of business operations														
Improve the management of technology and human resources (e.g. exoneration of resources for other important projects, better ways to manage/work)														
Scale economics (synergies, streamlining of services, diversification benefits)														
Increase the number of IT based innovations														
Reduce the number of IT staff														
Generate a momentum for change/flexibility (e.g. potential for participating as a vendor in the ITO market)														
Other:														
Economic														
Reduce IT expenditure														
Improve control over IT expenditure														
Improve financial freedom and flexibility (capital release, flexibility in budgeting and investments)														
Other:														
Technological														
Ensure the availability of necessary or new technology														
Ensure the availability of necessary or new IT staff or skills														
Standardised IT environment (hardware, software, processes)														
A well functioning IT environment														
Other:														
Social														
Improve the quality of service (safe, reliable service corresponding to needs, capable of adapting to individual requirements)														
Improve the availability of services (e.g. 7d/24h)														
Improve user satisfaction														
Other:														
Overall														
We are satisfied with our overall benefits from ITO														

*1: totally disagree, 7: totally agree

Table 2: ITO outcome

2.2.1 Did the ITO objectives and outcomes change during the lifetime of the ITO contract? Yes ☐ No ☐

If yes, please explain the changes and the drivers of change.

2.2.2 What is the basis for your rating of the ITO outcome?

2.2.3 How is ITO outcome measured in your company?

2.3 Factors influencing ITO success

Please indicate which of the following success factors are responsible for the achievement of the ITO objectives of ITO contract 1. In addition, please determine their weighting (mandatory, partly necessary, nice to have) and their time of relevancy within the ITO process stages (preparation, selection, contract, transition, execution and post-deal). Please explain your answer based on experiences with ITO contract 1. **Please add and explain any additional success factors which exist.**

2.3.1 Success factors and their weighting and relevance in the ITO process

	Success factor	**Relevance** *(please mark with a cross)*			**Weighting** *(please mark with a cross)*			**Time of relevance in ITO process stages** *(please mark with a cross)*						**Explanation based on experiences with ITO contract 1** *(please explain)*
		Yes	**No**	**Not assessable**	**Mandatory**	**Partly necessary**	**Nice to have**	**Preparation**	**Selection**	**Contract**	**Transition**	**Execution**	**Post-deal**	
1	**Environment**													
1.1	Stable external environment													
	• Economic climate													
	• Competition													
	• Product obsolescence													
	• Technology changes													
1.2	Vendor market instead of vendor monopoly to avoid dependency from one vendor													
1.3	Regulatory compliance													
1.4	Stable internal environment													
	• Strategic direction													
	• M&A													
	• Management													
	• Product portfolio													
1.5	Corporate culture													
1.6	Corporate terms													

	Success factor	Relevance *(please mark with a cross)*			Weighting *(please mark with a cross)*			Time of relevance in ITO process stages *(please mark with a cross)*						Explanation based on experiences with ITO contract 1 *(please explain)*
		Yes	No	Not assessable	Mandatory	Partly necessary	Nice to have	Preparation	Selection	Contract	Transition	Execution	Post-deal	
2	**Strategy**													
2.1	Clear and detailed ITO strategy including a statement on "what IT to source internally or externally and why currently and in the future" and a structured and detailed corporate standard process for ITO.													
2.2	Two-way "business – IT – alignment": IT(O) objectives must comply with business objectives and IT(O) capability can be used as an innovative source in terms of which business improvements technology can enable.													
2.3	Realistic, clear and detailed description of ITO objectives. Avoidance of the conflict of objectives in case of multiple ITO objectives.													
2.4	Suitable choice of ITO options:													
2,4,1	• IT subject:													
	• Don´t outsource: IT management, vendor management, IT functions highly interconnected, problematic, not well understood or which are based on a fast changing technology, systems integration, support of critical systems, ability to discuss architecture evolution with vendors.													
2.4.2	• Client/vendor combination:													
	• Use multiple vendors													
	• Form joint projects with other ITO clients													
2.4.3	• Degree / Procedure													
	• Outsource selectively rather than totally													

	Success factor	Relevance *(please mark with a cross)*			Weighting *(please mark with a cross)*			Time of relevance in ITO process stages *(please mark with a cross)*						Explanation based on experiences with ITO contract 1 *(please explain)*
		Yes	No	Not assessable	Mandatory	Partly necessary	Nice to have	Preparation	Selection	Contract	Transition	Execution	Post-deal	
	• Incremental instead of big-bang													
2.4.4	• Time frame													
	• Make shorter term instead of long-term Contracts													
2.5	Develop a strategic view on IT functions (commodity versus core)													
2.6	ITO as a life-cycle: keep the ability to backsource or to switch to other vendors, but rather renegotiate and restructure existing contracts.													
3	**Client capability**													
3.1	Business knowledge about the business supported by IT													
3.2	IT knowledge (in particular about the IT function to be outsourced)													
3.3	ITO knowledge													
3.4	Interpersonal skills (relationship building, communication etc.)													
3.5	Organisational learning capability													
3.6	Flexibility to cope with changes of technology or business requirements													
3.7	Exploitation of the partnership‘s long-term potential													
3.8	Aceptance of the vendor													
3.9	Capability to implement company specific requirements which cannot be covered by vendors with internal IT departments													
3.10	Problem management in a multi-vendor environment													
4	**Vendor selection**													
4.1	Rigorous tendering process with invitation of inter-													

	Success factor	Relevance *(please mark with a cross)*			Weighting *(please mark with a cross)*			Time of relevance in ITO process stages *(please mark with a cross)*						Explanation based on experiences with ITO contract 1 *(please explain)*
		Yes	No	Not assessable	Mandatory	Partly necessary	Nice to have	Preparation	Selection	Contract	Transition	Execution	Post-deal	
	nal and external bids													
4.2	Detailed requirements specification in the RFP													
4.3	Securing that vendors gather sufficient operational information for the submission of a realistic bid													
4.4	Evaluation of bids thoroughly for ensuring vendor capability/capacity and an adequate price/performance ratio													
4.5	Ensure, that the vendor bid result in a reasonable vendor profit													
4.6	Full leverage of inhouse capabilities before ITO. In particular, investigation if vendor terms and conditions can be reached internally as well by considering service requirements, in-house costs, incoming ITO costs and the performance of in-house IT. ITO based on political reasons and not based on an objective make or buy evaluation will be avoided													
4.7	It will only be outsourced if an external bid is better than an internal bid can be and if advantages of scale can be realised													
4.8	Detailed measurement of service requirements in a defined baseline period before contract conclusion													
5	**Vendor capability**													
5.1	Business knowledge about the client's industry													
5.2	IT knowledge (in particular about the IT function to be outsourced)													
5.3	ITO knowledge													
5.4	Interpersonal skills (relationship building, communication etc.)													
5.5	Organisational learning capability													

	Success factor	Relevance *(please mark with a cross)*			Weighting *(please mark with a cross)*			Time of relevance in ITO process stages *(please mark with a cross)*						Explanation based on experiences with ITO contract 1 *(please explain)*
		Yes	No	Not assessable	Mandatory	Partly necessary	Nice to have	Preparation	Selection	Contract	Transition	Execution	Post-deal	
5.6	Professional staff management													
5.7	Flexibility with changing client and IT needs													
5.8	Exploitation of a partnership's long-term potential													
5.9	Reliable, professional job completion with minimum customer involvement													
5.10	Capability to attract customers													
5.11	Financial stability and a professional cost and financial management													
6	**Contract**													
6.1	Individual													
6.2	Design of a complete, clear and detailed contract before it is awarded to the vendor: • Measurable service requirements, measures and reports • Arrangements for the resolution of performance disputes • Financial penalties for non-performance • Improvement targets concerning costs and service levels • Flexibility terms in case of changing business and IT requirements (flexible pricing based on growth rates, volume fluctuations etc.) • Occasions for renegotiation (biannual assessment, benchmarking etc.) • Account manager on vendor side • Benefit sharing arrangements to generate a win/win situation (profit sharing clauses etc.) • Termination clause • Regulations and guarantees for transferred													

	Success factor	Relevance *(please mark with a cross)*			Weighting *(please mark with a cross)*			Time of relevance in ITO process stages *(please mark with a cross)*						Explanation based on experiences with ITO contract 1 *(please explain)*
		Yes	No	Not assessable	Mandatory	Partly necessary	Nice to have	Preparation	Selection	Contract	Transition	Execution	Post-deal	
	staff • Control rights for client and regulatory institutions													
6.3	Contract review by external experts (technical experts help to define adequate service level measures; legal experts help to get a complete, clear and detailed contract negotiated)													
6.4	Due diligence before contract conclusion													
6.5	Constituent contract amendments for different services													
6.6	Early contract renegotiations for a positive influence on vendor performance													
7	**Stakeholder management and structural organisation**													
7.1	Involve all stakeholders and align their interests to ensure support from all sides													
7.1.1	• Ensure high-level support for ITO from business and IT side													
	• Involvement of the high-level IT management in the vendor selection phase only if they are open minded against ITO													
	• Avoid the conflict of interest of the high-level IT management potentially caused by career opportunity offerings of vendors													
7.1.2	• Client's staff													
	• Retainment of staff able to control the vendor sufficiently and involvement already from the vendor selection phase													
	• Adequate instruction of the staff doing the make or buy evaluation. In particular making clear that a simple vote against													

	Success factor	Relevance *(please mark with a cross)*			Weighting *(please mark with a cross)*			Time of relevance in ITO process stages *(please mark with a cross)*						Explanation based on experiences with ITO contract 1 *(please explain)*
		Yes	No	Not assessable	Mandatory	Partly necessary	Nice to have	Preparation	Selection	Contract	Transition	Execution	Post-deal	
	ITO is not accepted (e.g. a recommendation for ITO should be given on the basis of the evaluation of risks and avantages)													
	• Consideration of the IT user's expectations for satisfaction													
	• Staff affected from ITO is given a realistic impression about upcoming decision points, schedules, the influence on their job and possible options. The therefore necessary make or buy and vendor evaluations are conducted beforehand.													
	• Securing that long-term employees join the vendor by negotiation of good job conditions at the vendor side													
7.1.3	• Functional departments (e.g. Human Resources, legal department)													
7.1.4	• Public (if applicable, e.g. to benefit from stock market reactions)													
7.2	Clearly delineated and defined roles and responsibilities (decision making rights, reporting etc.) for vendor management; avoidance of multidimensional roles													
7.2.1	• Client project manager													
7.2.2	• Vendor account manager													
7.2.3	• Relationship manager on client and vendor side													
7.2.4	• "Single point of contact" for IT users at the client side, if various internal and external vendors are used for the production of IT goods and services													
8	**Control**													

	Success factor	Relevance *(please mark with a cross)*			Weighting *(please mark with a cross)*			Time of relevance in ITO process stages *(please mark with a cross)*						Explanation based on experiences with ITO contract 1 *(please explain)*
		Yes	No	Not assessable	Mandatory	Partly necessary	Nice to have	Preparation	Selection	Contract	Transition	Execution	Post-deal	
8.1	Regular monitoring and control of vendor performance as agreed in ITO contract (SLA's, cost targets, performance development goals) based on a measurement system which allow to track tangible and intangible expectations over a long time-scale													
8.2	Non-performance results in cash penalties													
8.3	Origination of vendor payment on time if no reason for complaints exist													
8.4	Regular check of market standards concerning contract, processes, service metrics and price to ensure competitiveness. Early initiation of contract adaptations													
8.5	Regular management reporting of vendor performance													
8.6	Risk assessment and risk management													
9	**Co-work**													
9.1	Clear and effective communication with the vendor to support a common understanding about performance expectations and governance structures etc.													
9.2	Knowledge transferring and sharing													
9.3	Shared culture and a proactive management of cultural differences													
9.4	Common terms													
9.5	Adequate project management practises ensuring quality													
10	**Relationship**													
10.1	Relationship building and management dependent from the type of contract (strategic partnership versus buyer/seller relationship)													

2.3.2 If the ITO contract was cancelled or terminated, what were the main reasons and consequences?

2.4 Success factor interdependencies

Please indicate if the following success factor interdependencies existed in connection with ITO contract 1. Please explain your answer based on experiences with ITO contract 1. **Please add and explain any additional interdependencies which exist.**

No.	Success Factor	No.	Success Factor	Description of interdependency	Relevance *(please mark with a cross)*			Explanation based on experiences with ITO contract 1:
					Yes	No	Not assessable	
1	Environment	6 8 10	Contract Control Relationship	A stable internal and external business environment supports the ability to define contractually stable IT requirements for the lifetime of the ITO contract. ITO in unstable environments should be handled by a flexible long-term contract with a strategic partner. The national regulatory authorities monitoring banks define requirements for ITO which have to be met. A German bank conducting ITO for example must regularly monitor the outsourced IT functions according to the German Banking Act to ensure the orderliness of this business or service. The federal financial supervisory authorities must further on have the right to audit and the ability to monitor the bank under its jurisdiction. This requires regular data collections by the bank and the federal financial supervisory authorities at the vendor side. These rights must be grounded in the ITO contract. Furthermore, regulatory entities published principles how to mitigate ITO risks and how to comply with regulatory issues in this context.				
2	Strategy	6 9	Contract Co-work	The description and articulation of objectives bounded with ITO must be realistic, clear and detailed for all people involved at the client and vendor side.				
2	Strategy	6 10	Vertrag Relationship	Strategic and company specific IT functions and IT functions supporting the core business processes of a company or IT functions closely linked with that IT functions are only outsourced in connection with a detailed contract and the establishment of a strategic partnership.				
2	Strategy	2	Strategy	Basic parameters of an ITO contract must be harmonised with each other for an optimal support of ITO success. On this, the following recommendations				

No.	Success Factor	No.	Success Factor	Description of interdependency	Relevance *(please mark with a cross)*			Explanation based on experiences with ITO contract 1:
					Yes	**No**	**Not assessable**	
		6 10	Contract Relationship	are given in literature: • ITO objectives – ITO degree – contract duration – detailedness of contract: The achievement of reduction in costs is supported ideally by a combination of selective Outsourcing, a detailed service definition in the contract and medium-term contract terms. Strategical aims or innovations are achieved ideally by a combination of comprehensive outsourcing, a little detailed contract and a long-term partnership. • Stability of environment – detailedness of contract – Kind of relationship: a "buyer-seller" relationship is optimum if the achievement of efficiency increases or reduction in costs is the objective of outsourcing, a stable environment allowing a detailed contract definition exists, and if low company specific requirements are to be fulfilled. The development of a strategic partnership is promising in an unstable environment not allowing a stable definition of the service requirements in the contract, in case of high company specific requirements, or in a stable environment in order to boos company-wide changes.				
6	Contract	10	Relationship	A long-term partnership it is promoted, while customers and service providers can participate mutually in advantages from the contract (monetary participation of the partner in efficiency improvements, cost reductions etc.). This occasions the partner to support the achievement of advantages at the counterparty. In order to create a formal basis for this "profit sharing model", it will be fixed in the ITO contract. If the vendor do not benefit from the ITO contract, it probably takes every chance to charge additional costs or to reduce the quality of the delivered service which both negatively affect the relationship between client and vendor.				
6	Vendor selection	6 8	Contract Control	The necessary service level requirements, measures and reports as well as cost and development goals are identified very detailed during the vendor selection phase and fixed in the ITO contract. The contract is then the fundamental basis for a regular and detailed monitoring and measuring of vendor performance. Furthermore, the ITO contract inclues amongst other things control mechanisms to motivate the vendor acting according to the contract (e.g. cash penalties for under performance), to ensure competitiveness (e.g. renegotiation option in case of changing market standards) and to terminate the contract if needed (termination clause).				

No.	Success Factor	No.	Success Factor	Description of interdependency	Relevance *(please mark with a cross)*			Explanation based on experiences with ITO contract 1:
					Yes	**No**	**Not assessable**	
6 9 7	Contract Co-work Stakeholder management	10	Relationship	Elements of a partnership like trust, communication, cooperation, satisfaction, business understanding, benefit and risk share and commitment impact ITO success. The establishment of a partnership requires time, knowledge and dedicated resources with interpersonal skills on the client and vendor side already before contract conclusion. Furthermore, an incomplete and unclear contract requires ongoing discussions between client and vendor about what is fixed in the contract and what not. The right definition of the required service levels allows an early detection of critical vendor performance which helps to avoid escalation and negative consequences on the relationship.				

2.5 Documentation

If possible, please provide supporting evidence for your expressed viewpoints (ITO contract, ITO budgets, annual reports, efficiency assessments etc.)

3 General questions regarding the provision of IT goods and services

3.1 What are the challenges the IT department of your bank is faced with nowadays?

3.2 Do you think that ITO is a suitable strategic instrument to cope with these challenges?

APPENDIX C

Analysis and discussion of case study results

Appendix C – Analysis and discussion of case study results

Success Factor Category: Environment
Success Factor: Stable external environment (economic climate)
A stable external environment in terms of the economic climate influences ITO success. First, environmental changes can obviate the need or can change the desire for ITO in general. Second, environmental stability supports the ability to define stable IT requirements for the lifetime of the ITO contract and thus avoids costly contractual amendments if possible at all.

Summary case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	No	No	No	No	No	No	Yes	Yes	**No**
Weighting							Partly necessary	Partly necessary	
Process classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution							X	X	
⇨ Post-deal									
Comments									
Contract A:	Regardless of the economic situation, retail banking must provide the basic functionalities of the banking business do not change very often.								
Contract B:	The requirements for a core banking system are regardless of the economic situation.								
Contract C:	Requirements on customer ratings depend on the legislation (Basel II).								
Contract D:	The terms and conditions of the IT service provider can depend on the market situation (extent of alternative sources of income).								
Contract E:	The demands on the system (accountancy, staff, goods economy) do not depend on the economic situation.								
Contract G:	1st priority within the influencing factors of the external environment.								
Contract H:	If the economy in Serbia does not go well, the south eastern affiliated companies of the bank also feel it. The banks still had no system support for many functions (e.g. dunning process) which needed to be introduced as a start. External stability supports a successful outsourcing because of stable requirements, but nevertheless, it was possible to implement these necessary changes at additional costs.								

In cases A, B, C, D, E and F the system requirements do not depend on the economic situation, hence the success factor is not relevant in these cases. In case H the economic situation of the country (nearshore) was responsible for the fact that still for many business processes no system support existed. System support was built up successively together with the external vendor. According to the opinion of case H, a stable economic situation is desirable, because this supports a stable definition of the system requirements. Nevertheless, necessary system changes could be implemented externally at additional expense within the scope of case H. In case G the system requirements depend on the economic situation and the stability of the economic situation is judged as partly necessary.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
The requirements for the outsourced IT application do not always depend on the economic situation, which is why the success factor is not relevant in these cases. According to experience the economic situation is subject to constant change (expansion – boom – recession – depression) and, hence, can never be expected to be stable. If system requirements depend on the economic situation, like in cases G and H, the need for system changes exists. The partly necessary assessment of the success factor in these cases can be reasoned with the objective of the ITO. In both cases, costs should be lowered in the course of the ITO among other things. To achieve this objective, it is to be checked whether the external conversion of regularly changing requirements is possible to more favourable costs in comparison to the internal production (part of success factor "Leverage in-house capabilities"). The efficiencies of an external vendor must be significant, to compensate the vendor margin (Willcocks, Fitzgerald and Feeny, 1995, p. 74) and if necessary for the value added tax to be paid. Necessary system changes in case H could be successfully implemented externally under realisation of cost reductions. Hence, the economic conversion of system changes by vendors seems to be possible. If other aims stand in the foreground of the ITO (lack of internal skill, etc.) an unstable economic situation is no reason to oppose ITO, provided the chosen IT application is changeable and the vendor has the right abilities and skills (see success factor category vendor capability). This is to be guaranteed within the scope of the selection phase (see success factor "Evaluation of bids").		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
In contrast to the result of this thesis, studies exist which classified a stable environment as relevant for success. Willcocks and Fitzgerald (1994), p. 312 examined exclusively application outsourcing cases (software support) and found out that "significant changes in business" were responsible for missing ITO success. The

studies Willcocks, Fitzgerald and Feeny (1995, p. 21, 10), Willcocks and Fitzgerald (1993, p. 227, 240), Aubert (1998, p. 689, 690) and Aubert (1999, p. 3) pointed to the fact that a “reasonable business certainty” is necessary to be able to specify and measure the software requirements solidly. “A changing environment” was described as a trigger for backsourcing (Veltri, 2008, pp. 12-13, 18). Also McLaughlin and Peppard (2006, p. 8) examined backsourcing cases and found out that an economic recovery was a trigger for backsourcing in formerly cost-motivated ITO decisions.
A further discussion in relation to the results of this thesis is not possible, because these studies provide no information on the individual ITO objectives of the outsourcing enterprise and on the abilities and skills of the chosen IT vendor.

Success Factor Category: Environment
Success Factor: Stable external environment (competition)
A stable external environment in terms of competitors` actions influences ITO success. First, environmental changes can obviate the need or can change the desire for ITO in general. Second, environmental stability supports the ability to define stable IT requirements for the lifetime of the ITO contract and thus avoids costly contractual amendments if possible at all.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	No	Yes	No	Yes	No	No	Yes	Yes	**No**
Weighting		Partly necessary		Partly necessary			Partly necessary	Partly necessary	
Process Classification									
⇨ Preparation				X					
⇨ Selection				X					
⇨ Contract				X					
⇨ Transition				X					
⇨ Execution		X		X			X	X	
⇨ Post-deal									
Comments									
Contract A:	The competition in the retail business mainly takes place in terms of conditions (e.g. interest rate) which do not always affect the underlying IT system.								
Contract B:	The implementation of individual wishes in a standard application with a bigger user's circle is not simply enforceable, because the approval of new requirements is done in a committee decision. Thus, all mandators must need the new requirement. The "Time-to-market" for new requirements must be acceptable. Such a solution is only satisfactory if the outsourcing bank wants to operate conservatively, rather than be innovative in the market.								
Contract C:	Requirements on customer ratings depend on the legislation (Basel II).								
Contract D:	A competitive CRM system helps to collect valuable customer information and makes the market entry easier. Necessary system changes are implemented continuously.								
Contract E:	The demands on the system (accountancy, staff and goods economy) do not depend on the competitive situation.								
Contract F:	The core banking system here is a back office system with no customer interface.								
Contract G:	3rd priority within the influencing factors of the external environment.								
Contract H:	Reinforced competition can lead to changes of system requirements. In the past, the affiliated banks were specified on certain banking products. Their product offer was extended successively. External stability is better for a successful outsourcing, but nevertheless it must be possible to implement changes at additional costs.								

In cases C, E and F the system requirements do not depend on competitors' actions. The outsourcings bank in case A acts in the retail business, while the competition occurs primarily regarding the price. This does not always require changes in the outsourced application. Hence, the success factor is not relevant in these cases. In cases B, D, G and H the competition influences the system requirements. In cases D and H, system changes released by competitors' actions are implemented regularly externally. In case B a standard core banking system is sourced externally, which is used by several banks in the banking group. Here the implementation of system changes is to be decided basically by a committee and consequently must be beneficial for a large part of these banks to receive a positive decision. Case B points to the fact that, by application of a standard core banking system, system changes can possibly take longer and that this is only recommended if one pursues a rather conservative market strategy.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
The requirements on the outsourced application do not always depend on the competitive situation, which makes the success factor irrelevant in these cases. The market situation for banks in Germany is tightened among other things by a high margin and competition pressure and is subjected to constant change (see Chapter 2.4). This can be assumed from the fact that a stable competitive situation will never be given. Systems whose requirements depend on the competitive situation, like in cases B, D, G and H, must be submitted to a regular change (e.g. implementation of new banking products) to guarantee the competitiveness of the outsourcing bank in the future. The partly necessary assessment of the success factor in these cases can be reasoned with the objective of the ITO. In all cases, costs should be lowered in the course of the ITO among other objectives. To achieve this objective, it is to be checked whether the external conversion of regularly changing requirements is possible to more favourable costs in comparison with the internal production (part of the success factor "Leverage in-house capabilities"). The efficiencies of an external vendor must be significant, to compensate the vendor margin (Willcocks, Fitzgerald and Feeny, 1995, p. 74) and if necessary the value added tax has to be paid. Necessary system changes released by competitors' actions could be implemented successfully externally in cases D and H under realisation of cost reductions. Hence, the economic conversion of system changes by vendors seems to be possible. If other aims stand in the foreground of the ITO (lack of internal skill, etc.) an unstable competitive environment is no reason to oppose ITO, provided the chosen IT application is changeable and the vendor has the right abilities and skills (see success factor category vendor capability). This is to be guaranteed within the scope of the selection phase (see success factor "Evaluation of bids").		

Discussion:

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

In contrast to the result of this thesis, studies exist which classified a stable environment as relevant for success. Willcocks and Fitzgerald (1994, p. 312) examined exclusively application outsourcing cases (software support) and found out that "significant changes in business" were responsible for missing ITO success. The studies of Willcocks, Fitzgerald and Feeny (1995, p. 21, 10), Willcocks and Fitzgerald (1993, pp. 227, 240), Aubert (1998, p. 689, 690) and Aubert (1999, p. 3) pointed to the fact that a "reasonable business certainty" is necessary to be able to specify and measure the software requirements solidly. "A changing environment" was described as a trigger for backsourcing (Veltri, 2008, pp. 12-13, 18). Also McLaughlin and Peppard (2006, p. 8) examined backsourcing cases and found out that an economic recovery was a trigger for backsourcing in formerly cost-motivated ITO decisions.

A further discussion in relation to the results of this thesis is not possible, because these studies provide no information on the individual ITO objectives of the outsourcing enterprise and on the abilities and skills of the chosen IT vendor.

Success Factor Category: Environment
Success Factor: Stable external environment (product obsolescence)
A stable external environment in terms of banking product obsolescence in the market influences ITO success. First, environmental changes can obviate the need or can change the desire for ITO in general. Second, environmental stability supports the ability to define stable IT requirements for the lifetime of the ITO contract and thus avoids costly contractual amendments if possible at all.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	No	Yes	No	No	No	No	Yes	Yes	**No**
Weighting		Partly necessary					Partly Necessary	Partly Necessary	
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution		X					X	X	
⇨ Post-deal									
Comments									
Contract A:	Retail banking must provide the basic functionalities of the banking business which do not change very often.								
Contract B:	Outdated products can stay included in the product portfolio. The implementation period of new products can be longer by using a standard system, as a bigger user circle needs to have an interest in the new function.								
Contract C:	Requirements on customer ratings depend on the legislation (Basel II).								
Contract D:	Requirements on a customer relationship management system are not directly affected by product changes.								
Contract E:	The System is used for accounting, staff and goods management and thus is not dependent on the obsolescence of market products.								
Contract F:	The core banking system here is a back office system with no customer interface.								
Contract G:	4th priority within the influencing factors of the external environment.								
Contract H:	Product obsolescence compared to the product portfolio of competitors can make the implementation of new products necessary. External stability is better for a successful outsourcing, but nevertheless it must be possible to implement changes to additional costs.								

In cases C, D, E and F the system requirements do not depend directly on the product offer of the bank. In case A, bank products which are part of the outsourced core banking system, nevertheless, have hardly had to be changed to date (standard product portfolio of a retail bank). Hence, the success factor is not relevant in these cases. In cases B, G and H an outdated product offer influenced the system standards. Case B points to the fact that outdated products can remain in the outsourced core banking system and that the implementation of new products to a standard core banking system can take a longer time under circumstances, because a bigger user's circle must state interest in the new product. In case H, the introduction of new banking products is seen as necessary to guarantee the competitiveness of the bank in the future, and that this must be possible externally under payment of additional costs.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
The requirements on the outsourced IT application do not always depend on an outdated product offer of the bank, which makes the success factor not relevant in these cases. The market situation for banks in Germany is tightened among other things by a high margin and competition pressure and is subjected to constant change (see Chapter 2.4). It can be assumed from the fact that a stable competitive situation and with it a stable product offer of the competitors will never be given. Hence, the systems which illustrate the product offer of the bank, like in cases B, G and H, must be flexible enough, to introduce new bank products in a satisfactory time frame ("time to market"), so that the competitiveness of the bank can be guaranteed in future. The partly necessary assessment of the success factor in these cases can be reasoned with the objective of the ITO. In these cases costs should be lowered in the course of the ITO among other things. To achieve this objective, it is to be checked whether the conversion of regularly changing requirements can be done externally to more favourable conditions in comparison to the internal production (part of success factor "Leverage in-house capabilities"). The efficiencies of an external vendor must be significant, to compensate the vendor margin (Willcocks, Fitzgerald and Feeny, 1995, p. 74) and if necessary for the value added tax to be paid. Necessary system changes in case H could be successfully implemented externally under realisation of cost reductions (see success factors "Stable external environment (economic climate)" and "Stable external environment (competition)"). Hence, the economic conversion of system changes by vendors seems to be possible. If other aims stand in the foreground of the ITO (lack of internal skill, etc.) an unstable environment influencing the product offer of the outsourcing bank is no reason to oppose ITO, provided, the chosen IT application is changeable and the vendor has the right abilities and skills (see success factor category vendor capability). This is to be guaranteed within the scope of the selection phase (see success factor "Evaluation of bids").		

Discussion:

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

In contrast to the results of this thesis, studies exist which classified a stable environment as relevant for success. Willcocks and Fitzgerald (1994, p. 312) examined exclusively application outsourcing cases (software support) and found out that "significant changes in business" were responsible for missing ITO success. In the study of Gilley and Rasheed (2000, p. 778, 783, 786) performance improvements could be achieved on the vendor side by a stable product offer. The studies of Willcocks, Fitzgerald and Feeny (1995, p. 21, 10), Willcocks and Fitzgerald (1993, p. 227, 240), Aubert (1998, p. 689, 690) and Aubert (1999, p.3) pointed to the fact that a "reasonable business certainty" is necessary to be able to specify and measure the software requirements solidly. "A changing environment" was described as a trigger for backsourcing (Veltri, 2008, pp. 12-13, 18).

A further discussion in relation to the results of this thesis is not possible, because these studies provide no information on the individual ITO objectives of the outsourcing enterprise and on the abilities and skills of the chosen IT vendor.

Success Factor Category: Environment
Success Factor: Stable external environment (technology changes)
A stable external environment in terms of the technology stability of the outsourced IT function influences ITO success. First, environmental changes can obviate the need or can change the desire for ITO in general. Second, environmental stability supports the ability to define stable IT requirements for the lifetime of the ITO contract and thus avoids costly contractual amendments if possible at all.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	No	Yes	No	Yes	Yes	Yes	Yes	Yes	**No**
Weighting		Partly necessary		Partly necessary	Partly necessary	Partly necessary	Partly necessary	Partly necessary	
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution		X		X	X	X	X	X	
⇨ Post-deal									
Comments									
Contract A:	The vendor must make sure of an adequate technological basis of the system.								
Contract B:	The need for technology adaptations is always given no matter whether the achievement is produced internally or externally (e.g. conversion to client / server technology).								
Contract C:	With the specification of the application (in particular methodology, framework functionalities) a technology-neutral requirements specification was emphasised. In addition, central interfaces were defined on the basis of standard technologies (https, MQ-series, XML). Hence the ITO was relatively free to make internal technology decisions; these were already partly modified in the course of the ITO (e.g. change of the central data base manufacturer).								
Contract D:	Regular software updates are necessary and are externally implemented.								
Contract E:	The change to new technologies is done on the vendor side. The vendor will just switch technologies if it is economically beneficial for the vendor or if several customers have an interest.								
Contract F:	The service bank took care of an adequate technology basis.								
Contract G:	2nd priority within the influencing factors of the external environment.								
Contract H:	External stability is better for a successful outsourcing. But information technology is short-lived. The implementation of necessary technology changes must be possible to additional costs (e.g. implementation of front-to-back technology).								

In case C, a stable technological base of the outsourced application is not classified as relevant for success. In this case a technology-neutral requirement specification was emphasised and standard technologies were used for interfaces. Hence, a change of the central data base manufacturer could be moved successfully externally. In cases A and E it is stated that the vendor owns the decision rights regarding the technology. Hence, case A evaluates a stable technological base also as not relevant for ITO success. However, in case E, as well as in cases B, D, F, G and H a stable technological base of the outsourced application is classified as partly relevant for ITO success. Information technology is short-lived, hence, technological changes (as for example introduction of a new front-to-back technology) must be possible to additional costs (case H). In case D, regular software updates are carried out externally. Case B points to the fact that technological changes (as for example the conversion to client server technology) will always be necessary, regardless of an external or internal production of IT goods and services. In case E standard software was outsourced. In this case technology adaptations are only carried out if the vendor profits economically from it or if a big user's circle has interest in it.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
The innovation cycles in information technology in general and in IT applications in particular quickly follow on each other; a stable technological base of the outsourced IT application for the term of the ITO is hardly realistic. Hence, vendors must be able to carry out technology adaptations to satisfactory costs. The partly necessary assessment of the success factor in cases B, D, E, F, G and H can be reasoned with the objective of the ITO. In these cases, costs should be lowered in the course of the ITO among other objectives. To achieve this objective, it is to be checked whether the external conversion of regularly changing requirements is can be done to better costs (part of the success factor "Leverage in-house capabilities"). The efficiencies of an external vendor must be significant, to compensate the vendor margin (Willcocks, Fitzgerald and Feeny, 1995, p. 74) and if necessary for the value added tax to be paid. Also in case A costs should be lowered with the ITO among other things. But here the success factor is not judged as relevant, as the responsibility for technology changes lies on the vendor side. In case E the same reason is given, but the success factor is rated as partly necessary. It is conceivable that technology changes are to be implemented, for example, for the benefit of the effectiveness or performance improvement of an outsourced IT application, no matter whether the IT application is outsourced or not (see comment case B). In the case of ITOs with a cost reduction objective, it is to be checked before the ITO whether technology changes can be economically implemented externally. In case C, the success factor is also not judged as relevant; here no cost reduction objectives are connected with the ITO. If other objectives stand in the foreground of the ITO (lack of internal skill, etc.) an unstable technological environment is no reason to oppose an ITO, provided the chosen IT application is changeable and the vendor has the right abilities and skills (see success factor category vendor capability). This is to be guaranteed within the scope of the selection phase (see success factor "Evaluation of bids").		

Discussion:

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
In contrast to the results of this thesis, studies exist which classified a stable environment as relevant for success. Willcocks and Fitzgerald (1994, p. 312) examined exclusively application outsourcing cases (software support) and found out that "significant changes in business" were responsible for missing ITO success. In the study of Gilley and Rasheed (2000, p. 778, 783, 786), performance improvements could be achieved on the vendor side by a stable technological base. The studies of Willcocks, Fitzgerald and Feeny (1995, p. 21, 10), Willcocks and Fitzgerald (1993, p. 227, 240), Aubert (1998, pp. 689, 690) and Aubert (1999, p. 3) pointed to the fact that a "reasonable business certainty" is necessary to be able to specify and measure the software requirements solidly. Aubert (1998, pp. 689-690) and Aubert (1999, p. 3) mention technology changes or technology innovations explicitly as a trigger for expensive adaptations of ITO contracts or with lacking conversion as a trigger for competitive disadvantages. "A changing environment" was described as a trigger for backsourcing (Veltri, 2008, pp. 12-13, 18).
A further discussion in relation to the results of this thesis is not possible, because these studies provide no information on the individual ITO objectives of the out-sourcing enterprise and on the abilities and skills of the chosen IT vendor.

Success Factor Category: Environment
Success Factor: Vendor market
An adequate number of vendors able to perform the required IT function to be outsourced should exist on the market in order to avoid over-reliance on one vendor.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	No	Yes	Yes	Yes	No	Yes	**Yes**
Weighting	Mandatory	Mandatory		Mandatory	Mandatory	Mandatory		Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation	X	X		X	X	X		X	
⇨ Selection	X	X		X	X	X		X	**X**
⇨ Contract	X	X		X	X	X		X	
⇨ Transition	X	X		X	X	X		X	
⇨ Execution	X	X		X	X	X		X	
⇨ Post-deal	X	X		X	X	X		X	
Comments									
Contract A:	Nevertheless, it is to be considered that a change of the vendor is not so easy and possible to do quickly.								
Contract B:	Service provider's monopolies should be avoided. But an outsourcer is already dependent in comparison to an internal solution, because the change of a service provider is time-intensive (in case of a core banking system approx. 2-3 years) and cost-intensive.								
Contract C:	A monopoly was created by foundation of the vendor. Only one vendor exists on the market that could perform the functional part, no IT support.								
Contract D:	Is continuously ensured via benchmarking.								
Contract E:	Standard software. Thus a dependency problem cannot exist, as many vendors can operate the system.								
Contract F:	The decision for the core banking system and the vendor was done by the parent bank. The core banking system is standard software and other vendors exist on the market who could manage it. The costs are market compliant. This must regularly be demonstrated to the Italian state for tax reasons.								
Contract G:	The vendor is the IT company of the banking group.								
Contract H:	At the beginning of the outsourcing, switching to another vendor would hardly have been possible as only a few suitable vendors existed in this market. Nowadays, it would be easier to switch as the market standard has risen.								

In cases A, B, D, E, F and H it is judged as mandatory that several vendors are available in the market who could take over the application to be outsourced. However, cases A and B point to the fact that, in spite of a competitive situation between these vendors, a certain dependence on the current vendor exists, because switching to another vendor is not so easy. A change takes a lot of time (cases A and B) and is connected with high expenses (case B). In the case of C, almost a monopoly was created by the foundation of the common service society in the market, which is why the success factor was classified as not relevant. In case G the vendor is a group-internal enterprise, hence a vendor market is classified as not relevant here either. In case D it is mentioned that a vendor market is constantly guaranteed by continuous benchmarking. In case H only few suitable vendors were available in the market at the beginning of the ITO.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
In case of dissatisfaction with vendor performance (in terms of costs, product quality and service quality, etc.) the possibility must exist to either change the vendor, or to be able to exert enough influence on the existing vendor to change his behaviour patterns in a positive way. In a rather external client-vendor relation the client hardly has possibilities to force the vendor into certain behaviour patterns. Hence, the existence of a vendor market is recommended in these cases (see also the mandatory assessment of the success factor in cases A, B, D and E). Influencing possibilities on the vendor exist rather by foundation of a joint venture or with an internal ITO (see cases C and G) on account of the capital interweaving between client and vendor. In case C, the outsourcing bank is a companion of the service society, and can thereby exert influence on the service society concerning the companion committees. In case G, an internal outsourcing is given, because the vendor is a group-internal enterprise. A group-internal vendor has, as a rule, an interest in satisfying his clientele to protect his existence in the long term. But in cases F and H the existence of a vendor market was rated as mandatory in spite of the organisational form of an internal ITO. In case F this is explained by the fact that the competitiveness of the price paid to the European vendor must be proved regularly to the Italian state. In case H, this can be explained by the lack of efficiency of the vendor (for details see case study H). Besides, agreed financial penalties cannot be exercised on account of the financial situation of the vendor, which also influences possibilities of influencing this internal vendor (see comment on case H regarding success factor "Financial stability / Cost and financial management"). Summary: The change of a vendor can be necessary if the possibilities of influencing the vendor are limited (external ITO, internal ITO without influencing possibilities) or because of tax reasons. In these cases it is to be ensured in the vendor selection phase that suitable vendors exist in the market. As the survey results show, the possibility of switching to another vendor should exist during the whole contract term, but after contract conclusion this success factor cannot be considered by the ITO project any more, which is why the temporal relevance was assigned to the vendor selection phase.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

A sufficient number of vendors in the market was also classified as success relevant in the studies of De Looff (1995, p. 294) and Aubert (1998, pp. 688, 690; 1999, p. 3). The studies of Aubert (1998, 1999) also focused on application outsourcing cases (system development).

Success Factor Category: Environment
Success Factor: Regulatory compliance
Companies must ensure they comply with regulatory issues to maintain their legal competence in general (e.g. compliance of German banks with § 25a KWG).

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation	X	X	X	X	X	X	X	X	**X**
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal	X	X	X	X	X	X	X	X	**X**
Comments									
Contract C:	Requirements on customer ratings depend on the legislation (Basel II). New requirements must be implemented continuously.								
Contract F:	Caused by Italian right (in particular supervision right and tax right) specific demands are to be fulfilled whose sole conversion would have been too cost-intensive. The costs could be divided with the other European banks which also act in the Italian market. EU width harmonisations stand in a queue which must be implemented IT sided.								
Contract H:	The country the vendor is operating in is currently built-up. Therefore, the legal requirements change regularly what needs to be implemented system-sided.								

The continuous fulfilment of legal demands for ITOs is seen in all 8 cases as compulsory for the achievement of ITO success. The cases C, F and H refer, in addition, to system-related legal demands whose conversion is also compulsory.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The fulfilment of legal demands regarding ITO in general (in particular §24 a KWG) and the outsourced systems in particular is relevant for success during the whole ITO process to maintain the legal capacity of the outsourcing enterprise. Hence, it is necessary to anchor obligation of the vendor caused by legal demands by contract. These are in particular the control rights for supervisory authorities and the outsourcing bank (see Chapter 2.4) and the obligation for system adaptations caused by legal demands (see case C).		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Huber (1993, p. 127) also mentions in his case study the importance of an early consideration of regulatory demands and the importance of communication with supervisory authorities. In particular the subjects "accounting treatment, asset valuations, fees, and service levels" were looked at by bank supervision authorities.

Success Factor Category: Environment
Success Factor: Stable internal environment (strategic direction)
A stable internal environment in terms of strategic direction of the outsourcing bank influences ITO success. Firstly, environmental changes can obviate the need or can change the desire for ITO in general. A change in strategic direction against ITO can be caused by a new internal management too. Secondly, environmental stability supports the ability to define stable IT requirements for the lifetime of the ITO contract and thus avoids costly contractual amendments if possible at all.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	No	Yes	No	Yes	Yes	Yes	**No**
Weighting	Partly necessary	Partly necessary		Partly necessary		Partly necessary	Partly necessary	Partly necessary	
Process Classification									
⇨ Preparation							X		
⇨ Selection							X		
⇨ Contract							X		
⇨ Transition							X		
⇨ Execution	X	X		X		X	X	X	
⇨ Post-deal									
Comments									
Contract B:	The development of a new European market as a new business objective requires adaptations in the system (in particular registration). These individually necessary changes in the system are charged only to the bank.								
Contract C:	Customer ratings are a legal requirement (Basel II) in case of loan applications.								
Contract D:	Desired changes in the kind of customer data to be stored are implemented regularly.								
Contract E:	The demands on the system (accountancy, staff and goods economy) do not depend on the strategic direction.								
Contract G:	Currently the foundation of competence centre in the banking group (for IT with this ITO).								
Contract H:	Internal stability is better for a successful outsourcing, in particular as the external environment changes very quickly currently. But nevertheless, changes must be possible at additional costs.								

In cases C and E the system requirements are not dependent on the strategic objectives of the enterprise; hence, the success factor is not relevant in these cases. In cases A, B, D, F, G and H the stability of the strategic enterprise objectives is classified as partly necessary for the achievement of ITO success during the term of the ITO. In case B the development of a new European market required adaptations in the outsourced standard core banking system which could be implemented

externally by the vendor under payment of additional costs. In case D, changes in the kind of customer data to be stored in the customer relationship management system were regularly implemented externally. According to the opinion of case H, system changes must be able to be implemented to additional costs externally. In case G, a change of the strategic business objectives led to the foundation of competence centres in the bank group and with it also to the outsourcing of the IT to a central IT service society.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
The requirements for the outsourced IT application do not always depend on the strategic business objectives of the bank, which is why the success factor is not relevant in these cases. Owing to the market situation of the banks in Germany (see Chapter 2.4: high margin and competitive pressure, change of the customer requirements, etc.) it is rather unlikely that the strategic business objectives of a bank would remain stable during an ITO. Hence, outsourced applications must be flexible enough to be adapted if necessary to new basic conditions, so that the competitive ability of the bank can also be guaranteed in the future. In addition, the strategic business objectives are a basis for ITO decisions (see case G). The partly necessary assessment of the success factor in cases A, B, D, F, G and H can be explained by the objective of the ITO. In these cases, costs should be reduced in the course of the ITO among other things. To achieve this objective, is has to be checked whether the external conversion of regularly changing requirements can be done to more favourable costs (part of the success factor "Leverage in-house capabilities"). The efficiencies of an external vendor must be significant to compensate for the vendor margin (Willcocks, Fitzgerald and Feeny, 1995, p. 74) and, if necessary, for value added tax to be paid. In cases B and D, system changes are regularly implemented externally, released by changes of the strategic business objectives. Hence, the economic conversion of system changes by vendors seems to be possible. If other aims stand in the foreground of the ITO (lack of internal skill, etc.) an unstable internal environment is no reason to oppose an ITO, provided the chosen IT application is changeable and the vendor has the right abilities and skills (see success factor category vendor capability). This is to be guaranteed within the scope of the selection phase (see success factor "Evaluation of bids").		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

In contrast to the result of this thesis, studies exist which classified a stable environment as relevant for success. Willcocks and Fitzgerald (1994, p. 312) examined exclusively application outsourcing cases (software support) and found out that "significant changes in business" were responsible for missing ITO success. In the study of Gilley and Rasheed (2000, p. 778, 783, 786) performance improvements could be achieved on the vendor side by a stable technological base. The studies of Willcocks, Fitzgerald and Feeny (1995, p. 21, 10), Willcocks and Fitzgerald (1993, pp. 227, 240), Aubert (1998, p. 689, 690) and Aubert (1999, p. 3) pointed to the fact that a "reasonable business certainty" is necessary to be able to specify and measure the software requirements solidly. "Changing business strategies" were also described as a trigger for backsourcing (Veltri, 2008, pp. 12-13, 18; Cullen et al., 2005, p. 243; Landis et al., 2005, p. 6; DiamondCluster, 2005, p. 6). A further discussion relating to the results of this thesis is not possible, because these studies provide no information on the individual ITO objectives of the outsourcing enterprise and on the abilities and skills of the chosen IT vendor.

Success Factor Category: Environment
Success Factor: Stable internal environment (mergers & acquisitions)
A stable internal environment in terms of mergers and acquisitions influences ITO success. First, environmental changes can obviate the need or can change the desire for ITO in general. As a result of mergers, divestitures or acquisitions, for example, new entities can result which have possibly reached a critical size to realise the same economies of scale as a vendor or have access to formerly missing IT skills, both making previous ITO decisions needless. Second, environmental stability supports the ability to define stable IT requirements for the lifetime of the ITO contract and thus avoids costly contractual amendments if possible at all.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Not assessable	Yes	Not assessable	Yes	Not assessable	Yes	Yes	Yes	**No**
Weighting		Partly necessary		Partly necessary		Partly necessary	Partly necessary	Partly necessary	
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution		X		X		X	X	X	
⇨ Post-deal						X			
Comments									
Contract A:	Other source situations lead if necessary to other decisions. Not always predictable.								
Contract B:	The bank belonged for the most part to a big German bank group which has introduced a new central group control for IT. The bank group demanded that the migration contract on the new core banking system can not be signed, before the final picture of the group IT was not clear. Nevertheless, the new business objectives of the bank to develop a new European market required a current decision. As in the worst-case no alternative solution could be provided from the bank group, the migration of the contract was finally agreed to.								
Contract C:	During the term of the ITO numerous initiatives were begun actively which concerned the companion's circle as well as the relation with a competitor coming from the same bank group. Even if there were no essential changes during the term, the ITO was prepared for such changes.								
Contract E:	Played no role during the ITO.								
Contract G:	With enlargement of the bank group the IT needs of the "new member" are analysed and as a result it is decided whether these are produced by the "new member" or by the vendor of the bank group. If the central vendor is used, it is decided whether the large part of the IT staff of the "new member" is transferred to the vendor or if it is out-placed. The decision depends on the business case calculations.								
Contract H:	Internal stability is better for an ITO, in particular because the external environment is more unstable in this case. Nevertheless, the implementation of changes externally must be possible at additional costs.								

In cases A, C and E the relevance of this success factor cannot be evaluated on account of lacking experience. In cases B, D, F, G and H the avoidance of enterprise unions and enterprise purchases (M&A) is evaluated as partly necessary for the achievement of ITO success. In case B, enterprise unions on the vendor side led to the fact that the core banking system used had to be migrated to the target system of the new vendor group. The affiliation of the outsourcing bank to a bank group led to discussions about this system change, because in the bank group attempts existed to standardise the IT landscape (for details, see case study B). According to opinion of case H, system changes released by M&A must be implemented externally at additional costs. In case G, the enterprise strategy is not stable. During recent years, for example, several banks were integrated into the bank group (for details, see case study G). By integration of a new bank, the IT requirements are examined to ascertain if they conform to the group-wide uniform IT landscape, are integrated there if necessary (ITO) or are left decentralised.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
Owing to the market situation of the banks in Germany (see Chapter 2.4: high margin and competition pressure, change of customer requirements, etc.), it is rather unlikely that movements in the market can be avoided like enterprise unions or enterprise purchases in the future. Hence, outsourced systems must be flexible enough to be adapted if necessary to new basic conditions, so that the competitiveness of the bank can also be guaranteed in future. In addition, it is possible that affected banks must develop in other directions caused by the internal IT guidelines of the bank group, i.e. a notice or no lengthening of the present ITO contract (see discussions in case B) or generally an IT outsourcing (see case G) can become necessary. The partly necessary assessment of the success factor in cases B, D, F, G and H can be explained by the objective of the ITO. In these cases, costs should be reduced in the course of the ITO among other things. To achieve this objective, it needs to be checked whether the external conversion of regularly changing requirements is possible to more favourable costs in comparison to the internal production (part of the success factor "Leverage in-house capabilities"). The efficiencies of an external vendor must be significant, to compensate the vendor margin (Willcocks, Fitzgerald and Feeny, 1995, p. 74) and, if necessary, for the value added tax to be paid. In cases B and G, M&A could be successfully implemented on the client and vendor side. Hence, the economic conversion of system changes, released by M&A, by vendors seems to be possible. If other aims stand in the foreground of the ITO (lack of internal skill, etc.) an unstable M&A environment is no reason to oppose an ITO, provided the chosen IT application is changeable and the vendor has the right abilities and skills (see success factor category vendor capability). This is to be guaranteed within the scope of the selection phase (see success factor "Evaluation of bids").		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
In contrast to the results of this thesis, studies exist which classified a stable environment as relevant for success. Willcocks and Fitzgerald (1994, p. 312) examined exclusively application outsourcing cases (software support) and found out that "significant changes in business" were responsible for missing ITO success. The studies of Willcocks, Fitzgerald and Feeny (1995, p. 21, 10), Willcocks and Fitzgerald (1993, p. 227, 240), Aubert (1998, p. 689, 690) and Aubert (1999, p. 3) pointed to the fact that a "reasonable business certainty" is necessary to be able to specify and measure the software requirements solidly. "Mergers, divestitures and acquisitions" were also described as a trigger for backsourcing (Veltri, 2008, p. 13, 19; McLaughlin and Peppard, 2006, p. 7, Cullen et al., 2005, p. 243).
A further discussion relating to the results of this thesis is not possible, because these studies provide no information on the individual ITO objectives of the outsourcing enterprise and on the abilities and skills of the chosen IT vendor.

Success Factor Category: Environment
Success Factor: Stable internal environment (management)
A stable internal environment in terms of internal management stability at the outsourcing bank influences ITO success. First, environmental changes can obviate the need or can change the desire for ITO in general. Second, environmental stability supports the ability to define stable IT requirements for the lifetime of the ITO contract and thus avoids costly contractual amendments if possible at all.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Not assessable	Yes	Yes	Yes	Yes	Yes	Yes	**No**
Weighting	Partly necessary		Mandatory	Partly necessary	Mandatory	Partly necessary	Partly necessary	Partly necessary	
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution	X		X	X	X	X	X	X	
⇨ Post-deal									
Comments									
Contract A:	Changed management requirements must be able to be implemented when required.								
Contract B:	A stable management exists on the IT side.								
Contract C:	The commitment of the management to the ITO is compulsory.								
Contract E:	Management commitment to continuing the ITO is necessary.								
Contract H:	Internal stability is better for an ITO, in particular because the external environment is more unstable in this case. Nevertheless, the implementation of changes externally must be possible at additional costs.								

The stability of the internal management as a success factor during the term of the ITO cannot be evaluated in case B. In cases C and E, the management commitment for the ITO was rated as compulsory for the achievement of ITO success. In cases A, D, F, G and H the stability of the internal management is evaluated as partly necessary. Cases A and H state, that changing system requirements caused by an internal management change must be implemented externally.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
In case B, a stable internal management is given at the outsourcing bank and the ITO has existed already for many years. This argues for a success-influencing effect of the stability of the internal management. Nevertheless, a stable internal management at the outsourcing bank cannot be assumed in particular in case of ITOs with long-term focus. Hence, outsourced systems must be flexible enough to be adapted if necessary to the requirements of a new internal management and to guarantee with it the competitiveness of the bank also in the future. Under some circumstances a new internal management also causes a change of the strategic enterprise objectives which can also entail the ending of an ITO. The partly necessary assessment of the success factor in cases A, D, F, G and H can be explained by the objective of the ITO. In these cases costs should be reduced in the course of the ITO among other things. In order to support the achievement of this objective, the external conversion of regularly changing requirements at more favourable costs must be possible (part of the success factor "Leverage in-house capabilities"). The efficiencies of an external vendor must be significant, to compensate for the vendor margin (Willcocks, Fitzgerald and Feeny, 1995, p. 74) and, if necessary, for the value added tax to be paid. Also in case E cost reduction objectives are connected with the ITO. Nevertheless, the success factor is judged, like case C, as compulsory for the achievement of ITO success. Nevertheless, in both cases the answer is not aimed at the stability of the internal management, but at the commitment of the management. If other aims stand in the foreground of the ITO (lack of internal skill, etc.) an unstable internal management is no reason to oppose ITO, provided the chosen IT application is changeable and the vendor has the right abilities and skills (see success factor category vendor capability). This is to be guaranteed within the scope of the selection phase (see success factor "Evaluation of bids").		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
In contrast to the result of this thesis studies exist which classified a stable environment as relevant for success. Willcocks and Fitzgerald (1994, p. 312) examined exclusively application outsourcing cases (software support) and found out that "significant changes in business" were responsible for missing ITO success. The studies of Willcocks, Fitzgerald and Feeny (1995, p. 21, 10), Willcocks and Fitzgerald (1993, p. 227, 240), Aubert (1998, p. 689, 690) and Aubert (1999, p. 3) pointed to the fact that a "reasonable business certainty" is necessary to be able to specify and measure the software requirements solidly. A new internal management on the client side was also described as a trigger for backsourcing (Veltri, 2008, p. 12, 13, 18; Cullen et al., 2005, p. 243; McLaughlin and Peppard, p. 8).

A further discussion in relation to the results of this thesis is not possible, because these studies provide no information on the individual ITO objectives of the outsourcing enterprise and on the abilities and skills of the chosen IT vendor.

Success Factor Category: Environment
Success Factor: Stable internal environment (product portfolio)
A stable internal environment in terms of the banking product portfolio offered at the market influences ITO success. Firstly, environmental changes can obviate the need or can change the desire for ITO in general. Secondly, environmental stability supports the ability to define stable IT requirements for the lifetime of the ITO contract and thus avoids costly contractual amendments if possible at all.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Results**
Relevance	Yes	Yes	No	No	No	No	Yes	Yes	**No**
Weighting	Partly necessary	Partly necessary					Partly necessary	Partly necessary	
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution	X	X					X	X	
⇨ Post-deal									
Comments									
Contract A:	In retail banking basic functionalities of the banking transaction are to be provided which do not change so often, but necessary changes must be possible.								
Contract B:	New products must be able to be implemented. Old products can remain in the system.								
Contract C:	The requirements on the rating system depend on the legislation (Basel II).								
Contract D:	The requirements on a CRM system are not influenced by product changes directly.								
Contract E:	The system requirements (accountancy, staff and goods economy system) do not depend on market products.								
Contract F:	The core banking system is a back office system without customer interface.								
Contract H:	Internal stability is better for an ITO, in particular because the external environment is more unstable in this case. The implementation of new products externally was possible at additional costs.								

In cases C, D, E and F the outsourced system is not influenced by changes of the product offer of the bank. Hence, the success factor cannot be evaluated in these cases. In cases A, B, G and H the stability of the product offer of the outsourcing bank is evaluated as partly relevant for the achievement of ITO success. Cases A

and H point to the fact that changes must be possible in the outsourced system. Case B explains that outdated products can remain in the outsourced system; however, necessary new products must be implemented.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
The requirements on the outsourced IT application do not always depend on the product offer of the bank, which is why the success factor is not relevant in these cases. The market situation for banks in Germany is tightened among other things by a high margin and competition pressure and is subjected to constant change (for details see Chapter 2.4). It can be assumed from the fact that a stable competitive situation and with it also a stable product offer of the outsourcing bank will never be given. Hence, the systems which illustrate the product offer of the bank, like in cases A, B, G and H, must be flexible enough to be able to introduce new bank products in a satisfactory time frame ("time to market"), so that the competitiveness of the bank can also be guaranteed in the future. The partly necessary assessment of the success factor in these cases can be explained by the objective of the ITO. In these cases, costs should be reduced in the course of the ITO among other things. In order to support the achievement of this objective, it is to be checked whether the external conversion of regularly changing requirements is possible at more favourable costs (part of the success factor "Leverage in-house capabilities"). The efficiencies of an external vendor must be significant, to compensate for the vendor margin (Willcocks, Fitzgerald and Feeny, 1995, p. 74) and, if necessary, for the value added tax to be paid. In case H, necessary system changes could be successfully implemented externally under realisation of cost effects (see success factors "Stable external environment (economic climate)" and "Stable external environment (competition)"). Hence, the economic conversion of system changes by vendors seems to be possible. If other aims stand in the foreground of the ITO (lack of internal skill, etc.) an unstable product portfolio is no reason to oppose an ITO, provided the chosen IT application is changeable and the vendor has the right abilities and skills (see success factor category vendor capability). This is to be guaranteed within the scope of the selection phase (see success factor "Evaluation of bids").		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
In contrast to the results of this thesis, studies exist which classified a stable environment as relevant for success. Willcocks and Fitzgerald (1994, p. 312) examined exclusively application outsourcing cases (software support) and found that "significant changes in business" were responsible for missing ITO success. The studies

of Willcocks, Fitzgerald and Feeny (1995, p. 21, 10), Willcocks and Fitzgerald (1993, p. 227, 240), Aubert (1998, p. 689, 690) and Aubert (1999, p. 3) pointed to the fact that a “reasonable business certainty” is necessary to be able to specify and measure the software requirements solidly. McLaughlin and Peppard (2006, p. 8) pointed to the fact that the enlargement or shortening of the product offer can lead to outsourcings or backsourcings.
A further discussion in relation to the results of this thesis is not possible, because these studies provide no information on the individual ITO objectives of the outsourcing enterprise and on the abilities and skills of the chosen IT vendor.

Success Factor Category: Environment
Success Factor: Corporate culture
Good co-working between client and vendor is important for ITO success, which is fostered amongst other things by a shared culture and proactive management of cultural differences.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Partly necessary	Mandatory	Partly necessary	Partly necessary	Mandatory	Mandatory	Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract A:	In particular ethical common characteristics.								
Contract B:	Mandators of the core banking system are banks from the same banking group, which is an advantage for mutual understanding. Nevertheless, the bank has also gained (more) positive experiences with a private IT service provider (above all concerning implementation of IT security standards).								
Contract C:	The vendor is an enterprise of banks of the same banking group in Germany which makes mutual understanding easier.								
Contract D:	Cultural differences can be regulated by good communication.								
Contract E:	It is most important that SLA's are kept and that changes are implemented correctly.								
Contract F:	In the current contract construct no consideration was shown for it (“enforced connection”), but it would make the cooperation easier.								
Contract G:	The development of a uniform group culture is important for a good relationship between the group members. Nevertheless, despite a group-internal vendor being given, a “customer - service provider“ relationship is a condition for success with this ITO (e.g. service levels with financial punishments in the form of a “credit point system“).								
Contract H:	The people in Serbia are characterised by an ex-communist system. To receive a good performance from an IT service provider in this environment, it is necessary for a customer to be on site and to control the vendor performance intensely (output and process of output production). On account of the cultural differences a management of the IT service provider by the bank has become necessary (expatriates). Nevertheless, according to experience not all cultural differences are manageable.								

In cases A, C, F, G and H a similar culture and the active management of cultural differences during the interaction of client - vendor is seen as compulsory for the ITO success. Case A stresses in particular ethical common characteristics. Case C notes that the vendor is an enterprise of the banking group which makes the mutual understanding easier. In case F a common culture was not considered within the ITO (outsourcing bank = Italian establishment of a German bank), but it was explained that a common culture would make the cooperation easier. Case G believes that the construction of a uniform group culture is important for success with ITO; however, a client-vendor relation should be protected despite this. Case H comes to the conclusion that, due to cultural differences between Austria and Serbia, a strict control of the vendor performance and the process of the performance production as well as a management of the vendor by expatriates of the outsourcing bank is necessary (internal paging). The cultural differences in this case were partly not manageable at all. Cases B, D and E believe that a similar culture and the active management of cultural differences are partly necessary for ITO success. Case D believes that cultural differences can be regulated by good communication. In case E the compliance of service level agreements and the correct conversion of changes is judged as more important in comparison to common cultural characteristics. Though case B notes that the mandators of the core banking system come from the same banking group and that this is an advantage for mutual understanding, it adds that the bank has gained even better experience with private IT service providers (above all concerning conversion of safety standards).

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
Cultural differences have an influence on the communication of client and vendor and thus affect cooperation (Aspray et al., 2006). In all 8 cases a similar culture and an active management of cultural differences is judged as relevant, but the weighting is not evaluated uniformly by the interview partners. A part views at this as a compulsory need. Others view at this as a partial need and believe that cultural differences can be regulated by good communication and that cultural differences are not so important in comparison to the compliance with service level agreements and the conversion of changes. The mandatory assessment of a similar culture is mainly given in the nearshore cases (see cases F, G and H). It is obvious that the cultural differences which are based on different national cultures are not so simply controllable, and hence can influence the success of an ITO with lasting effect. Case H notes that national cultural differences are partly not manageable at all. The compulsory need was also stated in connection with common ethical characteristics (case A). For people from our society (sophisticated industrial nations, consumption industry, democracy) the consideration of ethical principles could be counted as necessary unlike in other cultural groups (developing countries or threshold countries, food shortage, other state systems) and, hence, can be looked upon as compulsory. Another case with a compulsory assessment is a joint venture of several banks of the same bank group (case C). Because here also enterprise decisions must be made together for the joint venture, a common enterprise culture or the active management of cultural differences makes this easier, which could explain the compulsory assessment. The cases which refer to effective communication as the solution for cultural differences or to a greater importance of a correct vendor performance have a vendor from the same national culture (cases D and E). In these contract relations similar behaviour patterns can be assumed, e.g. concerning communication, which makes the cooperation easier. Here enterprise culture differences are to be considered if necessary (e.g. consensus versus confrontation culture) which are rather controllable under circumstances as national culture differences.		

In the third case with a partial necessary assessment of the success factor (also onshore) it is pointed out that, with a private vendor, more positive experiences were had in comparison with the vendor of the banking group (case B).
To sum up, with the organisational form of a joint venture or with a nearshore - delivery – model a common enterprise/land culture or an active management of cultural differences (e.g. severe controls, like in case H) are compulsory. Partly necessary is this success factor with an onshore – delivery – model if no joint venture was chosen as an organisational form. Here effective communication can already help to overcome enterprise culture differences (see also success factor 9.1 effective communication). The success factor is relevant during the interaction between client and vendor, so from the vendor selection phase (determination of cultural backgrounds) up to the phase of external execution (active management of cultural differences if necessary).

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Studies exist which evaluate fitting cultures or the active management of cultural differences also as a success factor. Willcocks and Fitzgerald (1994, p. 313, 311) examined exclusively application outsourcing cases (software support) and found out that the same working manners or at least the understanding of different approaches are relevant for success, and accordingly not fitting cultures were a reason for the failure of ITO relations. A "lesson learnt" from ITO experiences of vendors was that cultural differences must be recognised and managed (DiamondCluster, 2005, p. 19).

Success Factor Category: Environment
Success Factor: Corporate terms
Good co-working between client and vendor is important for ITO success, which is fostered, amongst other things, by common terms used in the communication between client and vendor.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting		Mandatory	Mandatory	Partly necessary	Partly necessary	Mandatory	Partly necessary	Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection		X	X	X	X	X	X	X	**X**
⇨ Contract		X	X	X	X	X	X	X	**X**
⇨ Transition		X	X	X	X	X	X	X	**X**
⇨ Execution		X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract A:	The service enterprise of the bank cares for a mutual understanding while they take a mediating role between vendor and direct bank.								
Contract B:	Banking terms must be clear.								
Contract C:	An effective communication was guaranteed by an external adviser (terminology standards were fixed).								
Contract D:	Conceptual differences can be regulated by good communication; because the IT of the bank speaks with the vendor, there are fewer problems at this point.								
Contract E:	The concepts are to be cleared by means of efficient communication, in particular the difference between "change" and "operation". The smallest changes run currently under "change" and generate high costs thereby.								
Contract G:	A uniform IT service model for all group members makes a uniform understanding about the IT products and services easier to produce.								
Contract H:	Nevertheless, less uniform concepts matter, but a common understanding must exist between client and vendor when situations show a crisis (commercial threat) for the client and how these can be remedied as quickly as possible.								

In cases B, C, F and H the use of common concepts during the interaction between client and vendor is classified as compulsory for ITO success. Besides, case B points in particular to the clarity of bank concepts. In case H the concepts were defined by the outsourcing bank and were taken over from the vendor (100% daugh-

ter of the outsourcing bank). In case C, an effective communication was guaranteed between the client and the vendor (joint-venture of several client banks of the same banking group) by an external advisor.
In case A, common concepts were not classified as relevant for success, because the IT service society of the outsourcing bank acts as a mediator between the vendor and the outsourcing bank.
In cases D, E and G, common concepts are judged as partly necessary for the ITO success. From the point of view of cases D and E, different concepts can be solved with good communication. Case E points to cost problems of the ITO in connection with the definition of the concepts "change" and "operation". The smallest changes are billed as "change" and cause high costs thereby. In case G, the group-internal vendor defines the concepts within the scope of the group-wide uniform IT service model. Case G further explains that less uniform concepts matter, but a common understanding about commercial-critical situations and the knowledge about adequate solutions is more important.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The use of uniform concepts within the client - vendor interaction (ITO process: vendor selection phase – external execution) in the form of concept definitions (cases B, C, F and H) or a uniform service catalogue (case G) generate mutual understanding about communication contents. Nevertheless, this can also be achieved by effective communication (see success factor 9.1 and cases A, D and E). Hereby an alternative solution is possible for the success factor, so it is finally classified as partly necessary for the ITO success. If necessary the concepts are to be defined in the early stage of the interaction before completion of the contract (selection, contract). The demand for clarity of bank concepts can be attributed to necessary bank know-how of the vendor (see remark in case B) which is part of the success factor “Vendor capability: Business knowledge”. The cost problems in case E were caused by unclear concept definition of "change" and "operation" and can be avoided under certain circumstances by an entire and detailed performance description in the contract (see success factor “Contract: Measurable service requirements, measures and reports”).		

Discussion

ITO studies based on long-term ITO cases
Gerigk (1997, p. 170) also points to the fact that, without a common terminology and without a common understanding about the agreed products and services, the danger exists that the outsourcing partners refer to the contract, which can complicate the cooperation and lead to higher costs. A common understanding can be achieved by effective communication.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Strategy
Success Factor: ITO Strategy
ITO is a strategic decision with long-term impacts: ITO is often connected with the transfer of IT staff and IT assets and demands the establishment of inter-organisational processes between client and vendor. Thus, the strategy and objectives connected with ITO must reflect the longer-term orientation and sufficient start-up time is necessary to get ITO up and running. An ITO strategy must exist. An ITO strategy should be clear and detailed and should not only cover a single ITO contract but the overall consideration of what IT to source internally or externally and why, currently and in the future. Furthermore it should comprise a standardised, structured and detailed ITO process from preparation till post-contract management.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Partly necessary		Mandatory	Mandatory	Mandatory	Mandatory	Partly necessary	**Partly necessary**
Process Classification									
⇨ Preparation	X	X		X	X	X	X	X	**X**
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The strategy was 100% outsourcing of IT.								
Contract B:	Strategy as description of the current situation makes sense, if possible.								
Contract C:	The ITO has developed itself from a pure methodology outsourcing to an ITO. Such a common developing plan needs management commitment from the beginning.								
Contract D:	The further outsourcing away from the first vendor to the subsequent vendor was primarily done to make “a shot across the bows” of the first vendor in order to improve the quality of performance and service of remaining products and to lower costs.								
Contract E:	The decision for ITO of the standard system was made from a strategic point of view.								
Contract G:	The foundation of competence centres in the bank group led to a central provision of the IT interests by an IT vendor. Depending on the business requirements it is decided whether it makes sense to implement these requirements by this IT vendor or by the bank units themselves. A structured approach within the scope of ITOs makes sure that all necessary arrangements are made. The exact consideration with which ITOs it is possible to achieve advantages for the enterprise is an important success factor.								
Contract H:	An ITO strategy assumes the possibility of longer-term thinking and action. Also the bank has written down a strategy, but this could not be realised because of constant changes of basic conditions. However, keeping the ITO running could be managed.								

An unequivocal and detailed outsourcing strategy is evaluated as compulsory for ITO success in cases A, D, E, F and G. In case A, the strategy was a 100% ITO of the IT in a service society of the bank. In case D, the motivation of the further outsourcing from the first to a subsequent vendor was to put the first vendor under pressure in order to improve the quality and service of the IT functions remaining there and to lower costs. Case G points out the fact that the exact consideration with which ITO advantages can be achieved for the enterprise is an important success factor and that a structured approach makes sure that all necessary arrangements are made. In cases B and H, an outsourcing strategy is seen as partly necessary for the achievement of ITO success. Case B notes that a strategy is judged as meaningful in terms of a description of the current situation. In case H, the ITO strategy once laid down became obsolete because of regularly changing basic conditions. Nevertheless, this did not affect the progress of the ITO. In case C, an outsourcing strategy is not evaluated as relevant for success, because the ITO developed itself from a methodology ITO to an ITO.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The objective for the ITO was founded understandably in all cases (see case studies). Nevertheless, on the basis of changing basic conditions, long-term sourcing planning is not always possible. For example, the original objectives of the ITO can change. Case H evaluates the success factor as partly relevant and points to changed basic conditions which made the conversion of the original ITO strategy not possible. Nevertheless, this did not lead to the breakdown of the ITO. Also case B evaluates the success factor as partly relevant and rates a present oriented IT strategy as meaningful. In case C (assessment “no”), an ITO was not planned but has developed in the course of the outsourcing project. Although the definition of an ITO strategy in terms of "a plan of what IT to source, how and why currently and in the future" in the forefront of an ITO seems sensible to generate advantages for the enterprise, this ITO strategy is not compulsory for the continuity of an ITO in case of changes. It also needs to be considered that a backsourcing or further outsourcing is connected with a high time and cost expenditure, by which an ITO cannot be simply cancelled when ITO objectives change. In this case, the quality of the vendor performance could move in the foreground of the vendor assessment. It appears rather important that the ITO brings an advantage compared with the internal production of IT goods and service at its start. The relevance of the success factor "standardised, structured and detailed ITO process" cannot be judged on the basis of the given data because of missing information.		

Discussion

ITO studies based on long-term ITO cases
Gerigk (1997, p. 170) also points out the fact that enterprises with a clear IT and ITO Strategy were more satisfied with their outsourcing.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

An outsourcing strategy is also evaluated in other studies as success relevant (Willcocks, Fitzgerald and Feeny, 1995, p. 7; Willcocks and Fitzgerald, 1994, p. 312-313; De Looff, 1995, p. 295; DiamondCluster, 2005, p. 6; Feeny and Willcocks, 1998, p.12). A structured approach for the realisation of an ITO, from the planning phase until the post-contract management, is seen as an important part of the outsourcing strategy (as is a tendering, the contract conclusion, the vendor management being done, etc.) (Feeny and Willcocks, 1998, p. 12; Willcocks, Fitzgerald and Feeny, 1995, p. 7); Cullen et al., 2005, p. 242, 229; Landis et al., 2005, p. 24, 19; Willcocks and Fitzgerald, 1994, p. 312; Lacity and Willcocks, 2001, p. xiii).

Success Factor Category: Strategy
Success Factor: "Business – IT – Alignment"
IT(O) objectives must be aligned and must comply with business objectives and IT(O) capability can be used as an innovative source in terms of which business improvements technology can be enabled.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	No	Yes	Yes / No	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory Partly necessary		Mandatory Partly necessary	Mandatory	Mandatory	Mandatory	Partly necessary	**Partly necessary**
Process Classification									
⇨ Preparation	X	X		X	X	X	X	X	**X**
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract B:	To IT(0) as an innovative source (partly necessary): A standard core banking application is "IT of the pole". But even here innovative products can be implemented to certain degrees which are of interest to the majority of IT users. A technology-sided innovation leadership is therefore not necessary. Big product-sided innovations must be implemented outside standard applications - internally or externally - individually.								
Contract C:	Legal requirement (Basel II).								
Contract D:	To IT(0) as an innovative source (partly necessary): The vendor has know-how from experience with other clients and could present if necessary innovative proposals. Nevertheless, this know-how should exist with the IT of the bank by which a competitive situation arises between the vendor and the IT of the bank.								
Contract E:	Yes: ITO objectives must comply with business objectives. No: IT as an innovative source does not apply in this case, because it concerns standard software. Here certain demands exist on the client side which "standard software must be able to cover".								
Contract H:	The business and IT objectives change constantly because of volatile basic conditions. Strategic decisions must be made IT sided. Thus also the decision for the ITO was made in the past, which is still running.								

In cases A, F and G the business-IT alignment is classified as compulsory for ITO success. In cases B, D and E the derivation of the IT and ITO objectives from the business objectives is also classified as mandatory. Nevertheless, the use of ITO as an innovative source is limited. In cases B and E, standard software is covered externally. Case B points to the fact that big bank product innovations must be implemented beyond standard software - internally or externally - individually. In case D, a competitive situation between the vendor and the IT units of the outsourcing bank is perceived by the bank, which prevents the use of the vendor as an innovative source. Case H evaluates a business-IT-alignment as partly necessary for the ITO success, because the business and IT objectives change, on account of volatile basic conditions, constantly. The outsourcing originally carried out on the basis of other objectives goes on despite this. In case C, a legal requirement (Basel II) is moved within the scope of the ITO, hence this ITO is not dependent directly on business and IT objectives, which makes the success factor not relevant.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The support of the business objectives by an ITO is necessary to guarantee the competitiveness of the bank also in future. Case C is an exception, as the fulfilment of legal demands was the purpose of the ITO. Nevertheless, objectives can change because of volatile basic conditions. Case H evaluates the success factor as partly relevant and points to changed basic conditions which made the conversion of the ITO strategy not possible (see success factor “ITO strategy”). But the change of the planning base did not lead to a breakdown of this ITO. Although the adjustment of the ITO objectives to business and IT objectives in the preparation phase of the ITO seems direction-giving, in the case of changes it is not mandatory for the continuity of the ITO. It is also to be considered that a backsourcing or further outsourcing is connected with a high time and cost expenditure by which an ITO cannot be simply cancelled. In this case the vendor performance presumably moves in the foreground of the vendor assessment. To use ITO as an innovative source has its limits. The implementation of innovations in standard applications (cases B and E) is not possible (case E) or restricted (case B). The use of standard applications complicates the differentiation of the competitors in the market. Innovations which should serve for that are to be moved - externally or internally – individually, according to case B. Besides, the innovation strength of the vendor can be perceived as a competition by the IT department of the outsourcing bank and hence cannot be promoted actively (case D).		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

The alignment of the outsourcing objectives with IT and business objectives is evaluated by several studies as relevant for the ITO success (Willcocks, Fitzgerald and Feeny, 1995, p. 7; van Lier and Dohmen, 2007, p. 3444, 3437-3438; Huber, 1993, pp. 126-127; Feeny and Willcocks, 1998, p.12). Feeny and Willcocks (1998, p. 12) describe, in addition, the use of technology as an innovative source by participation of the IT in business development initiatives. Remarks regarding the success relevance of changing objectives or regarding a limited possibility to use ITO as an innovative source cannot be found in these studies. Hence, a further discussion in relation to the results of this thesis is not possible.

Success Factor Category: Strategy
Success Factor: ITO objectives
The description of the objectives connected with ITO must be realistic, detailed and clear for all people involved on the client and vendor sides. With the setting of ITO objectives, the conflict of objectives (e.g. cost/service trade-off) must be avoided.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Not assessable	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation	X	X	X	X	X	X	X		**X**
⇨ Selection					X				
⇨ Contract					X				
⇨ Transition					X				
⇨ Execution					X				
⇨ Post-deal									
Comments									
Contract A:	The objective(s) were refined in a steering committee. Agreed higher objectives of the outsourcing between client and vendor are more important than service level agreements (SLAs).								
Contract B:	Investments must be founded.								
Contract D:	A rise of the quality with concurrent lowering of the costs was no aim conflict with the new vendor. This was guaranteed in particular by detailed SLAs.								
Contract E:	The objectives should be defined in the preparation phase, fixed in the contract and should be communicated.								
Contract H:	Not recorded. The ITO runs, nevertheless.								

In cases A, B, C, D, E, F and G a realistic, clear and detailed naming of the aims linked with the ITO and the consideration of aim conflicts is judged as mandatory at the beginning of the ITO. Case B explains this with the fact that investment decisions must be founded. Case E points out the fact that the objectives need to be defined in the preparation phase, need to be fixed in the contract and need to be communicated. In case A, the ITO objectives were fixed in a steering committee. Case A believes that the agreement of the higher objectives of the ITO is more important for the ITO success than service level agreements. Concerning aim con-

flicts is to be mentioned that in the case D a rise of the quality posed no problem with concurrent lowering of the costs by means of detailed SLAs. In case H, the aims of the ITO were never laid down in writing. In this case the success factor cannot be evaluated.

Analysis and results

Relevance: Yes	**Weighting:** **Partly necessary**	**Process classification:** 
The definition of the objectives linked with the ITO (in or beyond the contract) and the avoidance of aim conflicts is relevant for success, because only if the objectives are known can the client and vendor try to achieve these and support with it the achievement of the client's business objectives. Basically, this can be assumed from the fact that the motivation for the ITO is to be demonstrated to the management anyway in order to receive an approval for the ITO in view of the originating capital costs (see remark case B). Nevertheless, by volatile basic conditions the original ITO objectives can change, as in case H (relevance: not able to be evaluated) see success factor "ITO strategy"). Hence, the definition of the ITO objectives at the beginning of the ITO appears to be direction giving. However, it does not appear as mandatory for ITO success. In this case, the quality of the vendor performance becomes presumably more important. The ITO objectives are to be defined in the preparation phase. The regular communication of the ITO objectives as mentioned in case E is part of the success factor "communication".		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, p. 309, 312) have focused on the investigation of application outsourcing cases (system support) and also found out that vague and unrealistic objectives and, besides, missing knowledge about actual IT needs, have caused an ITO, exclusively done to achieve cost reduction, to fail. A clear objective and definition of the IT needs were identified as major success factors. Also DiamondCluster (2005, p. 6, 19) mentions clear and realistic aim definitions as a success factor and rejects ITOs purely motivated by cost reasons. Willcocks, Fitzgerald and Feeny (1995, p. 74) note that the cost advantages of outsourcing projects must be significant to compensate for the margin of the vendor. Internal IT units can often achieve the desired cost reductions as well by realisation of cost reduction measures (as, for example, consolidation of computer centres, cost control, etc.).

Success Factor Category: Strategy
Success Factor: IT functions
Do not outsource: IT management, vendor management, IT functions highly interconnected, problematic, or which are based on a fast changing technology, systems integration, support of critical systems, ability to discuss architecture evolution with vendors.

Summary of case studies

	Contract A		**Contract B**		**Contract C**	**Contract D**			**Contract E**		**Contract F**		**Contract G**		**Contract H**		**Result**	
Relevance	Yes	N/A	Yes	No	Yes	Yes	No	N/A	Yes	N/A	Yes	No	Yes	No	Yes	No	**Yes**	
Weighting	Mandatory		Mandatory		Mandatory	Mandatory			Mandatory		Mandatory		Mandatory		Mandatory		**Mandatory**	**Partly necessary**
Process Classification																		
⇨ Preparation	X		X		X	X			X		X		X		X		**X**	
⇨ Selection																		
⇨ Contract																		
⇨ Transition																		
⇨ Execution																		
⇨ Post-deal																		
Comments																		
Contract A:	Yes: IT management; Vendor management; IT functions highly interconnected or problematic: The 100% ITO enables an encapsulation of complexity at the vendor side; Ability to discuss architecture evolution with vendors: The judgement of the architecture evolution will increasingly develop into a problem of IT control, because through ITO IT knowledge gets successively lost as the employees develop towards banking business experts. This makes the control of the architecture evolution increasingly difficult, which can cause (if necessary) a dependence situation. Not assessable: The following IT functions cannot be assessed, but are rated basically as suitable for ITO: Fast changing technology as this allows a quick change between IT service providers, systems integration, support of critical systems.																	
Contract B:	Yes: IT management; Vendor management; Systems highly interconnected: Very interconnected IT functions are encapsulated by the external sourcing of a core banking application, which is why the external sourcing poses no problem. The present core banking application could not illustrate governance, registration and accountancy, nevertheless these functions could be operated easily by a bank of the same bank group on own applications, but on the same machines as the core banking application. No: The necessary functionality must be able to be sourced at a reasonable price. The client does not care how this is realised IT sided; a quickly changing technology is an argument for outsourcing, because the investments necessary for it can be divided with other mandators and then less costs originate with the outsourcer by these scale effect. Support of critical systems: the core bank ing system was outsourced.																	

Contract C:	These IT functions were not outsourced. The system integration in the application landscape of the bank was carried out by the bank itself.
Contract D:	Yes: IT management; Vendor management; IT functions highly interconnected or problematic No: The business functionality is important, the technical conversion (platform, etc.) does not matter from the client's point of view Not assessable: IT functions with fast changing technology; system integration; Support of critical systems
Contract E:	Yes: IT management; vendor management Not assessable: Very interconnected / problematic IT functions; IT functions with strongly changing technology; system integration; support of critical systems; ability to discuss architecture evolution with vendor
Contract F:	Yes: vendor management No: Rest; core banking system is sourced externally. Inter-connections exist to the application landscape of the parent bank in the form of a "hot interface". The vendor bank worries about technology interests
Contract G:	Yes: Vendor management No: Rest, because complete ITO to a group-internal IT vendor
Contract H:	Yes: IT management (e.g. IT architecture is given by the bank for all locations / daughters); vendor management; support of critical systems (treasury system is pursued by the bank) No (because of a nearly 100% ITO): Very inter-connected / problematic IT functions; IT functions with strongly changing technology; system integration

Vendor management: The vendor management is classified in all cases A, B, C, D, E, F, G and H as not outsourceable.
IT management: The IT management was outsourced in cases F and G, and was done in cases A, B, C, D, E and H by the outsourcing bank.
Highly interconnected IT functions: Highly interconnected IT functions were evaluated as not able to be outsourced in cases A, B, C, and D. Nevertheless, in case A it was mentioned that the 100% ITO allowed the encapsulation of the complexity at the vendor side, and with it an ITO. Also case B refers to the encapsulation of IT complexity by the external sourcing of a complete core banking system. Cases F, G and H believe that, with the outsourcing of the core banking system (case F) or the complete ITO (cases G and H), interconnected functions were outsourced successfully.
Critical systems: The ITO of critical systems is judged as not possible by cases C and H. Case H still pursues, for example, the treasury system itself. Case B believes that with the ITO of the core banking system a critical system was outsourced. And in cases A and G a complete ITO to a group-internal IT vendor is given.
IT functions with a volatile technological base: A quickly changing technology was classified as a reason for an ITO (cases A, B, F, G, H).
System integration, ability to discuss architecture evolution with vendors: Cases B, D and F believe that technological interests are to be co-ordinated by the vendor. In case G, these functions were outsourced in the course of the complete ITO. In case H, the IT architecture is given by the outsourcing bank. Nevertheless, system integration is valid as able to be outsourced. Case A explains that architecture knowledge gets increasingly lost in the course of the ITO, which leads to control problems. In case C, the system integration of the outsourced application in the application landscape of the outsourcing bank was carried out by the outsourcing bank.

Analysis and results

Relevance: Yes	**Weighting: Mandatory** **Partly necessary**	**Process classification:**	

In the preparation phase of the ITO the kind of ITO is to be decided (see Figure 2, page 14 and Table 1, page 15) which also includes the choice of the IT function to be outsourced:

Vendor management is valid correspondently as not able to be outsourced and, hence, is classified as compulsory for the achievement of ITO success.
With all other IT functions no uniform opinion exists.
IT management: The IT management was transferred only in case of the internal ITOs F and G on the vendor. Because of the capital interweaving between client and vendor a common aspiration exists, presumably, in these cases on pursuing the aims of the bank group. The aim conflict usually existing in an external contract relation between client (cost minimisation) and vendor (profit maximisation) could be weakened here. In the internal outsourcing case H, different cultures cause a strict control of the vendor by the outsourcing bank, which could explain the settlement of the IT management at the outsourcing bank. Hence, the ITO of the IT management seems to be possible in the case of internal ITOs with a similar cultural background.
Very interconnected IT functions: The ITO of much interconnected IT functions is not classified as recommendable, unless the complexity can be encapsulated on the vendor side (see cases A, B, F, G and H).
Critical systems: The complete ITOs in cases A and G are internal ITOs. By the capital interweaving enough influencing possibility on the vendor could exist here to be able to operate also critical systems externally. In case H, an internal ITO is also given. Nevertheless, the operation of critical systems (treasury) is done by the outsourcing bank. This can be reasoned with an inefficient vendor and with a lack of the possibility to influence the vendor (see case study). Core banking systems can be judged as business-critical systems (see remark in case B). This study shows that core banking systems can be outsourced successfully and in the long term (cases A, B, F, G, H). These cases concern (internal or external) ITOs within a banking group. Hence, the successful operation of critical systems by capable vendors of a banking group seems to be possible.
Systems integration: In cases B, F, G and H system integration is classified as able to be outsourced. In cases A, D and E the question was rated as not valuable. However, case A tends toward ability to be outsourced. In case C, system integration was not outsourced, which is why the success factor was rated as relevant. To sum up, the possibility to successfully outsource system integration can be assumed.
Ability to discuss architecture evolution with vendors: In cases B, D, F and G, one leaves the responsibility for the technological conversion of the ITO successfully to the vendor. Case A believes that this ability should not be outsourced and, besides, points to existing control problems due to a lack of technical knowledge and to a dependence situation perhaps resulting from it. Also in case H this ability is not classified as able to be outsourced. Here the IT architecture is given by the outsourcing bank, as cultural differences demand strict controls. In case C this ability was not outsourced. The different statements cannot be explained by underlying ITO options or ITO objectives. To sum up, it remains to ascertain that at least the existence of sufficient technical knowledge (see success factor “Client capability: IT knowledge”) is recommended on the client side for the judgement of the technical conversion of the outsourced IT function by the vendor.

The results of the IT function “systems integration” are finally not considered in the thesis, as they are based on assumptions of the interview partners. The investigated cases contained no system integration. And the IT functions “IT management” and “Ability to discuss architecture evolution with vendors” are also not integrated in the thesis results, as the main focus was laid on application outsourcing; these functions concern general IT functions.

Discussion

ITO studies based on long-term ITO cases

The studies of Lacity and Hirschheim (1993, p. 85) and Lacity et al. (1996, p. 24, 19-20) come to the conclusion that IT management cannot be outsourced. Lacity et al. (1996, p. 24, 19-20) define IT management with: strategic planning, market research to the identification of new technologies for the solution of business requirements, development of applications specific to business and support of critical systems. A discussion in relation to the results of this thesis is not possible, because in both cases no detailed information about capital interweaving or cultural differences between client and vendor were provided.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

The exercise of an "informed buyer role" as well as the monitoring of the contract may not be outsourced according to the study of Willcocks, Lacity and Fitzgerald (1995, p. 339). This coincides with the result of this thesis which classifies the vendor management as not able to be outsourced.
The work of Willcocks and Fitzgerald (1994, p. VII) focused on the investigation of application outsourcing (system support) with the result that IT management and IT strategy should not be outsourced. Also Huber (1993, p. 129), Willcocks, Lacity and Fitzgerald (1995, p. 339) as well as Willcocks, Fitzgerald and Feeny (1995, p. 6) came to the conclusion that it is not recommended to outsource the control over IT management and IT strategy. A comparison with the result of this thesis is not possible, because in these cases no detailed information about the capital interweaving or cultural difference between client and vendor were provided.
Willcocks and Fitzgerald (1994, p. 312) focused on the investigation of application outsourcing and found out by analogy with this thesis that system complexity and the absence of clear system borders are failure factors with ITOs. The studies of Aubert (1998, pp. 689-690, 687; 1999, p. 3) also focused on application outsourcing cases. He found that, with big dependence of the system to be outsourced to other systems, service deterioration can occur, because the identification of problem sources is complicated. Also De Looff (1995, p. 294) and Willcocks, Fitzgerald and Feeny (1995, p. 20, 10, 11) pointed to the need for low system interweaving. The possibility of a successful ITO by encapsulation of the complexity on the vendor side (see the results of this study) was not mentioned by these authors.

Lacity and Willcocks (2009d, pp. 341-347) also came to the conclusion in their thesis that technical knowledge may not be outsourced to be able to judge vendor data and vendor performance constantly. Also the control of the architecture design should not be outsourced, according to the opinion of Lacity and Willcocks (2009d, pp. 341-347). A further comparison with the results of this thesis is not possible, because in these studies no information was provided on capital interweaving between client and vendor.

System integration was classified as not able to be outsourced by Willcocks, Lacity and Fitzgerald (1995, p. 339) and Willcocks, Fitzgerald and Feeny (1995, p. 6). A comparison with the results of this thesis is not possible, because in these cases no detailed information about the capital interweaving between client and vendor was provided.

Success Factor Category: Strategy
Success Factor: Multiple vendors
The use of multiple vendors for one IT function to minimise vendor dependency is recommended for ITO success.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	**Not assessable**
Weighting									
Process classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	With use of several vendors, the control costs would become too high. Trust prevents opportunistic behaviour of the vendor. With missing trust, the ITO contract must be questioned.								
Contract D:	The use of several vendors would result in more expenditure by governance, failure search, etc. => costs would rise.								
Contract F:	One vendor for the core banking system.								
Contract G:	Complete ITO to a group-internal IT vendor.								
Contract H:	Nearly 100% ITO to one IT vendor.								

In the examined cases the outsourced IT function was awarded to one vendor, hence the success factor cannot be evaluated. The use of several IT vendors is seen as more disadvantageous, because this would lead to higher governance and control and, besides, the failure search would be more complicated.

Success Factor Category: Strategy
Success Factor: Joint projects
Formation of joint projects with other ITO clients to positively influence ITO cost structures.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Yes	Yes	Not assessable	Not assessable	Yes	Not assessable	Yes	**Yes**
Weighting		Partly necessary	Partly necessary			Partly necessary		Partly necessary	**Partly Necessary**
Process Classification									
⇨ Preparation		X	X			X		X	**X**
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract B:	An IT partnership was concluded with a bank of the same bank group, because the core banking system could not illustrate control, registration and accountancy. This is of advantage for small banks as cost-effects can be realised based on synergetic effects.								
Contract C:	The IT vendor is a joint venture with banks of the same bank group. Thereby cost could be divided and distributed know-how could be utilised. In addition, the application has been offered to third parties since 2007, which has led to further cost reduction.								
Contract E:	Potential would exist.								
Contract F:	The development expenses for country-specific features could be divided between European client banks with establishments in Italy. If the cost / performance relation were also satisfactory without this cost factor, "common projects" would not be necessary.								
Contract G:	Complete ITO to a group-internal IT vendor.								
Contract H:	IT vendor (100% of daughter) serves the bank daughters still after one external bank (synergetic effects, cost factor). If cost / performance relation fits, not necessary.								

In cases A, D, E and G no common projects were carried out with other ITO clients, hence the success factor cannot be evaluated in these cases. In cases B, C, F and H common projects were evaluated as partly necessary for ITO success. In case B, an IT partnership was concluded with a bank of the same bank group. Because the outsourced core banking system could not illustrate the functions control, registration and accountancy, this resulted in cost advantages. In case C, the IT vendor was founded by several banks of the same bank group as a joint venture by which costs could be divided and distributed know-how be utilised. In case F, development expenses in the core banking system for the conversion of country-specific features for Italy were divided with other banks. And in case H the IT vendor, as 100% daughter of the outsourcing bank, also offers her services externally, which has led to synergetic effects regarding costs.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
In the preparation phase of the ITO the kind of ITO is to be decided (see Figure 2, page 14 and Table 1, page 15), which also includes the decision about the number of partners working together on the client and vendor side. In cases B, C, F and H, common projects were carried out successfully in the form of IT partnerships and a joint venture with other banks. Nevertheless, if the cost / performance relation is also competitive with individual ITOs, common projects are not compulsory (see remarks in cases F and H). For smaller banks partnerships appear to be a meaningful solution regarding costs (see case B). Cases A, D, E and G are not common projects. Nevertheless, they are classified as successful (satisfaction assessment between 5 and 7, see Table 36, page 121).		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Heinzl (1993, p. 184, 186, 193) also comes to the conclusion that common projects with other enterprises lead to cost reductions for the outsourcing enterprise. The cost / performance of the ITO as a decisive factor for or against the realisation of common projects were not mentioned in the study of Heinzl. Hence, a comparison with the results of this thesis is not possible.

Success Factor Category: Strategy
Success Factor: Selective ITO
Selective rather than total ITO. Long-term total ITO is only for companies highly experienced in ITO and in managing major, long-term relationships.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	No	Yes	Yes	Yes	Yes	No	No	No	**No**
Weighting		Partly necessary	Partly necessary	Mandatory	Mandatory				
Process Classification									
⇨ Preparation		X	X	X	X				
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The service enterprise of the bank has implemented successfully a 100% outsourcing in the form of a “big-bang” approach.								
Contract B:	The applications were completely outsourced; the decentralised network is provided and operated by the bank itself.								
Contract C:	In particular with an outsourcing of a specified service it is essential that the external performance fits well with the outsourcing enterprise. This is only possible if one outsources deliberately only the (part) processes which can be better done by a vendor, e.g. because of synergies. Those components which are to be tuned individually to the needs of the house (e.g. output interfaces, post-processings, realisation of roll-out and trainings) should be better done by the outsourcing enterprise.								
Contract D:	Business-critical IT functions, or IT functions which serve in the differentiation from competitors, may not be outsourced.								
Contract F:	Complete external sourcing with minimum local infrastructure.								
Contract G:	Complete ITO to a group-internal IT vendor.								
Contract H:	Nearly 100% ITO. Some services were covered already by this IT vendor in the past. Then the strategic decision was made to buy this IT vendor and to adapt it to the needs of the bank group in order to operate successively all applications there.								

In cases A, F, G and H a selective ITO is not classified as relevant for success, because here complete ITOs are given. In cases B, C, D and E selective ITOs are given. Here a selective ITO is partially evaluated as mandatory (cases D and E) and partially as partly necessary (cases B and C). Case C points to the fact that only processes should be outsourced which can be better done by a vendor on the basis of synergetic effects. Individual demands should be moved inside. Case D believes that business-critical IT functions, or IT functions which serve for the differentiation of competitors, may not be outsourced.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
In the preparation phase of the ITO the kind of ITO is to be decided (see Figure 2, page 14 and Table 1, page 15), which also includes the decision about the extent of the ITO. Because successful complete ITOs exist, the supposition is obvious that a selective ITO is not a mandatory success factor. These complete ITOs concern internal ITOs coming along with high possibilities of the client influencing the vendor.		

Discussion

ITO studies based on long-term ITO cases
Lacity et al. (1996, pp. 15-17, 24) discovered problems with complete ITOs and recommended that this is only a possible option for ITO-experienced enterprises.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Poppo and Lacity (2009, p.100) found out that enterprises were more contented with the result of selective ITOs than enterprises with complete ITOs. Also the study of Lacity and Willcocks (1998, p. 365, 370-371) came to the conclusion that the expected cost reductions were achieved with higher likelihood in case of selective instead of comprehensive outsourcing. Lacity and Willcocks (2001, p.xiii, 338) explained that an “all or nothing” outsourcing strategy is a failure factor.

Lacity et al. (1996, pp. 15-17, 24) point to the fact that a high degree of experience is necessary for comprehensive ITOs. Hence, the divergence between the results of the thesis and studies cited above could be founded on the good individual experience and abilities of the actors in the examined complete ITO cases of this thesis.

Success Factor Category: Strategy
Success Factor: Incremental ITO
Incremental approach while outsourcing IT to gain experience and to keep up-to-date with sourcing practices.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	No	Yes	Yes	Yes	Yes	No	No	Yes	**No**
Weighting		Nice to have	Mandatory	Mandatory	Mandatory			Mandatory	
Process Classification									
⇨ Preparation		X	X	X	X			X	
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The service enterprise of the bank has implemented successfully a 100% outsourcing in the form of a “big-bang” approach.								
Contract B:	The risk is reduced with it.								
Contract C:	Implementation has occurred step by step (1. concept => 2. IT implementation)								
Contract E:	Several applications were outsourced to this vendor. This occurred successively.								
Contract F:	A "big-bang" approach with the foundation of a sales subsidiary of the bank in Italy.								
Contract G:	Complete ITO "big-bang" to a group-internal IT vendor.								
Contract H:	Some services were covered already by this IT vendor in the past. Then the strategic decision was made to buy this IT vendor and to adapt it to the needs of the banking group in order to operate successively all applications there.								

In cases A, F and G an incremental ITO is not classified as relevant to success, because in these cases complete ITOs were carried out in a “big bang” approach. In the case B, an incremental ITO is evaluated as "nice to have", because the risk can be reduced with it. In cases C, D, E and H it was outsourced incrementally and this was evaluated as mandatory for ITO success in these cases.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
In the preparation phase of the ITO, the kind of ITO is to be decided (see Figure 2, page 14 and Table 1, page 15), which also includes the decision about the implementation approach. Because successful complete ITOs were carried out in a "big-bang" approach, the supposition is obvious that an incremental approach is not a mandatory success factor. However, this can be risk-minimising, because experiences can be used in subsequent ITOs. The complete ITO cases implemented in a "big-bang" approach are internal ITOs coming along with high possibilities of the client influencing the vendor.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
In contrast to the results of this thesis, Willcocks, Fitzgerald and Feeny (1995, p. 21) recommend an incremental approach, even if a complete ITO is the objective. Lacity and Willcocks (2009d, p. 360) also recommend incremental outsourcing in order to collect experiences with ITOs and to remain on the current state of the art in sourcing practices. A further comparison with the results of this thesis is not possible, because these studies provide no information on capital interweaving between client and vendor.

Success Factor Category: Strategy
Success Factor: Contract duration (3-5 years)
Shorter term instead of long-term contracts (approximately 3-5 years) as IT requirements cannot be predicted for a long time. Shorter term contracts avoid costly contractual exceptions, ensure competitive prices and motivate vendor performance because after contract expiration the client may switch to another vendor if it is not satisfied. But the contract duration should be long enough to achieve operational cost savings.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	No	No	Yes	No	No	No	Not assessable	No	**Yes**
Weighting			Partly necessary						**Partly Necessary**
Process Classification									
⇨ Preparation			X						**X**
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The contract duration is unlimited with a cancellation period of 2 years.								
Contract B:	Unlimited contract term with a cancellation period of 3 years (= necessary time for migration to alternative solution).								
Contract C:	5-year minimum contract term with boundless prolongation, cancellation period 1 year. The contract term must be long enough to achieve a cost effect. During the duration of the cooperation the costs for this ITO have dropped by approx. 10% every year (curve of experience), from at first 4 on currently approx. 2.5 million €.								
Contract D:	Contract 1: Boundless contract term with cancellation period of 1 year. Contract 2 (new vendor): Boundless contract term with cancellation period of 3 months.								
Contract E:	Contract was closed for unlimited time with a cancellation period of 1 year. Thereby exit possibilities exist in the foreseeable future.								
Contract F:	Contract 1: 10 years Contract 2 (prolongation): 7 years								
Contract G:	Boundless contract term with notice possibility.								
Contract H:	Contract term is unlimited with notice possibility.								

In cases A, B, D, E, G and H a contract term of 3-5 years is not looked upon as relevant to success, because here a boundless contract term with notice possibility is given. In case F, even longer contract terms of 7 and 10 years were chosen. Case C has a minimum contract term and a boundless prolongation possibility with a cancellation period of 1 year. Case C evaluates the success factor as "partly necessary" and points to the fact that the contract term must be long enough to achieve a cost effect within the scope of the ITO. During the term of the ITO the costs per year have dropped by approx. 10%.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
In the preparation phase of the ITO the kind of ITO is to be decided (see Figure 2, page 14 and Table 1, page 15), which also includes the decision about the ITO contract term. In 6 cases an unlimited contract term with notice possibility is given. The topical contract terms are 16, 17, 4.5, 2 and 7 years. In case F, even longer contract terms of 7 and 10 years were chosen. Hence, the supposition is obvious that a shorter contract term of 3-5 years is not a mandatory success factor. Case C points to the fact that the contract term must be long enough, depending on the outsourced IT function, to lift cost effects. Hence, the success factor is judged as partly relevant.		

Discussion

ITO studies based on long-term ITO cases

Lacity et al. (1996, pp. 15-17, 24) point to the fact that enterprises with long-term contracts had problems, and, hence, recommend long-term, ITOs with a high degree only to enterprises with a lot of ITO experience.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

Willcocks and Fitzgerald (1994, p. 312) focused themselves on the investigation of application outsourcing and evaluated long-term outsourcing contracts as a failure factor. Lacity and Willcocks (2001, p. 338) classify a contract term of 3-5 years as "best practice" within the scope of ITO. The study of Lacity and Willcocks (1998, p. 365, 377-379) showed that enterprises with shorter-term contracts achieved the expected cost reductions with higher likelihood than enterprises with long-term contracts. Three reasons were stated for this: 1) Requirements cannot be predicted for a period > 3 years and vendors often try to make money with changed requirements; 2) with shorter-term contracts a market price level can be guaranteed; 3) shorter-term contracts work by motivating the vendor, because the client could change to another vendor after contract expiration in case of dissatisfaction. Also Landis et al. (2005, p. 24) recommend concluding short-term contracts to maintain flexibility and to avoid indifference on the vendor side. The divergence of the results of this thesis could be founded on the different types of ITOs. The case studies within the scope of this thesis concern, with the exception of case D, internal or external ITOs to a vendor of the banking group. In case D, a favoured external vendor (preferred partner) was instructed. In these company groups the conditions of cooperation might be not comparable with enterprises purely operating in the market. Fritsch and Wahrenburg (2008, p. 8) investigated business process outsourcing cases and came to the conclusion that the cost savings rise with longer contract terms. This coincides with the results of this thesis (see case C).

Success Factor Category: Strategy
Success Factor: Strategic view on IT functions
Companies outsource core functions more prudently than non-core functions, which positively affects outsourcing success.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Yes	Not assessable	Not assessable	Yes	Yes	Yes	**No**
Weighting			Partly necessary			Partly necessary	Partly necessary	Partly necessary	
Process Classification									
⇨ Preparation			X			X	X	X	
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The bank looked at the overall IT not as a core competence and, hence, outsourced it completely to the bank's service enterprise. The service enterprise has successfully outsourced the core banking system to a vendor.								
Contract B:	IT in general is looked upon as a "commodity".								
Contract C:	According to §25a KWG essential ITO of a new legal requirement.								
Contract E:	Standard application was not classified as a core system.								
Contract F:	Successful ITO of the core banking system = "core".								
Contract G:	Within the scope of the complete ITO also core IT functions were outsourced.								
Contract H:	The outsourcing of core IT functions is certainly carried out with bigger effort on account of their strategic significance, e.g. concerning planning and resources, than the ITO of commodity IT functions. Both can be pursued successfully externally.								

In cases A, B and E the success factor cannot be evaluated, because the outsourced IT function is not considered as a core function. In cases C, F, G and H the success factor is evaluated as partly necessary. In case F the outsourced core banking system is evaluated as a core function. In case G a complete ITO of core and not core functions took place.

Case H points to the fact that core IT functions are carried out with greater effort on account of their strategic significance than the ITO of commodity IT functions. Both can be pursued successfully externally.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
It is recognisable that the judgement of which IT functions are seen as core functions and which as commodity functions differs between the banks. For example, the outsourced core banking system is looked upon as a commodity in cases A and B. In case F, the core banking system is seen as a core IT function. Commodities as well as core IT functions were outsourced successfully; this demonstrates that this success factor is not mandatory for the achievement of ITO success. Obviously enough care was displayed with the ITO of the commodity functions.		

Discussion

ITO studies based on long-term ITO cases
Saunders et al. (1997, p. 77) point to the fact that ITOs were most successful if the outsourced IT was looked upon as a core function.
In this thesis cases were investigated, and in those core functions as well as commodity functions were successfully outsourced.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Strategy
Success Factor: Renegotiation and restructuring of ITO contract / Vendor switching / Backsourcing
Keeping the ability to backsource or to switch to other vendors. Before choosing these possibilities, existing contracts are renegotiated and restructured.

Summary of case studies

	Contract A		**Contract B**		**Contract C**	**Contract D**	**Contract E**		**Contract F**	**Contract G**	**Contract H**		**Result**	
Relevance	Yes	No	Yes	No	Yes	Yes	Yes		Yes	Yes	Yes	No	**Yes**	
Weighting	Mandatory		Mandatory		Mandatory	Mandatory	Man-datory	Partly neces-sary	Mandatory	Mandatory	Mandatory		**Partly nec-essary**	**Man-datory**
Process Classification														
⇨ Preparation														
⇨ Selection														
⇨ Contract														
⇨ Transition														
⇨ Execution	X		X		X	X	X		X	X	X		**X**	
⇨ Post-deal														
Comments														
Contract A:	Yes: Ability to switch to other vendors; renegotiation and restructuring of existing contracts before switching to another vendor. No: ability to backsource.													
Contract B:	Backsourcing: no. Further outsourcing and preceding negotiations / restructuring of existing contracts: yes.													
Contract C:	With notice of the contractual relationship every state bank receives a system documentation which allows the sole company of the software or the assignment to a third party.													
Contract D:	In this case a further outsourcing has taken place. The core lessons learnt from the experience gained with the first vendor were: the securing of market justice.													
Contract E:	Compulsory: further outsourcing; negotiations / restructuring of existing contracts. Partial: backsourcing.													
Contract F:	Because the vendor bank has migrated to another core banking system, a solution must be found for the establishment of the outsourcing bank in Italy. The backsourcing to the parent bank is discussed topically. In case of a decision for the present core banking system it is an advantage if both options (backsourcing and further outsourcing) are possible.													
Contract G:	Exit strategy was provided.													
Contract H:	Yes: further outsourcing. No: backsourcing. In particular in the case of core IT functions it is tried to renegotiate and restructure existing contracts, because high costs are connected with a notice of the existing contract and a further outsourcing.													

In cases A, B and H the possibility of further outsourcing is judged as compulsory, nevertheless, not the possibility for backsourcing. In case E, the possibility for backsourcing is judged as partly necessary. All the other cases look at the possibility of back- or further outsourcing as compulsory. Before taking the exit possibility, post-negotiations and restructuring of existing contracts are judged as mandatory.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary Mandatory**	**Process classification:** 
The possibility to lay the IT vendor off during the contract term and to find another solution for the production of IT goods and services is necessary to avoid dependence situations with the vendor and to give an incentive to the vendor for high-quality performance. The divergences between the assessment of backsourcing and further outsourcing in the investigated cases could be explained by the given ITO strategy of the banks. A backsourcing would lead to higher expenditures regarding costs and time for the outsourcing enterprise in comparison to a further outsourcing (in particular by the necessary employment of specialist staff). This might not be any longer part of the IT strategy of the outsourcing enterprise. However, the possibility for further outsourcing is rated as compulsory. Before a notice the post-negotiations and restructuring of existing contracts during external operation are mandatory for success, because another solution is connected with high costs.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Cullen et al. (2005, p. 242, 229) also believe that the management of an outsourcing as a life cycle positively influences the likelihood of success. Kern (2002, p. 61, 48) recommends post-negotiation and restructuring instead of cancellation of an ITO contract immediately, because high change costs can probably be avoided by that and early post-negotiations have a positive effect on the vendor performance. This coincides with the results of this thesis.

Success Factor Category: Client capability
Success Factor: Business knowledge
The client must have mature management capacity with experience and expertise about the business supported by the IT function to be outsourced.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process classification									
⇨ Preparation	X	X	X	X	X	X	X	X	**X**
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X		X	X	X	X	X	**X**
⇨ Post-deal	X	X		X	X	X	X	X	**X**
Comments									
Contract C:	The necessary specialist knowledge was transferred consciously from the companion's banks on the joint venture and should exist there.								

Specialist knowledge about the business supported by the IT function to be outsourced was rated as compulsory for the achievement of ITO success in all cases. In case C (vendor = joint-venture) the aim was to bundle professional know-how (regulatory requirement) from all societies at the vendor (= joint venture) and to set up there (competence centre). In this case not only was the IT outsourced, but also the responsibility for the regulatory implementation of the rating methodology. Distributed knowledge was built up in the course of the transition and could so be leveraged by all partners.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Knowledge about the banking business supported by the IT function to be outsourced is a core competence of the outsourcing bank. Within the scope of the preparation phase of the ITO, it is important to make sure that the employees entrusted with the ITO have this business knowledge. In the course of the ITO project the specialist knowledge is applied to the advantage of the ITO.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Pei et al. (2007, p. 4381) also mention the need of business know-how on the client side. The employees must have business as well as technical and social know-how.

Success Factor Category: Client capability
Success Factor: IT knowledge
The client must have mature management capacity with experience and expertise about the IT function to be outsourced.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Not assessable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting		Partly necessary	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Partly Necessary**
Process Classification									
⇨ Preparation		X	X	X	X	X	X	X	**X**
⇨ Selection		X	X	X	X	X	X	X	**X**
⇨ Contract		X	X	X	X	X	X	X	**X**
⇨ Transition		X	X	X	X	X	X	X	**X**
⇨ Execution		X		X	X	X	X	X	**X**
⇨ Post-deal		X		X	X	X	X	X	**X**
Comments									
Contract A:	The technical responsibility was transferred in the course of the ITO on the IT vendor. Technical competence is substituted with service levels. Nevertheless, a 100% measurement of the sourced services is not possible from a cost / benefit point of view.								
Contract B:	Barely available. It is substituted with mutual trust. Support of the decentralised network still occurs within the bank. Application support also requires basic understanding about IT; in the case of merely "connected" third applications the knowledge need is higher, because here a bigger responsibility of the bank exists with regard to the effectiveness of the interfaces. From case to case there is a requirement for external IT advisers who cause, as a rule, higher costs than internal employees.								
Contract C:	The necessary IT knowledge was deliberately built up at the vendor and should exist there.								
Contract E:	Detailed knowledge is partly absent. Nevertheless, the maintenance of too much know-how can make the ITO obsolete. The extent of the know-how which needs to be kept back is dependent on the strategic significance of the software and the extent of the ITO (costs versus benefits). Nevertheless, basic knowledge must exist for the appraisal of offers / control.								
Contract F:	Decisions are taken in management meetings with participation of the client banks. Nevertheless, the vendor bank is responsible for the technology. Technical know-how must exist to control the vendor.								
Contract H:	The bank is involved by strict controls in IT decisions. The IT architecture is also completely given by the bank. Org/IT employees in the parent bank steer and control the IT vendor technically.								

The opinions differ regarding the success relevance of IT knowledge about the outsourced IT function at the outsourcing enterprise. Predominantly this is judged as compulsory (cases C, D, E, F, G, H). Nevertheless, the maintenance of technical knowledge about the outsourced IT function is also seen as problematic. Case E explains that enough knowledge must exist for the assessment of offers and for the vendor control. However, it also points to the fact that the maintenance of too much know-how could make the ITO obsolete (cost versus benefit). In case H, the outsourcing bank exercises strict controls, is involved in IT decisions of the vendor (100% daughter) and determines the IT architecture. In case C, IT knowledge was consciously transferred to the vendor (joint venture) and should exist there. In case A the success factor is seen as not valuable. However, it is mentioned that technical knowledge is substituted with service levels. In case B, technical knowledge on the client side is classified as partly relevant to success. In this case technical knowledge hardly exists and is substituted with a bond of trust with the vendor. From case to case the access to external advisers is necessary here.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The opinions differ regarding the success relevance of IT knowledge about the outsourced IT function at the outsourcing enterprise. In case A (not assessable) and B (partly necessary) the ITOs have also functioned without the availability of technical knowledge on the client side for many years already. Client and vendor pursue, as a rule, two different objectives: cost minimisation versus profit maximisation. Hence, an outsourcing enterprise must protect itself from opportunistic behaviour of the vendor and hence should also be able to judge the vendor performance technically. In case A, technical knowledge might not be necessary, because standard bank functionality in retail banking is covered externally, for which many comparison possibilities exist in the market. In case B, lacking technical knowledge could be explained by the fact that the costs are certain and cannot be influenced (see remark success factor “Contract renegotiation”). In all other cases the success factor is classified as compulsory. Within the scope of the preparation phase of the ITO, it is important to make sure that the employees entrusted with the ITO have this ability. In the course of the ITO project the IT knowledge is applied to the advantage of the ITO.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

Many studies also classify IT knowledge as relevant to ITO success. Willcocks and Fitzgerald (1993, p. 227) evaluate internal experiences with the IT to be outsourced and the retention of sufficient IT abilities as relevant to success. Willcocks and Fitzgerald (1994, p. 314) focused on the investigation of application outsourcing and also came to the conclusion that necessary technical skills must be identified and retained. Aubert et al. (1998, pp. 688-690; 1999, p. 3) also examine application outsourcing cases and see the danger of unexpected transition and management costs caused by a lack of experience and knowledge about the outsourced IT function on the client side; this can cause the inability of the client to describe and to control the expected performance extensively. Employees must be trained to be able to negotiate and govern ITO contracts. Employees with affinity to IT are necessary therefore. For Pei et al. (2007, p. 4381), the organisational IT abilities of the client are a critical success factor.

Success Factor Category: Client capability
Success Factor: ITO knowledge
The client must have mature management capacity with experience and expertise concerning ITO.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation	X	X	X	X	X	X	X	X	**X**
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal	X	X	X	X	X	X	X	X	**X**

In all cases knowledge and experience with IT outsourcing is judged as compulsory for ITO success during the whole outsourcing process.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
ITO knowledge and experience is basically a compulsory success factor for the planning and realisation of ITOs.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
ITO knowledge is also classified as relevant for success in other studies. Aubert et al. (1998, pp. 688-690; 1999, p. 3) examine application outsourcing cases and see in a lack of ITO experience and knowledge on the client side the danger of unexpected transition and management costs, and the danger that opportunistic behaviour of the vendor is not recognised. DiamondCluster (2005, p. 19) recommend the use of resources with ITO experience and skills to develop own sourcing strategies and implementation plans as "lesson learnt" from outsourcing experiences. The studies of Willcocks, Fitzgerald and Feeny (1995, p. 7), Kern (2002, p. 48, 63) and Cullen and Willcocks (2003, pp. 172-173) mention necessary demands for the conversion of ITOs: ability to steer ITO contracts (Cullen and Willcocks, 2003, pp. 172-173) (Kern, 2002, p. 48, 63), employees capable of controlling vendor performance (Cullen and Willcocks, 2003, pp. 172-173) (Willcocks, Fitzgerald and Feeny, 1995, p. 7), a competent project manager (Cullen and Willcocks, 2003, pp. 172-173), decision ability and the ability to choose a suitable vendor and to conclude a suitable ITO contract (Willcocks, Fitzgerald and Feeny, 1995, p. 7), a plan for handling affected staff (Willcocks, Fitzgerald and Feeny, 1995, p. 7).

Success Factor Category: Client capability
Success Factor: Interpersonal skills
The employees of the client concerned with ITO must have interpersonal skills to positively influence a common understanding, knowledge sharing and the establishment of inter-organisational relationships between client and vendor.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process classification									
⇨ Preparation									**X**
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									

Social competence on the client side during cooperation with the vendor is classified in all cases as compulsory for the achievement of ITO success.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Social competence is a compulsory success factor during the client vendor interaction (ITO process phases: vendor selection – external execution). The survey result shows the ITO process phases in which social competence must be applied. Nevertheless, at the beginning of the ITO it is important to ensure that the employees in charge of the ITO have this social competence. Hence, the temporal relevance of the success factor was also expanded to the preparation phase of the ITO process.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Pei et al. (2007, p. 4381) also mention the need for social competence on the client side. Employees must have the business, technical and social competence to support the fulfilment of the outsourcing tasks, the knowledge transfer between client and vendor and relationship building with the vendor.

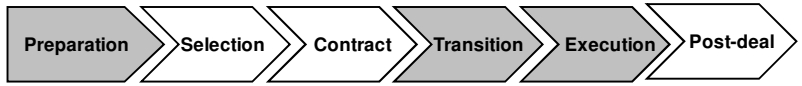
Success Factor Category: Client capability
Success Factor: Organisational learning capability
The capability to learn or acquire the needed knowledge from the vendor is important for effective knowledge sharing which positively influences ITO success.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									**X**
⇨ Selection									
⇨ Contract									
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract A:	In particular, because IT knowledge is very short-lived.								

The ability of the client to acquire knowledge from the vendor during the transition and execution phase is seen as compulsory for ITO success. Case A attributes this to the short life span of IT knowledge.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The learning ability of the client organisation with regard to vendor knowledge during the transition and execution phase is mandatory for the achievement of ITO success. The survey results show the ITO process phases in which this learning ability must be applied. At the beginning of the ITO it is to ensure that the employees in charge of the ITO own this competence. Hence, the temporal relevance was expanded to the preparation phase.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
According to Lee (2001, pp. 332-333), the learning capability of the client is also seen as a fundamental and necessary ability which supports a successful knowledge transfer between client and vendor which positively influences the success of ITO.

Success Factor Category: Client capability
Success Factor: Flexibility in case of changing technology or business requirements
The client must have the capability to cope with changes of technology or business requirements to ensure flexibility for the benefit of a permanent and adequate business support.

Summary of case studies

	Contract A	**Contract B**		**Contract C**		**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**	
Relevance	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes	**Yes**	
Weighting	Mandatory	Partly necessary		Mandatory		Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Partly necessary**	**Mandatory**
Process Classification												
⇨ Preparation												**X**
⇨ Selection												
⇨ Contract												
⇨ Transition												
⇨ Execution	X	X		X		X	X	X	X	X	**X**	
⇨ Post-deal												
Comments												
Contract B:	No: technology changes (responsibility of the vendor) Yes: business requirements; nevertheless, a “system from the drawer” brings advantages cost-wise. Hence, the need for the conversion of individual demands should be weighed carefully.											
Contract C:	Yes, concerning changing business requirements. The responsible competence centre in the companion's banks communicates change needs in the rating methodology to the joint venture. For the technology has the joint venture the decision taking authority.											

In cases A, D, E, F, G and H, the flexibility of the outsourcing enterprise concerning coping with changes of business and IT requirements during the term of the ITO is judged as compulsory; in cases B and C only concerning changes of the business requirements. The responsibility for the technology is seen in these cases as

being on the vendor side. Case B points out, in addition, that the need for conversion of individual demands in standard software should be weighed carefully, because the use of a standard brings cost advantages.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary** **Mandatory**	**Process classification:** 
With the exception of cases B and C, flexibility in coping with technology changes is classified as compulsory for ITO success. The cases mentioned refer to the responsibility of the vendor for the technology. In spite of the technological responsibility of the vendor, effects on the outsourcing enterprise can originate from technology changes during the term of the ITO which must also be mastered on the client side (released by interlinking in the application landscape of the client, performance, availability, etc.) And in the case of technological control by the client (as in case H), technological adaptations are also to be mastered on the client side. Flexibility in coping with changes of business requirements is compulsory for ITO success. Nevertheless, before the implementing of new business requirements their need should be weighed carefully, since the use of standard software with standard functionalities generates advantages cost-wise (see remark, case B). The survey result shows that, in the execution phase, this flexibility must be applied if necessary. Nevertheless, at the beginning of the ITO it is important to ensure that the outsourcing enterprise have this flexibility if necessary. Hence, the temporal relevance of the success factor was also expanded to the preparation phase of the ITO.		

Discussion

ITO studies based on long-term ITO cases
Kim and Chung (2003, p. 83, 87-88) explain by analogy with the results of this thesis that flexibility for coping with changing business and technology requirements influences strongly the success of ITO.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Cullen and Willcocks (2003, pp. 172 – 173) also point to the success factor of flexibility in the adaptation of any aspect of the ITO contract.

Success Factor Category: Client capability
Success Factor: Partnership's potential
The client must have the capability of exploiting the partnership`s long-term potential in terms of leveraging the capabilities of client and vendor to the advantage of each counterparty.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	**Yes**
Weighting	Partly necessary	Mandatory	Mandatory	Partly necessary	Partly necessary	Mandatory	Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution	X	X	X	X	X	X	X		**X**
⇨ Post-deal									
Comments									
Contract A:	If the price / performance relation fits no need for action exists.								
Contract B:	Focus lies in the costs.								
Contract E:	Hardly potential, because standard software.								
Contract H:	The IT vendor is a 100% daughter and financially dependent on the bank. Hence, there is no partnership for the purposes of equal rights. The IT vendor often has no scope of action for own decisions and also does not expect this. On the basis of cultural differences a strict control of the performance is necessary.								

The boosting of the long-term potential of the partnership during the term of the ITO was rated as compulsory in 4 cases (B, C, F and G). In case B, the focus lies on the costs. In 3 cases (A, D and E) this is evaluated as only partly necessary. This is explained in case E by lacking potential because of the sourcing of standard software. Case A believes that, with a suitable price / performance relation, no need for action exists. In case H the relation between client and vendor is not looked upon as a partnership, because the vendor is a 100% daughter and as cultural differences demand a close governing of the vendor by the outsourcing banks.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
Boosting the long-term potential of the partnership as a success factor during the term of the ITO is not evaluated in all cases as compulsory. Provided that the costs / performance relation is right from the point of view of the client and the vendor, this is not necessary according to case A (external ITO). In the case of the external ITO B the success factor is evaluated as compulsory regarding costs. By application of standard software, as in the cases of the external ITOs E and D, the boosting of potentials is limited by the given functional frame of the software, which is why the success factor was evaluated as partly necessary in these cases. In case H (internal ITO) the vendor has no decision rights, owing to which the relationship is not evaluated as a partnership. Hence, the success factor is evaluated as not relevant in this case. The internal ITOs F and G as well as the joint venture in case C evaluate the success factor as compulsory for the achievement of ITO success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Feeny and Willcocks (1998, p. 15) also mention the identification of the potential "added-value" of vendors as one of nine core IT abilities which need to exist on the client side. Thereby, client and vendor should investigate possibilities beyond the existing contract for a long-term win win potential, by whose conversion the vendor increases his income while he produces services which raise the business benefit of the client.

Success Factor Category: Client capability
Success Factor: Acceptance of the vendor
The acceptance of the vendor in the client company is relevant to ITO success.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Partly necessary	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract D:	Given by completion of the contract.								
Contract F:	Yes. Nevertheless, it was given centrally.								
Contract H:	Given by contractual relationship. If reasonable votes against exist internally, the bank has the possibility to change the contractual relationship.								

The acceptance of the vendor on the client side in the transition and execution phase was classified as compulsory for ITO success in 7 of 8 cases. In three cases (D, F and H) it was mentioned, however, that this is pre-given by the management decision for the ITO and the completion of the contract. Therefore, case D values the success factor as "partly relevant".

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
In cases D, F and H it is mentioned that the acceptance of the vendor in the transition and execution phase is given by the completion of the contract. Meaning that the vendor must be accepted as soon as it is elected by the management. With discontent the possibility exists to change the contractual relationship (see remark, case H). Also in all other cases the success factor was evaluated as compulsory for ITO success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Also the following studies mention the relevance of the vendor's acceptance on the client side as an ITO success factor. Willcocks and Fitzgerald (1994, p. 310) focus on the investigation of application outsourcing cases and mention the ability of the vendor to generate acceptance on the client side as an important generic ability. Nagengast (1997, p. 253) mentions the missing acceptance of the vendor as a problem in connection with the achievement of satisfaction with ITOs on the client side.

Success Factor Category: Client capability
Success Factor: IT capability
Business needs which cannot be covered by standard technical approaches of vendors must be internally implemented.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	No	No	No	No	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory					Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation									**X**
⇨ Selection		X							**X**
⇨ Contract		X							**X**
⇨ Transition			X						**X**
⇨ Execution	X		X					X	**X**
⇨ Post-deal									
Comments									
Contract A:	For the direct bank, visible infrastructure subjects (e.g. desktop management, support of board of directors) were backsourced or further outsourced to third parties. Small and medium-sized companies offer more flexibility here than the present vendor.								
Contract B:	Standard product catalogue of the IT vendor = base. Big product-side innovations for differentiation in the market must be implemented outside from standard applications - internally or externally - individually.								
Contract C:	Very important (e.g. data formats for interfaces); the companion's banks must also be able to support the society in case of bottlenecks.								
Contract D:	The outsourced system is purchased software. Everything which cannot be implemented there is also not implemented internally.								
Contract E:	Only changes in the standard software are implemented.								
Contract F:	Demands which cannot be illustrated in the standard software are not implemented (IT is covered almost to 100% externally).								
Contract G:	Complete ITO to a group-internal IT service provider.								
Contract H:	A business-critical IT system (Treasury) is operated by the bank.								

In cases A, B, C and H, the internal implementation of business requirements which cannot be covered by vendors is seen as compulsory for ITO success. In case A, visible infrastructure subjects (e.g. desktop management, support of board of directors) were backsourced from the service society of the bank or further out-sourced to third vendors, because small and medium-sized companies offer more flexibility. Case B believes that the big product-sided innovations which serve for the differentiation in the market must be implemented outside from standard application - internally or externally - individually. In case C, the connection of the out-sourced application in the application landscape of the outsourcing bank was carried out internally and the companion's banks must support the vendor in case of bottlenecks. And in case H a business-critical system is still pursued by the outsourcing bank itself in spite of the existence of an almost complete ITO.
In cases D, E, F and G, the success factor is evaluated as not relevant to success. Cases D, E and F refer to the standard software character of the applications sourced externally. Demands not covered by the standard application are not implemented. Case G refers to the complete ITO to a group-internal IT vendor by which no more IT solutions are implemented internally.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 

The internal conversion of individual demands not covered by standard applications of vendors is partly necessary and depends on the market treatment strategy and the kind of ITO.

- If a bank likes to operate innovatively in the market, the application of standard software is not recommended, because the introduction of new products often depends on the acceptance of a bigger user's circle and is often available after the introduction to all users. A differentiation in the market is not possible thereby. The individual implementing of new products is necessary by an innovative market strategy (see remark, case B). This can occur internally as well as externally. However, the application of a standard application brings advantages cost-wise (see remark, case B, on success factor “Flexibility in case of changing technology or business requirements”). These strategic aspects are to be decided before completion of the contract.
- With complete ITOs the capacity for internal solutions cannot exist any more (as in case G). In case G, an internal ITO is given. Owing to the capital interweaving, enough influence can presumably be exerted on the vendor for the conversion of necessary requirements. Also, in case H, a complete internal ITO is given. In this case, nevertheless, the ability for an internal conversion of requirements is seen as compulsory for ITO success. For example, the business-critical treasury system is still pursued internally. Indeed, a discontent with the performance of the vendor (see case study H) exists and the performance of the vendor can barely be influenced due to the vendors financial situation and cultural differences. The internal conversion of individual IT demands can be renounced if necessary in case of a complete internal ITO to an efficient vendor with enough possibilities of influencing that vendor.

- If parts of the IT are outsourced, the integration in the application landscape of the outsourcing bank is to be carried out in the transition phase for which IT skill is necessary at the outsourcing bank (see remark, case C). If the outsourcing bank is, besides, a companion of the vendor, it can occur that in the transition and execution phase a capacity balance at the vendor by bank employees is planned (see case C). With a partial external ITO (cases A and B) the success factor is also evaluated as compulsory. With partial internal ITOs this need does not exist on account of the influencing possibilities on the vendor (case F); the requirements can be moved externally, as a rule. If this influencing possibility is limited, the success factor becomes relevant again (as in the case of the complete ITO in H).

The survey result shows the ITO process phases in which the ability must be applied if necessary (selection – execution). Nevertheless, at the beginning of the ITO it is necessary to make sure that the outsourcing enterprise have these IT abilities. Hence, the temporal relevance of the success factor was also expanded to the preparation phase.

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Feeny and Willcocks (1998, p. 13) point to the fact that, with the use of several vendors, competent employees on the client side are necessary who can solve problems quickly and can move demands not covered by the standard systems of vendors. A discussion in relation to the results of the thesis is not possible, because in this study no detailed information was provided on the market treatment strategy of the outsourcing company and on the kind of ITO.

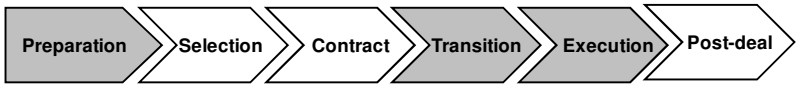
Success Factor Category: Client capability
Success Factor: Problem management
If the client company sources IT from multiple internal and external vendors, it must ensure that technical problems are rapidly solved.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									**X**
⇨ Selection									
⇨ Contract									
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract B:	Departments have no direct contact with the vendor. Per outsourced application a contact exists in the internal IT department.								
Contract C:	First-Level-Support lies with the vendor (customer care centre).								
Contract D:	The business divisions of the bank have no direct contact with the vendor. So called requirement co-ordinators in the department bundle up and prioritise demands and also fill in failure tickets in the central ticket system of the outsourcing bank. The vendor is informed about the failure and the status of the failure removal is pursued in the central ticket system.								
Contract E:	At the outsourcing bank a central place exists for the registration of error messages. The IT vendor is informed about the error and the error removal is centrally pursued at the outsourcing bank.								
Contract F:	Is done by the vendor bank for the core banking system.								
Contract G:	Help Desk at the group-internal IT vendor.								
Contract H:	The bank daughters which are served by the IT vendor often escalate problems directly to the board of directors of the bank or contact the software manufacturer of purchased software products directly and thereby bypass agreed communication ways in the problem case (e.g. phone hotline or application manager at the IT vendor).								

In all cases a quick problem solution in the transition and execution phase is evaluated as compulsory for the achievement of ITO success in case of using a sourcing network. The problem solution is organised differently. In cases C, F, G and H a helpdesk is settled on the vendor side. In case, B a contact exists per outsourced application in the IT department of the outsourcing bank. In cases D and E a central phone hotline exists at the outsourcing bank which is the drop-in centre for any kind of IT problems. The errors are grasped in a central ticket system and the suitable internal or external IT units are automatically informed. Case H mentions communication problems in problem cases; agreed communication ways are often not met.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
A quick problem solution with use of a sourcing network is mandatory for ITO success. The established organisational structures for the problem case are built up differently (hotline at the vendor, hotline per ITO in IT department of the outsourcing bank, central hotline for all IT interests at outsourcing bank). The survey result shows the ITO process phases in which the ability must be applied if necessary (transition– execution). Nevertheless, at the beginning of the ITO it is necessary to make sure that the outsourcing enterprise has this capability. Hence, the temporal relevance of the success factor was also expanded to the preparation phase.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Feeny and Willcocks (1998, p. 13) also point to the fact that, with the use of several vendors, competent employees on the customer side are necessary who can solve problems quickly and can implement demands not covered by the standard systems of vendors.

Success Factor Category: Vendor selection
Success Factor: Tendering process
The main objective of the vendor selection phase is to choose the right vendor by ensuring that the vendor has the professional and interpersonal skills suitable for the needs of the client. Therefore, a rigorous tendering process with invitation of internal and external bids is recommended, amongst other things.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Not assessable	Yes	Not assessable	Yes	Not assessable	Not assessable	**Yes**
Weighting				Partly necessary		Partly necessary			**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection				X		X			**X**
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The IT vendor, as a family enterprise of the banking group, was given; a tendering was not carried out in 1996. Nevertheless, this was later (2010) done within the scope of a market comparison.								
Contract B:	The first ITO occurred to a computer centre which had also looked after other banks of the banking group in the past and thus scale effects could be realised. An internal performance was economically not possible any more, because of the rising complexity of the requirements (in particular supervision right) and by taking into account the size of the bank. The current migration on a new core banking system was given as caused by the coalescence of the IT vendors. Also all other mandators go this way.								
Contract C:	As the aim was to found a common enterprise with banks of the same banking group and to instruct this with the fulfilment of the duties, no tendering occurred.								
Contract D:	A backsourcing was not up for debate; hence, one has obtained several external offers as well as an offer from the present vendor.								
Contract E:	For strategic reasons (bundling of the IT in Bavaria at the IT vendor of the banking group) the vendor was given, hence, no tendering has occurred.								
Contract F:	The demand of the parent bank was to cover the IT need for the Italian establishment so far as possible externally. Hence, a tendering has occurred in Italy. However, functionally better software was not used because of cost advantages at the vendor bank (scale effects).								
Contract G:	Group-internal IT enterprise was certain as IT vendor.								
Contract H:	No tendering has occurred. Before the purchase of the IT vendor some services were already produced there and were extended after the purchase successively.								

In cases A, B, C, E, G and H this success factor can not be evaluated, because no tendering was carried out before the ITO. In these cases the vendor was given as a family enterprise or a joint venture or an already used vendor was bought and the performance produced there was successively extended. In case A, a tendering was done during the course of the ITO within the scope of a market comparison. In cases D and F, the realisation of a tendering under invitation of internal and external offers is evaluated as partly necessary for ITO success. In case D, a further outsourcing occurred. In this case only external offers as well as an offer of the present vendor were obtained. In case F, the strategic demand of the parent bank was to cover the IT need for the Italian establishment as far as possible externally, hence, only an external tendering has occurred.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
Because in 6 of the examined cases no tendering was carried out in the vendor selection phase, it can be assumed that a tendering is not compulsory for the long-term success of an ITO. In these cases strategic aims stood in the foreground of the ITO by which the vendor was certain (as, for example, in case E the bundling of the IT at a central vendor of the banking group in Bavaria for the protection of IT jobs, etc.). By realisation of a tendering, the invitation of external and internal bids is recommended. Nevertheless, internal offers are not always relevant. In cases D and F, for example, the internal performance is not any longer part of the IT strategy, which is why no internal offers were obtained.		

Discussion

ITO studies based on long-term ITO cases
Lacity et al. (1996, pp. 20-22) also recommends a tendering and the comparison of vendor offers against internal offers, because internal IT departments could achieve the same efficiencies. However, they are often hindered by user's resistance.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
A tendering with an invitation for internal and external offers is described as a success factor, not only in this thesis but also in other studies. Willcocks and Fitzgerald (1994, p. 313, VII) focused on the investigation of application outsourcing cases and describe a detailed, quantitative evaluation of the ITO incl. internal and external benchmarking among other things as a "lesson learnt" from outsourcing experiences. Also Willcocks, Lacity and Fitzgerald (1995, p. 334, 338-339) found out that "assessment issues" greatly influence ITO success. In particular, the absence of adequate measures for the measurement of internal performance had negative effects on the comparison of vendor offers against each other and against internal offers. Willcocks, Lacity and Fitzgerald (1995, p. 334, 338-339) also looked at temporal aspects: the realisation of a make or buy analysis after completion of the contract can lead to hidden costs and to opportunistic behaviour of the vendor.

Lacity and Willcocks (1998, p. 365, 375-376) reported that organisations which invited internal and external offers reached the expected cost savings with higher frequency than organisations which merely compared external offers to momentary internal IT costs. Also in their study from 2009 d (p. 341, 353) brought Lacity and Willcocks to the same conclusion. The enterprises which compared the RFPs of the vendors to internal offers had a higher likelihood of success. Hirschheim and Lacity (2000, p. 107) explain that the biggest cost savings are achieved by vendors through cost reduction measures and not by scale effects. Hence, internal IT units should also get the chance to submit an offer, because this often helps to overcome political hurdles for the conversion of internal cost reduction measures. From the point of view of Willcocks, Fitzgerald and Feeny (1995, p. 20), a basic condition for effective outsourcing decisions is that the offers of vendors are better than the efficiency of the internal IT unity. Also De Looff (in 1995, p. 295) recommends that all possible internal and external alternatives should be examined within the scope of an analysis, before the ITO decision is taken. A further discussion in relation to the results of this thesis is not possible, because in these studies the results were not connected with the objective of the ITO.

Success Factor Category: Vendor selection
Success Factor: Requirements specification
The main objective of the vendor selection phase is to choose the right vendor by ensuring that the vendor has the professional and interpersonal skills suitable for the needs of the client. Therefore, a rigorous tendering process with invitation of internal and external bids is recommended, amongst other things. Before the bidding process, the service requirements, in-house costs, incoming ITO costs and the performance of in-house It must be collected. These support a detailed requirement specification and an effective make or buy evaluation.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Yes	Yes	Yes	Yes	Not assessable	Yes	Not assessable	**Yes**
Weighting		Mandatory	Mandatory	Mandatory	Mandatory		Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection		X	X	X	X		X		**X**
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The production of IT goods and services was begun within the scope of a "letter of intent (LOI)". In favour of scale effects from standardisation the standard contract of the vendor was accepted originally. Successively, divergent service level and measures were determined and anchored by contract. An as low as possible divergence from the standard helps to keep outsourcing costs low.								
Contract B:	A tendering has not occurred. However, there is a qualitative elevation and definition of the requirements before completion of the contract. Not all requirements are measurable in the forefront (e.g. maximum down-time). A regular examination of the requirements takes place within the scope of the SLA reporting.								
Contract C:	The rating system is pursued by an external IT vendor after the end of the first development in the joint-venture. The society has specified the necessary service levels towards this vendor and anchored them within the scope of SLAs.								
Contract D:	The service level requirements could not be measured by the first vendor and, hence, were defined towards the new vendor before completion of the contract.								
Contract E:	A tendering has not occurred. Nevertheless, the service standards were fixed in the form of SLAs. It is to be noted that intentionally too highly demands can prevent, if necessary, an ITO.								
Contract F:	The service standards were compiled and improved after completion of the contract step by step.								
Contract G:	A detailed specification has occurred towards the group-internal IT vendor.								
Contract H:	No tendering has occurred. At the beginning of the contractual relationship. Necessary service standards were developed successively. Nevertheless, detailed service standards are a success factor, more and more value is placed on them.								

In cases A, F and H the success factor can not be evaluated, because the service requirements were determined after completion of the contract successively. In case A, this approach brought financial advantages, because the standard contract of the vendor was originally accepted in favour of scale effects by means of standardisation. Nevertheless, case H mentions that the contractual fixing of detailed service standards is a success factor and more and more value is laid on it. In cases B, C, D, E and G a detailed specification of the requirements towards the vendor is evaluated as compulsory for ITO success, even if a tendering was not carried out in all cases. Case B points to the fact that not all demands are measurable in the forefront, as for example the maximum down-time. Case E notes that intentionally, too, high demands can prevent an ITO.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
A detailed specification of the requirements within the scope of the vendor selection phase has also occurred in the cases without a tendering and is compulsory for the achievement of ITO success. In cases B, C, D, E and G the requirements were investigated before completion of the contract and were integrated into the contract (service level agreements). Thus the expectations of the outsourcing bank were already cleared before the start of the external performance. In cases A, F and H the service requirements were specified after completion of the contract successively. Also in the last three cases, the ITO relation seems to be lasting. In case A this approach had no disadvantageous effects. This could be explained by the fact that the requirements for a core banking system in the retail business do barely deviate from the standards. Also, in the case F and H, the service requirements were developed after completion of the contract successively. This could have been unproblematic on account of the organisational form of an internal ITO and the possibilities of influencing the vendor linked with it. Nevertheless, in case H a remark is found that a detailed specification is a success factor and that, in the future, more value is placed on it. This could point to the advantage of a timely and detailed service level definition. In case G, also, an internal ITO is given. However, here the success factor is evaluated as compulsory, but in this case a client-vendor relationship is maintained in spite of an internal ITO.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
The success relevance of a detailed requirement specification towards the vendor is also expressed in the following studies.
Kern (2002, pp. 60-61, 64-65) explains that, for the avoidance of "winner's curse" - a disadvantageous situation in which the vendor underbids the market price to receive the award - the need exists to disclose the requirements towards the vendor in detail. Willcocks, Lacity and Fitzgerald (1995, p. 334, 338-339) look at a missing entire description of the IT requirements as a source of hidden costs which can affect the contract relation negatively. Willcocks and Fitzgerald (1994, p. 313, VII) demand the putting of clear cost and benefit goals to the vendor.
A further discussion in relation to the results of this thesis is not possible as no information regarding the kind of the ITO was given in these cases (in particular: capital interweaving between client and vendor, individual IT function or standard application).

Success Factor Category: Vendor selection
Success Factor: Operational information gathering
The client must ensure that the vendors gather sufficient operational information (to be able to submit a realistic bid).

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Yes	Not assessable	Yes	Yes	Yes	Yes	Not assessable	**Yes**
Weighting		Mandatory		Partly necessary	Mandatory	Mandatory	Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection		X		X	X	X	X		**X**
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The production of IT goods and services was begun within the scope of a "letter of intent (LOI)". In favour of scale effects from standardisation, the standard contract of the vendor was accepted originally. Successively divergent service level and measures were determined and anchored by contract. An as low as possible divergence of the standard helps to keep out-sourcing costs low.								
Contract C:	A common enterprise with banks of the same banking group was founded and this was instructed with the fulfilment of the duties.								
Contract D:	Workshops have taken place between the bank and the vendor. One has counted on the experiences of the vendor (responsibility of the vendor to organise needed information).								

In cases B, E, F and G it is looked upon as a compulsory success factor to make sure that the vendor gathers enough operational information to be able to submit a realistic offer. In case D, this is evaluated as partly necessary, because it is seen as a duty of the vendor to collect the needed information. In case C the success factor can not be evaluated, because a common enterprise with banks of the same banking group was founded and this was instructed with the fulfilment of the duties. In case A, the success factor was also classified as not being possible to evaluate, because the production of IT goods and services was started within the

scope of an LOI and the standard contract was originally accepted. In case H, the success factor was classified as not being possible to evaluate, because the IT vendor was bought and was aimed successively at the needs of the banking group (see remark in success factor “Evaluation of bids”).

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The collection of enough operational information by the vendor in the vendor selection phase to ensure a realistic offer is a success factor. Only in this way it can be determined whether the clients’ requirements for the ITO can be realised by the vendor at an economic cost. It can occur that no offer is provided (see cases C and H) or that the production of IT goods and services is begun within the scope of an LOI. In these cases, less value is placed on the detailed information gathering of the vendor in the forefront of the ITO (see case A) which makes the success factor not relevant. In case A, the production of IT goods and services was begun with an LOI. Further on the standard contract was accepted originally. This could be explained by the fact that the demands for a core banking system in retail business hardly deviate from the standard. In case C, a joint-venture is given. In this case it was sure that the society is entrusted with the development and conversion of the requirements. In case H, the vendor was bought and aimed successively at the needs of the banking group (see remark, success factor “Evaluation of bids”). However, in cases C and H the outsourcing enterprise has intervention rights with the vendor and control possibilities on account of the present capital interweaving (joint venture, internal ITO) to form the performance according to own needs.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Kern (2002, p. 48) explains that, for the avoidance of "winner's curse" and a disadvantageous situation in which the vendor underbids the market price to receive the award, it is necessary that the bidders collect detailed information to be able to submit a realistic offer. This lets the influencing factor also appear as a success factor. A further discussion in relation to the results of this thesis is not possible, because in the study no information was provided about the kind of ITO (in particular about capital interweaving between client and vendor, outsourcing of an individual IT function or of a standard application).

Success Factor Category: Vendor selection
Success Factor: Evaluation of bids
Enough time should be spent on evaluating vendor bids thoroughly in order to ensure vendor capability and capacity and an adequate price/performance ratio.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Not assessable	Yes	Yes	Yes	Yes	Not assessable	**Yes**
Weighting	Mandatory	Mandatory		Mandatory	Mandatory	Mandatory	Mandatory		**Partly necessary**
Process classification									
⇨ Preparation									
⇨ Selection	X	X		X	X	X	X		**X**
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract C:	A common enterprise with banks of the same banking group was founded and this was instructed with the fulfilment of the duties.								
Contract G:	Make or buy evaluation has occurred and was judged by chartered accountants. A positive business case was a precondition for this ITO. The business case is checked yearly.								
Contract H:	IT vendor was bought and aimed successively at the needs of the banking group.								

The careful check of the vendor offer in the vendor selection phase to ensure vendor capabilities, vendor capacities and an adequate price/performance relation was judged as compulsory in cases A, B, D, E, F and G.
In case C the success factor could not be evaluated, because the vendor was founded by banks of the same banking group as a joint venture. In case H, the success factor could not be evaluated either, because the vendor was bought and was aimed successively at the demands of the banking group.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The thorough evaluation of the vendor bids in the vendor selection phase is a success factor to ensure vendor capability and capacity and an adequate price/performance ratio. Cases can exist in which no offer is requested, because the vendor firm is given on account of certain basic conditions and is equipped successively after completion of the contract with the necessary abilities and skills (see cases C and H). However, in these cases the outsourcing enterprise has intervention rights with the vendor and control possibilities on account of the present capital interweaving (joint venture, internal ITO) to form the performance according to own needs.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Also other studies look at a careful evaluation of the vendor offers as a success factor. Lacity and Willcocks (2001, p. xiii, 338-339) see a severe evaluation of market options and vendor offers, as well as a careful choice of suitable vendors for the duties to be outsourced, as a success factor. The importance of an exact analysis of vendor offers in comparison to internal offers is also mentioned by Willcocks, Lacity and Fitzgerald (1995, p. 334, 338-339). A careful check of vendor offers and promises (e.g. by means of authoritative visits with the vendor, check of staff, products and the financial stability of the vendor, enough time for the vendor selection, test of vendor statements with regard to service levels, etc.) was a "lesson learnt" from outsourcing experiences in the study of Willcocks and Fitzgerald (1994, p. 313).
A further discussion in relation to the results of this thesis is not possible, because these studies provide no information as to the kind of the ITO (in particular capital interweaving between client and vendor).

Success Factor Category: Vendor selection
Success Factor: Vendor profit
Ensure that the vendor is making a reasonable profit with the delivered bid. A vendor making no profit will primarily aim to recover costs for the account with additional costs or decreases in service quality.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Not assessable	Yes	Yes	No	Yes	No	No	No	**No**
Weighting		Nice to have	Mandatory		Partly necessary				
Process Classification									
⇨ Preparation									
⇨ Selection		X			X				
⇨ Contract			X						
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract B:	Vendors partially offer no cost-covering, but political prices, e.g. because they want to open a new customer segment. However, the disadvantageous effects for the outsourcing enterprise can be avoided by a detailed specification of the performance to be produced.								
Contract C:	The costs resulted at the joint venture will be reduced with the portion carried by the third customers, 7% of profit is considered in favour of the society (dividend after taxes), the remaining costs are distributed to the companion's banks.								
Contract D:	The price must be in line with market requirements.								
Contract E:	Vendor must gain profit with the whole ITO relation. For the purposes of an "across subsidisation" also non-profitable parts can be contained in the whole package.								
Contract F:	The vendor bank is to be seen as a competence centre for this core banking system within the bank group of the parent bank. Hence, there exists no profit achievement intention, but the aim is to pursue this core banking system with as low as possible costs for all client banks. Then the costs are divided between the client banks. A small margin is included in the settled costs, because the staff also fulfil other duties at the vendor and the outsourcing part is not unambiguously identifiable.								
Contract G:	Group-internal vendor works not with a profit achievement intention, but has the job of producing the required IT services with as low as possible costs. If the actual costs at the end of the year are lower than the target cost ("Flatrate" in the form of a fixed price), a restitution or additional payment occurs.								
Contract H:	The IT vendor should produce the services with as low as possible costs, a big black "0" be the aim. Hence, a profit achievement intention does not exist.								

In case A, the success factor cannot be evaluated. In cases D, F, G and H a sufficient profit at the vendor is evaluated as not relevant for success, while in case B it is seen as "nice to have". Case B mentions that vendors partially offer no cost-covering, but political prices, e.g. because they want to open a new customer segment. Nevertheless, disadvantageous effects for the outsourcing enterprise can be intercepted by a detailed specification of the requirements. Case D mentions that the price must be in line with market requirements. In cases F, G and H, internal ITOs are given. Here no profit achievement intention exists on the part of the vendor, the aim is to produce the necessary IT services with as low as possible costs which are split under the client banks. Though in case C the same aim is pursued, nevertheless a 7% profit for the joint venture is considered, which is why the success factor was evaluated here as compulsory. Case E evaluates a sufficient profit for the vendor as partly relevant for success; the vendor must gain a profit with the complete contract relation from the point of view of case E. However, cross-subsidies must be possible.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
With internal outsourcing (cases F, G and H), the profit achievement intention of the vendor is not central, but a performance with as low as possible costs for the family enterprise. This success factor is not relevant for these cases. An interview partner mentions that the price must be in line with market requirements no matter whether the vendor gains profit with it or not. Also political prices or cross-subsidies were reported. Should the vendor achieve no or insufficient profit, nevertheless, disadvantageous effects for the client can be avoided by detailed specifications of the IT services to be produced in service level agreements (see success factor “Contract: measurable service requirements, measures and reports”) (see remark, case B). In case C, a mandatory judgement of the success factor was made. In this case, profit of the joint venture gained with third customers lowers the costs for the companion’s banks; nevertheless, the joint venture has no profit achievement intention but just passes on the resulting costs to the companion’s banks. So, the success factor can be judged as not relevant in case C. Hence, the securing of vendor profit before completion of the contract is evaluated as not relevant for success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

Willcocks and Fitzgerald (1994, p. 311) focused on the investigation of application outsourcing and identified “loss leader deals”, which are vendors gaining no profit within the scope of the outsourcing contract, as a failure factor. Hirschheim and Lacity (2000, p. 101) reported backsourcing cases which were released by vendors who tried to maximise their profit. A careful analysis of the reasons for a low vendor offer and the securing of enough vendor profit is seen as a condition for the avoidance of a "winner's curse", a disadvantageous situation in which the vendor offers no cost-covering price to receive the order (Kern, 2002, p. 48, 60-61).

These studies stand in contrast to the results of this thesis. Detailed service levels are evaluated here as a protection against the disadvantageous effects of too low vendor profit. And, in the case of lacking profit achievement intentions on the part of the vendor (e.g. within the scope of an internal ITO, joint venture), the success factor is rated as not relevant. The mentioned studies give no information about the level of detail with respect to the satisfaction with the service levels and the organisational form of the investigated ITO cases. Hence, a further discussion in relation to the results of this thesis is not possible.

Success Factor Category: Vendor selection
Success Factor: Leverage in-house capabilities
Investigation of whether vendor terms and conditions can be reached internally as well by considering service requirements, in-house costs, incoming ITO costs and the performance of in-house IT. ITO based on political reasons and not based on an objective make or buy evaluation will be avoided.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Yes	Not assessable	Not assessable	Not assessable	Yes | N/A	Not assessable	**Yes**
Weighting			Mandatory				Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation			X						**X**
⇨ Selection			X				X		**X**
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The formerly used core banking system had become technologically outdated and was not suitable to open new business segments and to cover the planned market growth. Besides, a lack of IT skill (technology) and capacity existed internally. In this situation "with the back to the wall" a complete outsourcing of IT was decided.								
Contract B:	An internal performance was economically not possible any more, because of the rising complexity of the requirements (in particular from supervision right) and taking into account the size of the bank. Although an internal production of IT goods and services would be possible, an ITO can be decided because of strategic reasons.								
Contract C:	The time pressure regarding the conversion of Basel II requirements, linked with the distributed know-how about the necessary kinds of customer ratings, has led to the fact that banks of the same banking group have united in a joint venture.								
Contract D:	By the original outsourcing strategic aims were in the foreground (protection of the IT location Bavaria by a central IT vendor of the banking group) which required an ITO. A backsourcing to the outsourcing enterprise did not stood not up for debate, because there employees' capacities and skills were absent. For cost and quality reasons the application was shifted to a third vendor.								
Contract E:	Strategic decision (protection of IT location Bavaria by a central IT vendor of the banking group)								
Contract F:	The strategic decision was made to bundle up the support of the core banking system, which is used predominantly in foreign bases, at one place within the banking group to create synergies.								
Contract G:	Yes: Business Case (actual - target comparison) was decisive for outsourcing decision.								

Contract H:	Not possible to evaluate: Internal optimisation measures have not occurred before ITO, because it was the aim to bundle up all IT functions in a competence centre for IT.

In cases A, B, D, E, F, G and H it was not checked in the forefront of the ITO whether an internal performance was more advantageous, because among other things strategic objectives should be achieved with the ITO (technically outdated system with functional gaps, lacking internal capacities and skills, enterprise size not enough to implement supervision-juridical demands economically, protection of IT location in Bavaria, creation of competence centres in the banking group, performance by IT vendor in the market of the bank's daughters). In case C, the full leverage of internal IT abilities before an ITO was evaluated as compulsory for ITO success. After a preliminary investigation it was found that the supervision-juridical demands could not be fulfilled alone on time, which is why the internal performance was not followed up any more. In case D, no back misalignment was taken into consideration because of the absence of internal IT capacities and skills. Instead, the IT function was shifted to a third party.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The full leveraging of the internal abilities before an ITO does not seem to be compulsory for a lasting ITO. The relevance of this success factor emerges as dependent on the ITO objectives. If strategic reasons stand in the foreground of the ITO (see cases A, B, D, E, F, G and H), the success factor is not relevant. In these cases an internal performance was not further wished for strategic reasons. Also, in case C strategic aims stood in the foreground of the ITO; nevertheless if the legal demands could have been fulfilled alone, the ITO would not have occurred. This can explain the compulsory assessment of the success factor in spite of a strategic objective. In case G, the business case was decisive for the ITO decision; in spite of strategic objectives, a make or buy investigation occurred against the existing internal ability. The investigation whether vendor conditions can also be achieved internally occurs, if necessary, in the forefront of the ITO in the preparation and vendor selection phase.		

Discussion

ITO studies based on long-term ITO cases

Lacity and Hirschheim (1993, p. 85, 76-78) also recommend questioning better external offers, because often the same results can be achieved by the implementation of internal cost reduction strategies.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

Willcocks, Lacity and Fitzgerald (1995, p. 350) also recommend enterprises with ITO considerations that first internal improvement measures should be implemented, then the full IT costs should be identified, performance benchmarks should be set up, in order to implement again improvement measures on this basis. Not till then should outsourcing considerations be made. According to Willcocks, Fitzgerald and Feeny (1995, p. 21), outsourcing decisions should always walk at the head of internal rationalisation. Because these studies provide no information on the objective of the examined ITOs, a further discussion in relation to the results of this thesis is not possible.

Success Factor Category: Vendor selection
Success Factor: Outsourcing if external market is better than in-house IT and with realisation of scale effects
ITO should only be chosen if the external market is better compared with the in-house IT department and if advantages of scale can be ascertained.

Summary of case studies

	Contract A		**Contract B**	**Contract C**	**Contract D**		**Contract E**		**Contract F**		**Contract G**		**Contract H**	**Result**
Relevance	Yes	N/A	Yes	Yes	Yes	N/A	Yes	N/A	Yes	N/A	Yes	N/A	Not assessable	**Yes**
Weighting	Mandatory		Mandatory	Mandatory	Mandatory		Mandatory		Mandatory		Mandatory			**Partly necessary**
Process classification														
⇨ Preparation				X										**X**
⇨ Selection	X		X	X	X		X		X		X			**X**
⇨ Contract														
⇨ Transition														
⇨ Execution														
⇨ Post-deal														
Comments														
Contract A:	"Yes" with the exception of the internal achievement of the vendor conditions. The existing core banking solution had a functional gap and a lack of IT skill and capacity existed. Therefore, the internal performance was not taken into consideration.													
Contract B:	An internal performance was not economically possible any more, because of the rising complexity of the demands (in particular from supervision right) and taking into account the size of the bank. Although an internal production of IT goods and services would be possible in principle, however, an ITO can also be wished for strategically.													
Contract C:	The time pressure regarding the conversion of Basel II linked with distributed know-how about the necessary kinds of customer ratings has led to the fact that banks of the same banking group have united in a joint venture.													
Contract D:	At the original outsourcing strategic aims were in the foreground (protection of IT location Bavaria by a central IT vendor of the banking group) which required an ITO. A backsourcing was not up for debate, because employees' capacities and skills were absent. For cost and quality reasons the application was shifted to a third vendor. Thereby, scale effects could be realised wise.													
Contract E:	Yes: Scale effects													
Contract F:	No: Make or buy because of strategic decision (protection of IT location Bavaria by a central IT vendor of the banking group)													
Contract G:	The strategic decision was made to bundle the support of the core banking system, which is used predominantly in foreign bases, at one place in the group to create synergies.													

Contract H:	The strategic decision was met to produce the IT need of the East European daughters by the IT vendor. Standardisation between the daughters has so far only partly been carried out. A reason for this is the partly different juridical demands in the single countries (from national banks, bank supervision). It is difficult to illustrate all land standards in one system. This should increasingly be implemented now.

In cases A, B, D, E, F, G and H it was not checked in the forefront of the ITO whether an internal performance is more advantageous, because among other things strategic objectives should be achieved with the ITO (technically outdated system with functional gaps, lacking internal capacities and skills, enterprise size not enough to implement supervision-juridical demands economically, protection of IT location in Bavaria, creation of competence centres in the banking group, performance by IT vendor in the market of the bank's daughters). In case C, the full leverage of internal IT abilities before an ITO was evaluated as compulsory for ITO success. After a preliminary investigation it was found out that the supervision-juridical demands cannot be fulfilled alone on time, which is why the internal performance was not followed up any more. In case D, no back misalignment was taken into consideration because of the absence of internal IT capacities and skills. Instead, the IT function was shifted to a third party.
An ITO only if scale effects can be achieved was evaluated as compulsory for ITO success in cases A, B, C, D, E, F and G.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The assessment of the success factor "ITO only if the external market is better than internal IT units" is done within success factor "Leverage in-house capabilities". Here, the success factor "ITO only if scale effects can be realised with it" is evaluated. The success factor is judged in 7 of 8 cases as compulsory. In these cases the achievement of strategic or cost-sided scale effects was the trigger for the ITO: In case H ("not valueable") all South East European daughters of the outsourcing bank should be served by a vendor on site to simplify the co-working by the same language and mentality as well as to generate cost advantages by the exploitation of the wage slope. This ITO objective leads to no scale effects, which is why the success factor could have been classified as not possible to evaluate. Whether scale effects should and can be realised must be checked in the forefront of the ITO, in the preparation and vendor selection phase.		

Discussion

The discussion of the success factor “ITO only if the external market is better than internal IT units” is done within the success factor “Leverage in-house capabilities”.

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
De Looff (1995, p. 294) in his study also comes to the conclusion that ITOs are to be recommended only if scale effects can be achieved with them.

Success Factor Category: Vendor selection
Success Factor: Measurement of service requirements upfront in baseline period
Before contract conclusion, the service requirements stated in the request for proposal must be measured in great detail in a defined baseline period.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Yes	Yes	Yes	Yes	Not assessable	Yes	Not assessable	**No**
Weighting		Mandatory	Mandatory	Mandatory	Mandatory		Mandatory		
Process Classification									
⇨ Preparation									
⇨ Selection		X	X	X	X		X		
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The production of IT goods and services was begun within the scope of a "letter of intent (LOI)". The standard contract of the vendor was accepted originally in favour of scale effects from standardisation. Successively, divergent service level and measures were determined and anchored by contract. An as low as possible divergence of the standard helps to keep outsourcing costs low.								
Contract B:	The requirements for the core banking system were qualitatively raised and defined before completion of the contract. A regular examination of the demands takes place within the scope of the SLA-Reporting. Nevertheless, not all demands are measurable in the forefront (e.g. maximum down-time).								
Contract C:	The rating system was pursued afterwards by an external IT vendor from the first development in the joint-venture. The necessary service levels were specified in detail within the scope of SLAs.								
Contract D:	The service level requirements could not be measured by the first vendor and, hence, were defined towards the new vendor before completion of the contract.								
Contract E:	A tendering has not occurred. Nevertheless, the service requirements were fixed in the form of SLAs. It is to be noted that too high requirements can prevent, if necessary, an ITO.								
Contract F:	The service standards were compiled and improved after completion of the contract step by step.								
Contract G:	A detailed specification has occurred towards the group-internal IT service provider.								
Contract H:	The service requirements were developed after completion of the contract successively and are partly unsatisfactory. The principles of operation need improvement. It often works with the motto “the one who shouts loudest is served first”.								

In cases A, F and H the success factor cannot be evaluated, because the service requirements were determined after completion of the contract successively. In case A, this approach brought financial advantages, because the standard contract of the vendor was originally accepted in favour of scale effects from standardisation. Case H mentions that the contractual fixation of detailed service requirements is a success factor and more and more value is laid upon it. In cases B, C, D, E and G a detailed specification of the requirements is evaluated as compulsory for ITO success, even if in all cases a tendering was not carried out. Case B points out, in addition, that not all requirements are measurable in the forefront, as for example the maximum down-time. Case E notes that too high requirements can also prevent an ITO. Information regarding a detailed measurement of the service requirements within the scope of a "baseline period" was not given.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
A detailed specification of the requirements towards the vendor is analysed within success factor “Requirements specification”. A detailed measurement of the requirements within the scope of "baseline period" as a basis for the requirement specification was not mentioned. Hence, the success factor can be rated as not relevant.		

Discussion

The discussion of the success factor “detailed service requirements” is done within success factor “Requirements specification”.

ITO studies based on long-term ITO cases
In contrast to the results of this thesis, in their study Lacity and Hirschheim (1993, pp. 81-83) come to the conclusion that a basic condition for the contract negotiations of fixed price contracts is a detailed measurement of the service requirements of every service to be produced, because any performance above or under the agreed extent is to be paid to the vendor. For the measurement, a time window of approx. 6 months is recommended to consider seasonal differences. In addition, the customer should agree on volume tapes for every service level to be ensured against variations.
The difference in the assessment of the success factor could be explained with the special kind of contract (fixed price contract) underlying the study of Lacity and Hirschheim (1993, pp. 81-83). A further discussion is not possible, because with the exception of case G it is not known whether fixed prices were agreed in the examined cases. Though in case G fixed prices were agreed, nevertheless at the end of the year a restitution or additional payment occurs depending on the cost development. So, in this case a real fixed price arrangement is not given.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Vendor capability
Success Factor: Business knowledge
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs amongst other things experience and expertise about the client´s industry.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	
⇨ Transition	X	X	X	X	X	X	X	X	
⇨ Execution	X	X	X	X	X	X	X	X	
⇨ Post-deal									
Comments									
Contract C:	The legal demands (Basel II) were new. The business know-how was introduced by the companion's banks in the society and the business requirements were developed successively within the scope of the society.								
Contract F:	Competent contacts with the vendor are an important success factor.								

In all 8 cases the availability of business knowledge on the vendor side about the client's industry is evaluated as compulsory for ITO success. In case C, the necessary business knowledge was introduced by the partners in the service society (joint venture). From the point of view of the outsourcing enterprise this knowledge is necessary during the client-vendor interaction (ITO process phases: vendor selection, contract, transition, execution).

Analysis and results

Relevance: Yes	Weighting: Mandatory	Process classification: 
Business knowledge on the part of the vendor about the branch of the client is compulsory for the achievement of ITO success. The survey result shows the ITO process phases in which this knowledge is applied by the vendor to the advantage of the ITO (selection – execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Also other studies look at the business knowledge of the vendor about the branch of their clients as a success factor. Willcocks and Fitzgerald (1994, p. 310), for example, focused on the investigation of application outsourcing in their study and evaluated an understanding of the vendor for the business of the client as a necessary generic vendor ability or a missing understanding as a failure factor. Cullen and Willcocks (2003, pp. 172-174) judged the inability of the vendor to understand the organisation of the client, its needs and priorities, as a failure factor. Also DiamondCluster (2005, p. 6) see the need of the vendors to focus themselves continuously on the needs and expectations of their customers. Thereby, it is important to understand complicated industrial processes, to develop deep technical knowledge and to find better ways to exceed customer expectations.

Success Factor Category: Vendor capability
Success Factor: IT knowledge
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs amongst other things experience and expertise about the outsourced IT function and underlying technology.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	
⇨ Transition	X	X	X	X	X	X	X	X	
⇨ Execution	X	X	X	X	X	X	X	X	
⇨ Post-deal									
Comments									
Contract C:	After development of the rating methodology the companion's banks have consulted their IT. With their support and the support of an external software house the software LB rating was developed and introduced in the society. The IT project was supported to approx. 80% by two of the companion's banks.								
Contract F:	Competent contacts at the vendor are an important success factor.								

In all 8 cases the availability of IT knowledge about the IT function to be outsourced and the underlying technology has been evaluated as compulsory for success with ITO. In case C, the rating software was developed by two companion banks together with an external software house and was then introduced in the newly founded joint venture. From the point of view of the outsourcing enterprise, this knowledge is necessary during the client-vendor interaction (ITO process phases: vendor selection, contract, transition, execution).

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Specialist knowledge on the part of the vendor about the outsourced IT function belongs to the core competence of the vendor and is compulsory for the success with ITO. The survey result shows the ITO process phases in which this knowledge is applied by the vendor to the advantage of the ITO (selection – execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
The following studies looks at the IT abilities of the vendor regarding the outsourced IT function also as a success factor. Pei et al. (2007, p. 4381) value the IT abilities of the vendor as a core competence and critical success factor. Aubert (1998, pp. 687-688, 690-691; 1999, p. 3) focused on the investigation of application outsourcing cases and see in a lack of experience and specialist knowledge of the vendor about the outsourced IT function the danger of service deterioration.

Success Factor Category: Vendor capability
Success Factor: ITO knowledge
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore it needs, amongst other things, experience and expertise with ITO.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	
⇨ Transition	X	X	X	X	X	X	X	X	
⇨ Execution	X	X	X	X	X	X	X	X	
⇨ Post-deal									
Comments									
Contract D:	In particular about the migration away from the first vendor.								
Contract F:	Competent contacts at the vendor are an important success factor.								

ITO knowledge and experience at the vendor is seen in all 8 cases as compulsory for the success with ITO. From the point of view of the outsourcing enterprise this knowledge is necessary during the client-vendor interaction, as in the ITO process phases of vendor selection, contract, transition, execution. If the vendor is changed, as in case D, the new vendor should have, in particular, experience of system migration.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Knowledge and experience about ITO on the vendor side is compulsory for success with ITO. The survey results show the ITO process phases in which this knowledge is applied by the vendor to the advantage of the ITO (selection – execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
ITO experience on the vendor side is also classified in the study of Aubert (1998, pp. 687-688, 690-691; 1999, p. 3) as relevant to ITO success. He focused on the investigation of application outsourcing cases and saw in a lack of experience and specialist knowledge of the vendor with outsourcing contracts the danger of escalating costs, conflicts and legal disputes.

Success Factor Category: Vendor capability
Success Factor: Interpersonal skills
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs amongst other things the ability to communicate and relate to the client's staff.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	
⇨ Transition	X	X	X	X	X	X	X	X	
⇨ Execution	X	X	X	X	X	X	X	X	
⇨ Post-deal									

In all 8 cases, social competence on the vendor side is judged as compulsory for success with ITO. From the point of view of the outsourcing enterprise, this knowledge is necessary during the client-vendor interaction, so in the ITO process phases of vendor selection, contract, transition, execution.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The social competence of the vendor, in particular the ability to communicate with the client and to build up a relationship, is mandatory for ITO success. The survey results show the ITO process phases in which this knowledge is applied by the vendor to the advantage of the ITO (selection – execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
The social competence of the vendor is also evaluated as success relevant by Willcocks and Fitzgerald (1994, p. 310). They look upon the ability of the vendor to build trust and relationships with the employees of the client, to communicate and to be accepted as an external partner, as a necessary generic ability.

Success Factor Category: Vendor capability
Success Factor: Organisational learning capability
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore it needs amongst other things the ability to learn the necessary knowledge from the client. This is important for effective knowledge sharing which positively influences ITO success.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									**X**
⇨ Contract									
⇨ Transition	X	X	X	X	X	X	X	X	
⇨ Execution	X	X	X	X	X	X	X	X	
⇨ Post-deal									
Comments									
Contract C:	In particular knowledge transfer of the necessary business know-how of the companion's banks in the common society.								

The learning ability of the vendor is classified in all 8 cases as compulsory for success with ITO. The knowledge transfer between client and vendor takes place primarily in the transition phase and during the external operation of the application.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The ability of the vendor to take up knowledge of the client is compulsory for success with ITO. The survey result shows the ITO process phases in which this knowledge is applied by the vendor to the advantage of the ITO (transition – execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Lee (2001, pp. 332-333) also evaluates the learning ability of the vendor as a necessary ability for the successful knowledge transfer between client and vendor which positively influences ITO success.

Success Factor Category: Vendor capability
Success Factor: Staff management
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs (amongst other things) a professional staff management (staff quality, capacity, working conditions, allocation, low staff turnover, etc.)

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**	
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**	
Weighting	Mandatory	Mandatory	Partly necessary	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Partly necessary**	**Mandatory**
Process Classification										
⇨ Preparation										
⇨ Selection									**X**	
⇨ Contract										
⇨ Transition	X	X	X	X	X	X	X	X		
⇨ Execution	X	X	X	X	X	X	X	X		
⇨ Post-deal										
Comments										
Contract C:	Employee's fluctuation exists in the joint venture. Nevertheless, owner of the know how are the companion´s banks.									
Contract H:	It is an important success factor which is partially not given. Key business players are absent. On the other side, employees exist for not value-added activities.									

A professional personnel management on the vendor side by takeover of the IT function in the transition phase and during the external operation is judged as compulsory for ITO success in cases A, B, D, E, F, G and H. In case H, in particular, professional members of staff are mentioned as a success factor (see success factors “Vendor capability: Business knowledge” and “Vendor capability: IT knowledge”). In case C, the business knowledge per rating module is owned by a companion's bank by which the availability of knowledge or knowledge fluctuation in the society is seen as less critical.

Analysis and results

Relevance: Yes	Weighting: Partly necessary Mandatory	Process classification: 
Professional personnel management of the vendor (staff quality, capacity, working conditions, allocation, low staff turnover, etc.) from takeover of the IT function in the transition phase is compulsory for success with ITO. By choice of certain organisational forms (like in case C: foundation of a joint venture with business responsibility per rating module at companion's banks) employee fluctuation at the vendor can be less critical under such circumstances, because the client can help out if necessary. The survey result shows the ITO process phases in which this knowledge is applied by the vendor to the advantage of the ITO (transition – execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Also other studies evaluate a professional personnel management as a success factor. Willcocks and Fitzgerald (1994, p. 311), for example, focused on the investigation of application outsourcing cases and evaluated inadequate vendor management and too much field service of the vendors' employees as failure factors. Hirschheim und Lacity (2000, p. 101) found out that a disadvantageous vendor management, in particular the reduction of staff, the reworking of the remaining employees and the allocation of good staff to other customers, is a reason for backsourcing by formerly outsourced IT functions. Koh et al. (2004, p. 369, 362) call an effective personnel management - for the purposes of high personnel quality and low employee's fluctuation as well as minimum customer participation - a success factor.

Success Factor Category: Vendor capability
Success Factor: Flexibility in case of changing client and IT needs
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs (amongst other things) the ability to react flexibly to changing client and IT needs.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									**X**
⇨ Contract									
⇨ Transition									
⇨ Execution	X	X	X	X	X	X	X	X	
⇨ Post-deal									
Comments									
Contract C:	Yes, concerning changing business standards. The responsible competence centre in the companion's banks communicates the change needs in the rating methodology to the society. The joint venture has the decision taking authority for the technology.								

Flexibility of the vendor regarding the implementation of changing business and IT requirements during the term of the ITO is evaluated in all 8 cases as compulsory for ITO success.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The conversion of changes in business and technology requirements during the external execution of the ITO is compulsory for the achievement of success with ITO. The survey result shows the ITO process phases in which this knowledge is applied by the vendor to the advantage of the ITO (execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
Kim and Chung (2003, p. 83, 87-88) explain by analogy with the result of this thesis that flexibility for coping with changes of business and IT requirements, released by the client, the market or the economic situation, strongly influences ITO success.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Flexibility on the vendor side is also evaluated as success factor by the following studies. DiamondCluster (2005, p. 19) formulated as "lesson learnt" for vendors that client expectations and objectives change constantly, and that the vendor must be able to fulfil the changed demands. Hirschheim and Lacity (2000, p.101) investigated as a reason for backsourcing the inability of the vendor to introduce new technologies without extremely high fees. Veltri et al. (2008, p. 11) come to the conclusion that the vendors who are not able to implement changed client requirements influence the business success of the client negatively. Willcocks and Fitzgerald (1994, p. 311) focused on the investigation of application outsourcing cases and found out that the retention of the once agreed service is a main failure factor in cases of changing business and user requirements.

Success Factor Category: Vendor capability
Success Factor: Partnership's potential
A vendor must be willing to look beyond the existing ITO contract together with the client to identify the long-term potential of the partnership.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**No**	**Yes**
Weighting	Partly necessary	Mandatory	Mandatory	Partly necessary	Partly necessary	Mandatory	Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution	X	X	X	X	X	X	X		**X**
⇨ Post-deal									
Comments									
Contract A:	If the prize/performance ratio is appropriate, no action need exist.								
Contract B:	Focus lies on the expenses.								
Contract D:	Depending on the business model.								
Contract E:	Hardly potential, because standard software.								
Contract H:	The IT vendor is a 100% daughter and financially dependent on the bank. Hence, there exists no partnership for the purposes of equal rights. The IT vendor often has no scope of action for own decisions and also does not expect this.								

Leveraging the long-term potential of the partnership during the term of the ITO is judged in 4 cases (B, C, F and G) as compulsory. Case B puts the focus on the costs. In 3 cases (A, D and E) this is evaluated as partly necessary. In case E, this is explained by a lack of potential because of the external sourcing of standard software. Case A believes that, with a suitable prize / performance relation, no action need exist. In case H, the success factor is evaluated as not relevant, because

the relationship to the vendor is not classified as a partnership by the outsourcing bank. The IT vendor is a 100% daughter and is governed closely by the outsourcing bank because of existing cultural differences. Hence, the strategic objective of the ITO is given unilaterally.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
Boosting the long-term potential of the partnership as a success factor during the term of the ITO is not evaluated in all cases as compulsory. Provided that the costs/performance relation is right from the point of view of the client and the vendor, this is not necessary according to case A (external ITO). In case of the external ITO in B, the success factor is evaluated as compulsory regarding costs. By application of standard software, as in the cases of the external ITOs E and D, the boosting of potentials is limited by the given functional frame of the software, which is why the success factor was evaluated as partly necessary in these cases. In case H (internal ITO), the vendor has no decision rights, for which reason the relationship is not evaluated as a partnership. Hence, the success factor is evaluated as not relevant in this case. The internal ITOs F and G as well as the joint venture in case C evaluate the success factor as compulsory for the achievement of ITO success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Feeny and Willcocks (1998, p. 15) also mention the identification of the potential "added-value" of vendors as one of nine core IT abilities which need to exist on the client side. Thereby, client and vendor should investigate possibilities beyond the existing contract for a long-term win win potential, by whose conversion the vendor increases its income while it produces services which bring business benefits to the client.

Success Factor Category: Vendor capability
Success Factor: Reliable, professional job completion / Minimum customer involvement
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs reliability and professionalism and the ability for job completion with minimum customer involvement.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**	
Relevance	Yes	Yes	Yes / No	Yes	Yes	Yes	Yes	Yes / No	**Yes**	
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**	**Partly necessary**
Process Classification										
⇨ Preparation										
⇨ Selection									**X**	
⇨ Contract										
⇨ Transition										
⇨ Execution	X	X	X	X	X	X	X	X		
⇨ Post-deal										
Comments										
Contract C: Contract H:	The participation of the companion banks (business competence centre for rating modules) is desirable. Yes: reliability and professionalism. Due to culture partially not given. No: minimum customer participation. Cultural differences require a management on site (managers of the IT vendor are expatriates of the bank) and strict controls. Maximum customer participation is necessary.									

A reliable and professional job completion of the vendor during the external operation is judged in all 8 cases as compulsory for success with ITO. Minimum customer participation is evaluated by 6 banks as compulsory. At one bank (case C) the participation (=companion bank of the joint venture) is welcome. The companion's banks act as a business competence centre for rating modules. Due to cultural differences, maximum customer participation in case H, in terms of strict controls of vendor performance and vendor management on site by expatriates (100% of daughter), is compulsory.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary Mandatory**	**Process classification:** 
A reliable and professional job completion by the vendor is compulsory for the achievement of success with ITO. However, a minimum customer participation cannot be possible with big cultural differences (as in the case H) which require strict controls or cannot be desirable with certain types of ITOs, like by foundation of the joint venture in case C. The survey result shows the ITO process phases in which these abilities are applied if necessary by the vendor to the advantage of the ITO (execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, p. 310) focused on the investigation of application outsourcing cases and values reliability and professionalism of the vendor also as a necessary generic ability.
Koh et al. (2004, p. 369, 362) found out that an independent performance and problem solution of the vendor with minimum customer participation had a significant positive relation to ITO success. A further discussion in relation to the results of this thesis is not possible as no information is given about the organisational form of the underlying ITOs or about cultural differences existing between client and vendor.

Success Factor Category: Vendor capability
Success Factor: Attraction of customers
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs the capability to attract customers.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Not assessable	Yes	Yes	No	No	**Yes**
Weighting	Partly necessary	Partly necessary	Partly necessary		Partly necessary	Mandatory			**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									**X**
⇨ Contract									
⇨ Transition									
⇨ Execution	X	X	X		X	X			
⇨ Post-deal									
Comments									
Contract A:	If the prize-performance ratio is appropriate, no need exists for additional clientele on the vendor side.								
Contract B:	If costs and quality are okay, not necessary.								
Contract C:	Since 2007 the rating software has also been offered to third parties (to approx. 1/3) which leads to cost reductions for the companion's banks. During the duration of the cooperation the costs for this ITO have dropped by approx. 10% every year (curve of experience), from at first 4 on currently 2.5 million €.								
Contract E:	If the price / performance relation is right for the client, no need exists.								
Contract F:	The more banks source the core banking system at the vendor bank, the less costs are to be paid (cost divisor).								
Contract G:	Group-internal IT vendor.								
Contract H:	IT vendor acts beside one external bank only for the banking group. With suitable cost / performance relation not necessary.								

In cases A, B, C and E the ability of the vendor to acquire customers is evaluated as partly relevant for success. Cases A, B and E are not of the opinion that this is necessary, if the cost / benefit relation is right. In case C, a joint venture was founded by banks of the same banking group for the performance of the outsourced

application, which distributes the performance also to third customers. This has brought significant cost savings. For case D, the success factor is not possible to evaluate. In case F, the ability of the vendor to acquire customers is judged as compulsory, because this reduces the costs for the client banks. In cases G and H, the success factor is classified as not relevant. In case G, the vendor is a solely group-internal enterprise. In case H also, nevertheless one external bank is co-supplied here. Case H also points to the fact that customer acquisition is not necessary with a suitable cost / performance relation.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
If the cost / performance relation of the ITO fits, no need exists for the vendor to acquire new customers during the term of the ITO (see cases A, B, E and H with assessment partly necessary). In case C, no cost reduction aims stand in the foreground of the ITO, hence the success factor has only a subordinate meaning which can explain the partly necessary assessment in this case. If a vendor operates almost exclusively for banks within a banking group, the success factor is not relevant (see cases G and H). The compulsory judgement of the success factor in case F can be explained by the discontent of the outsourcing enterprise with the costs of the ITO (see case study F). The cost / benefit relation is not classified as adequate here. The survey result shows the ITO process phases in which this ability is applied by the vendor to the advantage of the ITO (execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Pei et al. (2007, p. 4381) see the ability of the vendor to acquire customers also as a critical success factor. In this study no information is provided about the cost/benefit relation of the underlying ITOs and about the organisational form. Hence, a further discussion in relation to the results of this thesis is not possible.

Success Factor Category: Vendor capability
Success Factor: Financial stability / Cost and financial management
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs financial stability and a good cost and financial management.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	
⇨ Transition	X	X	X	X	X	X	X	X	
⇨ Execution	X	X	X	X	X	X	X	X	
⇨ Post-deal									
Comments									
Contract H:	Financial stability of the vendor is not sufficient to execute contractually agreed financial punishments in case of reduced / mal performance.								

In all 8 cases the financial stability and a professional cost and financial management of the vendor during the duration of the cooperation is seen as compulsory for the success with ITO. In case H, it is pointed out that the financial situation of the vendor (100% daughter) is currently not sufficient to compensate financial punishments from reduced or mal-performance. This leads to the fact that these cannot be executed and lose thereby their effect in bringing the vendor to act according to the contractual arrangements.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Financial stability and a professional cost and financial management are compulsory for the success with ITO to avoid negative effects on the vendor performance. The survey result shows the ITO process phases in which the financial stability of the vendor and a professional cost and financial management need to exist (selection - execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
Kim and Chung (2003, pp. 87-88, 84) reported that a good financial status of the vendor correlates significantly to ITO success. The success relevance of these aspects was also confirmed in this thesis.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Cullen and Willcocks (2003, pp. 172-173) also evaluate a good cost and financial management on the vendor side as a success factor.

Success Factor Category: Vendor capability
NEW Success Factor: Short response time in case of problems
The vendor´s primary goal must be to deliver the outsourced IT service in budget, time and quality in compliance with the ITO contract, and to improve the service continuously. Therefore, it needs the ability to respond quickly to problems.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance						Yes			**Yes**
Weighting						Mandatory			**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									**X**
⇨ Contract									
⇨ Transition						X			
⇨ Execution						X			
⇨ Post-deal									

In case F, a short response time of the vendor in case of problems was mentioned as a compulsory additional success factor during the transition and execution phase.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
A short response time of the vendor to problems from the takeover of the operation and during external operation is a compulsory success factor. This is of interest for every customer in order to recover the functionality of the outsourced application quickly. The survey result shows the ITO process phases in which a quick response time is necessary in the case of problems with the outsourced application (transition - execution). This study examines the success factors from the point of view of the outsourcing enterprise, though the temporal relevance of this success factor is fixed to the vendor selection phase in which the outsourcing enterprise must guarantee that the vendor has this ability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Vendor capability
Success Factor: Individual contract
The standard contract of the vendor should never be accepted. Instead, it needs to be tailored to the client´s specific needs.

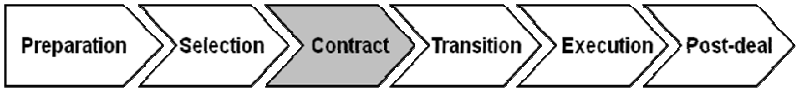
Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Partly necessary	Partly necessary		Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract	X	X		X	X	X	X	X	**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The standard general agreement was accepted. In the service description and in SLA's individual requirements were negotiated.								
Contract B:	The contracts (companion's contract and contract of utilisation) were developed by the companion banks together.								
Contract C:	Meeting demand.								
Contract E:	Country-specific supervision right and tax right are to be considered.								
Contract F:	The standard general agreement was accepted. In the service description and in SLA's individual requirements are negotiated.								

In 5 cases (D, E, F, G and H) it is judged as compulsory not to accept the standard contract of the vendor, but to negotiate individual contracts. Case E is of the opinion that the contract needs to meet the demand, case F refers to the necessity of considering country-specific supervision rights and tax rights. In cases A and B the negotiation of individual contracts was classified as partly relevant to success. In case A, the standard contract was accepted originally by which cost savings by means of scale effects could be realised. Necessary, deviating requirements were determined successively and anchored by contract. In case B, the standard gen-

eral agreement was accepted, the service level agreement was negotiated individually. In case C, individual contracts are evaluated as not relevant to success. In this case, a joint venture was founded by banks of the same banking group. The contracts were developed by the companion banks together.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The contract must meet the demand (e.g. adequate service levels and exit possibilities), no matter whether this is already considered completely or partially in the standard contract of the vendor or must be negotiated. In favour of possible scale effects from ITO, each outsourcing enterprise should weigh carefully whether a divergence from the standard general agreement is necessary (see case A). Case C is not touched by this success factor, because by foundation of the common joint venture the companion's contract and the contract of utilisation has been developed by all companion banks together.		

Discussion

ITO studies based on long-term ITO cases
Lacity and Hirschheim (1993, pp. 80-81) give recommendations on how ITO contracts should be negotiated. Among other things, it is judged as important to reject the standard contract of the vendor, because this prefers as a rule the vendor (by absence of performance standards or penalties, payment prior to service delivery etc.).

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, p. VI) recommend never to accept the contract proposal of the vendor. Fritsch and Wahrenburg (2008, p. 8) mention that an individually negotiated contract helps to increase the cost efficiency and the profitability of the outsourcing bank. These studies do not state the kind of underlying ITOs (in particular the organisational form, if an individual IT function or a standard application is outsourced) and if the contract meets the demand, which is why a further discussion in relation to the results of this thesis is not possible.

Success Factor Category: Vendor capability
Success Factor: Contract: Measurable service requirements, measures and reports
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is specific and measurable service requirements and related service level measures and reports.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes / N/A	Yes	Yes	Yes	Yes	Yes / N/A	Yes	Yes / N/A	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X								
⇨ Execution	X								
⇨ Post-deal									

Comments

Contract A: The standard contract of the vendor was accepted originally and protects the same demands and with it scales effects. With divergent demands it was always checked whether the divergence was really necessary. Successively, necessary individual demands were anchored in the contract.

Contract B: For the core banking system the requirements were qualitatively raised and defined before completion of the contract. A regular examination of the requirements takes place within the scope of the SLA reports. Nevertheless, not all demands are measurable in the forefront (e.g. maximum downtime).

Contract C: The rating system has been pursued by an external IT vendor since the end of the first development in the joint-venture. The service levels were specified in detail within the scope of SLAs.

Contract D: The service level standards were not measurable at the first vendor and, hence, were defined towards the new vendor before completion of the contract.

Contract E: The service standards were fixed in the form of SLAs.

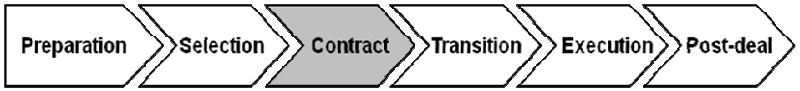
Contract F: The service standards were determined and improved after completion of the contract step by step. An important success factor is “regulate required services so far as possible in service level agreements in writing”.

Contract G: A detailed agreement of the service standards with the group-internal IT vendor has occurred.

Contract H: The service standards were developed after completion of the contract successively and are partly unsatisfactory. The operation methods are improvement-worthy. It has often worked according to the motto “the one who shouts loudest is served first”.

The contractual agreement of measurable service requirements, measures and reports is seen in all 8 cases as compulsory for success with ITO. In cases B, C, D, E and G this has occurred within contract conclusion (service level agreements). In cases A, F and H the service requirements were specified after completion of the contract successively. In case H, the service requirements are partially evaluated as unsatisfactory. In the case A, the fact is pointed out that the acceptance of the standard contract of the vendor helped to realise scale effects and to lower costs with it. Case B mentions that not all requirements are measurable in the forefront, as for example the maximum down-time.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
A detailed specification of the requirements and the linked measures and reports in the ITO contract is necessary for success with ITO. In cases B, C, D, E and G the requirements were investigated before completion of the contract and were integrated beside related measures and reports into the contract (service level agreements). Thus the expectations of the outsourcing bank were already cleared for the start of the external operation. In cases A, F and H the service requirements were specified after completion of the contract successively. Also in these three cases the ITO relation seems to be lasting. In case A this approach had no disadvantageous effects. This could be explained by the fact that the requirements for a core banking system in retail business do barely deviate from the standard. Also in cases F and H the service requirements were developed after completion of the contract successively. This could have been unproblematic on account of the organisational form of an internal ITO and the possibilities of influencing the vendor linked with it. Nevertheless, case H mentions that a detailed specification is a success factor and that more value is placed of it in the future. In case G an internal ITO is also given. Nevertheless, here the success factor is evaluated as compulsory. This could be explained by the fact that case G maintains a client-vendor relation in spite of the character of an internal ITO.		

Discussion

In the following studies, contractually anchored service levels, measures and reports are also mentioned as a success factor.

ITO studies based on long-term ITO cases
Lacity and Hirschheim (1993, pp. 81-85) give 14 recommendations for the completion of successful outsourcing contracts. Among other things, it is recommended not to conclude incomplete contracts and to define service requirements, measures and reports. Saunders et al. (1997, pp. 72-77) look at the careful definition of all aspects of an outsourcing relationship as an important success factor (among other things service levels). Gerigk (1997 p. 169) comes to the conclusion that the likelihood of success is higher the more exactly the performance and costs can be defined at the time of contract conclusion.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

In the studies of Lacity and Willcocks (2009d, 341, 355, 357) and Lacity and Willcocks (1998, p. 365, 379-381) detailed contracts are associated in general with outsourcing success. Aubert (1999, p. 3) focused on the investigation of application outsourcing cases and explains that a lack of clarity about the vendor can lead to service deterioration. Also Willcocks and Fitzgerald (1994, pp. 310-311, 313-314) examined application outsourcing cases and came to the conclusion that service level agreements and measuring dimensions are the main success factors. They recommend spending enough time raising the service requirements clearly and extensively, getting the approval of the vendor before awarding the contract and anchoring the service requirements by contract. Lacity and Willcocks (2000, p. 22) derived from outsourcing experiences that contracts, and in particular service level agreements, are to be defined better. Koh et al. (2004, p. 363, 369) reported that outsourcing success depends greatly on clear specifications. Landis et al. (2005, p. 24) explain that extensive service level agreements and qualitative and quantitative measuring dimensions were a "lesson learnt" from outsourcing experiences. De Looff (1995, p. 294) recommends outsourcing only if the service requirements can be defined in the forefront and can be measured later. Cullen and Willcocks (2003, pp. 172-173) value SLA's with service definitions, KPIs and measuring dimensions as a success factor. For DiamondCluster (2005, p. 6, 19) the definition of very exact and measurable SLA's is also a success factor. Business Intelligence (1994, p. 103) evaluate a strict contract with rigorously defined services levels as success-influencing. A further discussion in relation to the results of this thesis is not possible, because these studies make no connection between the success factor and the kind of the outsourced IT function (in particular, if an individual IT function or standard application was outsourced) or the organisational form of the ITO.

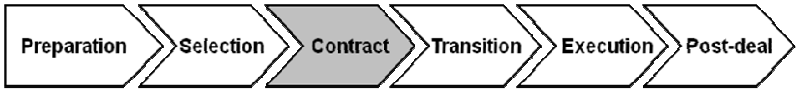
Success Factor Category: Vendor capability
Success Factor: Contract: Escalation procedures / process for resolution of performance disputes
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is escalation procedures and the process of how to resolve performance disputes in case of vendor underperformance.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Not assessable	Yes	Yes	Yes	Yes	Not assessable	**Yes**
Weighting	Mandatory	Mandatory		Mandatory	Mandatory	Mandatory	Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract	X	X		X	X	X	X		**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract C:	Financial punishments were not agreed, because these reduce though the costs, but also the participation yields. Hence, it is planned to leverage the available control committees (advisory board, partners meeting) in case of serious quality problems and to come to improvements in the consensus. During the project term this role was taken over from an external management consultant.								
Contract H:	The approach for the resolution of performance disputes was not regulated. Nevertheless, it would be important.								

The contractual anchorage of the process for the escalation and resolution of performance disputes was judged in 6 cases as compulsory for success (A, B, D, E, F and G). In cases C and H, the success factor is not possible to evaluate. In case H, this arrangement is absent, which is seen as a disadvantage. In case C, the vendor is a joint venture between banks of the same banking group. Here the resolution of performance disputes was not anchored in the contract, because this reduces the costs, but would also reduce the participation yields. Hence it is planned to leverage the available control committees (advisory board, partners meeting) in case of serious quality problems and to come to a consensus on improvements.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The contractual arrangement of a process for the escalation and resolution of performance disputes in case of less or mal-performance of the vendor is partly relevant for success. With the organisational form of an external or internal ITO the success factor is compulsory. In the internal ITO case, H, the success factor was classified as not possible to evaluate. Nevertheless, it was mentioned that such a regulation would have been important. By foundation of a joint-venture (case C: not possible to evaluate), however, influencing possibilities on the vendor exist via partners committees which make a contractual definition unnecessary.		

Discussion

Also the following studies point to the need of a contractual definition of procedures for escalation and for the resolution of performance disputes as a success factor.

ITO studies based on long-term ITO cases
Lacity and Hirschheim (1993, pp. 81-85) give recommendations for the successful completion of ITO contracts. Amongst other things, it is important to specify the approach for escalation (e.g. establishment of a crisis squad for the investigation of the causes and for the definition of the handling of critical services, etc.). Saunders et al. (1997, pp. 72-77) see a careful definition of all aspects of an outsourcing relationship as an important success factor (among other things the approach for the resolution of performance disputes).

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, pp. 310-311, 313-314) focus on the investigation of application outsourcing cases and recommend, among other things, the contractual regulation of escalation procedures. A further discussion in relation to the results of this thesis is not possible, because these studies gave no information about the organisational form of the underlying ITOs.

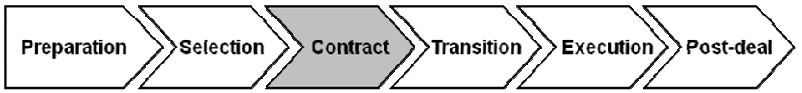
Success Factor Category: Vendor capability
Success Factor: Contract: Financial penalties
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is financial penalties for vendor underperformance.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Not assessable	Not assessable	Yes | No	Yes	Not assessable	Yes	Yes	Yes	**Yes**
Weighting			Mandatory	Mandatory		Mandatory	Mandatory	Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract				X		X	X	X	**X**
⇨ Transition			X						
⇨ Execution			X						
⇨ Post-deal									
Comments									
Contract A:	No financial penalties were agreed in the contract. We take it that the vendor would not perform better with financial penalties. Malus regulations would only be okay, if bonus regulations would also be taken up in the contract. Within the scope of this contract a standard service is obtained. Up to now no disadvantageous performance has appeared. An effective communication contributes to a quick problem solution.								
Contract B:	Financial punishments for less or mal-performance would be an advantage. Nevertheless, if the problem appears as exhaustive to the vendor, this can lead to a high financial damage for the vendor. This could flow again into the price calculations if necessary and could have a negative effect on the price.								
Contract C:	Financial punishments were not agreed, because these reduce the costs, but also the participation yields. Hence it is planned to leverage the available control committees (advisory board, partners meeting) in case of serious quality problems and to come to a consensus on improvements. During the project term this role was taken over from an external management consultant.								
Contract D:	Every companion is to be obliged to supply the same portion on personal days. If this is not fulfilled, compensatory payments flow. Besides, there exists a sprinter's premium: subprojects, which can provide necessary business changes in the comparison earlier, receive a reimbursement from the society.								
Contract E:	Financial punishments in case of less or mal-performance are a market standard and work by disciplining the vendor.								
Contract G:	Escalation punishments for less or mal-performance were not agreed.								
Contract H:	Financial punishments for less or mal-performance are used in the form of a credit point system.								

In 5 cases (C, D, F, G and H) the arrangement of financial punishments for less or mal-performance was seen as compulsory for success with ITO.
The vendor in case C is a joint venture between banks of the same banking group. Here no financial punishments were agreed in the real sense, because these reduce through the costs, but would also reduce the participation yields. Hence it is planned to leverage the available control committees (advisory board, partners meeting) in case of serious quality problems and to come to a consensus on improvements. Nevertheless, every companion is obliged to introduce the same portion on personal days for further developments. If this is not fulfilled, compensatory payments flow. Besides, there exists a sprinter's premium: sub-projects, which can provide necessary business changes data in the comparison earlier, receive a reimbursement.
Case D points to the fact that the arrangement of financial punishments belongs to the market standard and works by disciplining the vendor. In case H, the agreed financial punishments could never be executed on account of the financial situation of the vendor.
In cases A, B and E the success factor is classified as not possible to evaluate because a contractual regulation is absent. But case B would see an advantage from such a regulation. However, it is also pointed out that, with exhaustive problems, the financial punishments are included again in the prices, which can cause cost increases for the outsourcing enterprise. In case A such a regulation was not judged as necessary because the outsourcing enterprise is also contented without this regulation of the performance of the vendor (standard bank functionality) and thereby expects no performance improvement by this.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The contractual arrangement of financial punishments is an incentive to bring the vendor to act according to the contractual arrangements. Depending on the financial situation of the vendor, an outsourcing enterprise can still decide whether or not to execute the financial punishments (as in case H). In cases D and A an external ITO is given. In case D, the success factor is evaluated as compulsory. In case A, no financial punishments were agreed in the contract. Nevertheless, in case A a standard application with less divergence from the standard requirement is sourced externally. Under such circumstances, standard applications can be more mature on account of the wider user's circle and, hence, less susceptible to disturbances, which is why a contractual arrangement could be absent. With capital interweaving between client and vendor, possibilities of influencing the vendor exist via committees, which made the contractual definition of financial punishments unnecessary in cases and E (external ITOs with capital participation). In the case of the joint venture (case C) no financial punishments were agreed either, because these reduce the costs, but would curtail also the participation yields. In contrast to cases B, E and C with capital participation, the success factor is judged as compulsory in cases F, G and H (internal ITO = 100% capital participation). Internal ITOs could look at financial punishments if necessary as a necessary incentive to bring the vendor to act according to contractual arrangements despite a safe orders situation.		

Discussion

The following studies also point to the need for a contractual definition of financial punishments in case of less and mal-performance.

ITO studies based on long-term ITO cases
Lacity and Hirschheim (1993, pp. 81-85) give recommendations for the successful completion of ITO contracts. Among other things, the arrangement of financial punishments for less and mal-performance of the vendor should be agreed high enough to win the attention of the upper vendor management. Saunders et al. (1997, pp. 72-77) look at the careful definition of all aspects of an outsourcing relationship as an important success factor (among other things financial punishments).

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, pp. 310-311, 313-314) focus on the investigation of application outsourcing cases and recommend, among other things, the contractual regulation of financial punishments for less and mal-performance of the vendor. Also Aubert (1999, p. 3) investigates application outsourcing cases and recommends taking up financial punishments in ITO contracts in order to guard against service deteriorations by ITO.

A further discussion in relation to the results of this thesis is not possible, because these studies provide no information about the organisational form of the ITO and the kind of outsourced IT function (individual IT function or standard application).

Success Factor Category: Vendor capability
Success Factor: Contract: Improvement targets
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is improvement targets concerning costs and service levels.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Not assessable	Not assessable	Yes	Yes	Yes	Not assessable	**No**
Weighting					Partly necessary	Mandatory	Mandatory		
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract					X	X	X		
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	Development objectives are not anchored in the contract. Nevertheless, they are discussed at management level regularly. A definition in the contract would have, if necessary, positive effects.								
Contract C:	Development objectives are not fixed in the contract. Nevertheless, they are agreed within the scope of the partners meeting.								
Contract E:	The vendor is obliged to work on the current state of the technology, can implement innovations and must keep the market standard in IT security. The payment was based at the time of the completion of the contract on the production costs of the vendor. At the beginning of the year the prospective costs were determined and paid in monthly rates. Owing to the coalescences of the vendor and the discontinuation of the capital participation the payment occurs currently performance-related.								
Contract H:	Development objectives are discussed in committees.								

In 2 cases (F and G) the contractual arrangement of development objectives concerning costs and performance was judged as compulsory for success with ITO. In case E, the success factor was evaluated as partly necessary. The cases A, B, C, D and H could not value the success factor, as a contractual agreement is absent.

Nevertheless, in cases A, C and H these topics are discussed regularly between client and vendor (e.g. in committees). Case A mentions that such a regulation would be advantageous in the contract.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
Some of the examined contracts (A, B, C, D and H) contain no contractual arrangement of development objectives; hence, the success factor does not seem to be compulsory. Nevertheless, a regular verbal discussion of the topic partially occurs in these cases. In other cases the success factor is evaluated as partially relevant or compulsory. It can be concluded that a regular discussion of the success factor between client and vendor is advantageous for the external performance, regardless of a contractual anchorage.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Feeny and Willcocks (1998, p. 14) describe a monitoring of the contract as one of the 9 core abilities for IT units. Parts of this aspect are also the securing of existing service contracts and of the constantly developing performance standards of the market. Lacity and Willcocks (2009d, p. 341, 359-360) look at the leveraging of the vendors' abilities as a success factor. The inclusion of change mechanisms in the contract is publicised by Lacity and Willcocks (2009d, p. 341, 355, 357) (among other things, negotiation possibility for price and service levels, benchmarking with “best of breed” vendors as a basis for the adaptation of prices and service levels). These studies also point to the need for leveraging developing potentials with the vendor.
A further discussion in relation to the results of this thesis is not possible because these studies provide no information about the organisational form of the underlying ITOs.

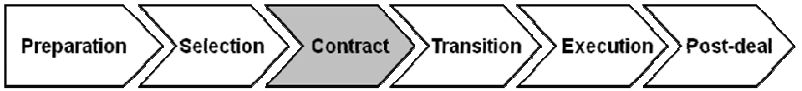
Success Factor Category: Vendor capability
Success Factor: Contract: Flexibility terms
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is flexibility in case of changing business and IT requirements (flexible pricing options considering growth rates and service volume fluctuations, etc.)

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Not assessable	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory		Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract	X		X	X	X	X	X	X	**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract C:	Flexibility in terms of “no minimum purchase dependent on use”.								
Contract E:	Changes may be required by the client and must be implemented by the vendor. The procedure for this is defined.								

Flexibility clauses in the contract for the adaptation to changing business and IT standards are evaluated in 7 of 8 cases (A, C, D, E, F, G, H) as compulsory for success with ITO. Case C mentions flexibility in terms of “no minimum purchase dependent on use”. In case B, the success factor is not possible to evaluate without giving any reasons.

Analysis and results

Relevance: Yes	Weighting: Mandatory	Process classification: 
Flexibility clauses in the contract for securing contract adaptation with changing business or technical requirements are compulsory for the achievement of success with ITO. According to the type of contract relation, various flexibility clauses are necessary (avoidance of minimum purchase, approach to conversion of application changes, etc.).		

Discussion

The following studies also point to the need for a contractual definition of flexibility clauses.

ITO studies based on long-term ITO cases
Lacity and Hirschheim (1993, pp. 81-85) give recommendations for the successful completion of ITO contracts. The following contract contents are recommended among other things: growth rates for certain resources (MIPS, storage, tapes, etc.), price adaptations in case of essential business changes like purchases and coalescences to equalise volume variations (reduction fixed price, quick conversion of changes, etc.), definition of "change of character" for the outsourced IT goods and services. Saunders et al. (1997, pp. 72-77) look at the careful definition of all aspects of an outsourcing relationship as an important success factor (among other things, growth rates, volume variations with services, "change of character" clauses).

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, pp. 310-311, 313-314) examined application outsourcing cases and stated the flexible creation of the contracts for the adaptation to changing business and IT standards as "lesson learnt". Lacity and Willcocks (2001, p. xiii, 338-339) evaluate an adaptable contract as a success factor. Huber (1993, p. 128) points to the fact that the methods of payment must be fixed exactly for a change project, in particular which payments are to be made in case of project changes or project stop. Kern (2002, p. 48, 60, 61, 65) recommends flexibility in outsourcing contracts to avoid a "winner's curse", a disadvantageous situation in which the vendor underbids the market price to award the contract. Flexibility in this case is defined as: “flexible pricing options including cost plus, market pricing, fixed fee adjusted by volume fluctuations, biannual assessment of pricing adjustments, price recalculations,” etc. The anchorage of change mechanisms in the contract is also publicised by Lacity and Willcocks (2009d, p. 341, 355, 357) (“planned contract realignment points for adaptation, contingency prices for fluctuations in volume of demand, negotiated price and service level improvements over time, external benchmarking of best-of-breed suppliers to reset prices and service levels”).

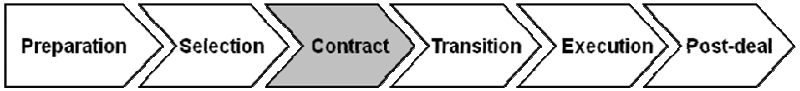
Success Factor Category: Vendor capability
Success Factor: Contract: Renegotiation
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is occasions for renegotiation possibilities (biannual assessment of pricing adjustments, renegotiation based on external benchmarking, etc.)

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	No	No	Yes	Not assessable	No	Yes	No	**Yes**
Weighting				Mandatory			Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract				X			X		**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	Occasions for renegotiation are not fixed in the contract, but nevertheless accepted by the vendor.								
Contract B:	Prices are uniform for all mandators and not negotiable.								
Contract C:	Post-negotiations are not necessary, because the aim of the society is to produce the performance for the companion's banks at as low as possible costs, not profit maximisation.								
Contract F:	The service provider's bank is to be seen as a competence centre for this core banking system within the banking group of the parent bank. Hence, no profit achievement intention exists, but the aim is to pursue this core banking system with as low as possible costs for all client banks. The costs are divided between the client banks. A small margin is included in the costs, because vendor staff members also perceive other duties and the outsourcing part is not unambiguously identifiable. The price is fixed yearly. At the end of the year a restitution or additional payment occurs according to cost development. A benchmarking has not been carried out so far.								
Contract G:	Group-internal vendor works not with profit achievement intention, but has the job to achieve the required IT services at as low as possible costs. If the actual costs in the end of the year are lower than the target cost ("flatrate" in the form of a fixed price), a restitution or additional payment occurs. A benchmarking is carried out by the group-internal IT vendor to guarantee the market compliance for the banking group.								
Contract H:	The IT vendor has no profit achievement intention but needs to produce the services at as low as possible costs. Hence, post-negotiations are not necessary.								

The anchorage of occasions for post-negotiations by contract was judged as not relevant in cases B, C, F and H. In case B, the vendor admits no contract negotiations, because the prices are the same for all mandators. In cases C, F and H no profit achievement intention of the vendor exists in consequence of the organisational forms of an internal ITO and joint venture. Here the originating costs are split between the client banks. In case G, the success factor is judged as compulsory, although it concerns an internal ITO without profit achievement intention as well. Nevertheless, in this case the assessment is explained by the realisation of a benchmarking by the internal vendor to guarantee the market compliance of the settled costs for the banking group, not with a post-negotiations possibility.
In cases A and E the success factor cannot be evaluated. In case A, a contractual arrangement is absent; nevertheless, the vendor admits contract negotiations.
In case D, an external ITO is given. Here the success factor is evaluated as compulsory.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The agreement of regular post-negotiation possibilities (e.g. on the basis of a benchmarking) in the contract gives the possibility to guarantee contract conditions in line with market requirements and is partly relevant to success. In case of ITOs without profit achievement intention (internal ITO, joint venture) the success factor is not relevant, because prices are not negotiated. In case G an internal ITO is also given, but the success factor is evaluated as mandatory. This internal ITO is handled as a client-vendor relation (see case study G). Prices are also not negotiated here; instead, a benchmarking is carried out by the vendor to guarantee market compliance. The agreement to regular post-negotiation possibilities is also not relevant in case B (external ITO to a vendor of the banking group with equity holding), as the prices are the same for all mandators and cannot be negotiated. In case E (not assessable) an external ITO with capital participation is also given. Hence, the success factor is relevant in external ITO cases without equity holding. In the external ITO case A no renegotiation possibilities were agreed. Nevertheless, they were admitted by the vendor, which can remedy the missing contractual arrangement.		

Discussion

The following studies also point to the need for a contractual definition of post-negotiation options.

ITO studies based on long-term ITO cases
Saunders et al. (1997, pp. 72-77) look upon the careful contractual definition of all aspects of an outsourcing relationship as an important success factor, which also means a post-negotiation option.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

Kern (2002, p. 48, 60, 61, 65) recommend anchoring flexibility in outsourcing contracts to avoid a "winner's curse", a disadvantageous situation in which the vendor underbids the market prices to receive the contract award. In this case, flexibility is defined (among other things) as 2-times examination of the price per year, post-calculation of the prices, etc. The agreement of change mechanisms in the contract is also publicised by Lacity and Willcocks (2009d, p. 341, 355, 357) (“planned contract realignment points for adaptation, contingency prices for fluctuations in volume of demand, negotiated price and service level improvements over time, external benchmarking of best-of-breed suppliers to reset prices and service levels”). Landis et al. (2005, p. 24) draw as a "lesson learnt" from ITO experiences that, amongst other things, a renegotiation option in the contract is important.

A further discussion in relation to the results of this thesis is not possible, because these studies provide no information about the organisational form of the underlying ITOs.

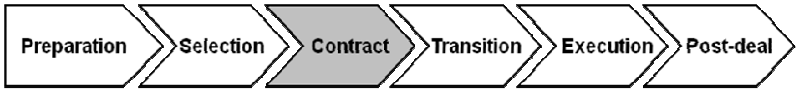
Success Factor Category: Vendor capability
Success Factor: Contract: Communication channels
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is communication channels, in particular definition of the vendor´s account manager in the contract.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes	Yes	Not assessable	Not assessable	Yes	Not assessable	Yes	Not assessable	**Yes**
Weighting	Mandatory	Mandatory			Mandatory		Mandatory		**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract	X	X			X		X		**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									

The contractual fixation of communication channels, in particular the notable naming of the vendors account manager in the contract, is seen in 4 cases (A, B, E and G) as compulsory for the success with ITO. In cases C, D, F and H the success factor cannot be evaluated without any reason being given.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The contractual definition of communication channels is compulsory for ITO success (see also success factor roles and responsibilities/vendors account manager: notable naming of the vendor's account manager on the vendor side).		

Discussion

ITO studies based on long-term ITO cases
Lacity and Hirschheim (1993, pp. 81-85) give recommendations for a successful completion of ITO contracts. The specification of the account manager on the vendor side in the ITO contract is also recommended to avoid opportunism and negative results of juridical gaps. Also Saunders et al. (1997, pp. 72-77) look at the careful definition of all aspects of an outsourcing relationship as an important success factor. They also recommend, among other things, to fix an account manager on the vendor side).

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Vendor capability
Success Factor: Contract: Benefit sharing arrangements
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is benefit sharing arrangements (e.g. vendor and client benefit from application revenues, increased efficiencies or reduced client costs).

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Not assessable	Not assessable	No	Not assessable	Not assessable	No	No	No	**No**
Weighting									
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract C:	The aim of the society is to produce the performance for the companion's banks at as low as possible cost, not profit maximisation.								
Contract E:	A profit sharing model was not necessary at the beginning of the partnership because the performance was produced by the IT vendor to production costs. At the beginning of the year the prospective costs were determined and paid in monthly rates. Owing to the coalescences of the vendor and the discontinuation of the capital participation the payment occurs currently performance-related.								
Contract F:	The service provider's bank is to be seen as a competence centre for this core banking system within the banking group of the parent bank. Hence, no profit achievement intention exists, but the aim is to pursue this core banking system with as low as possible costs for all client banks. The costs are divided between the client banks. A small margin is included in the costs, because the vendor staff members also perceive other duties and the outsourcing part is not unambiguously identifiable. The price is fixed yearly. At the end of the year a restitution or additional payment occurs according to cost development. A benchmarking has not been carried out up to now. The group-internal service provider does not work with a profit achievement intention, but has the job of achieving the required IT services at as low as possible costs. If the actual costs at the end of the year are lower than the target cost ("flatrate" in the form of a fixed price), a restitution or additional payment occurs.								
Contract G:	The IT vendor has no profit achievement intention but must produce the services at as low as possible cost.								
Contract H:	The aim of the society is to produce the performance for the companion's banks at as low as possible cost, not profit maximisation.								

A contractual anchored profit-sharing of the vendor in monetary advantages the client gains from the ITO is evaluated as not necessary in cases C, G, G and H. These vendors (joint venture of client banks or internal ITO) work not with profit achievement intention, but should produce the performance at as low as possible cost. In cases A, B, D and E the success factor cannot be evaluated. In case E, no profit achievement intention was also given at the beginning of the ITO, because the vendor (a family enterprise) has produced the performance to cost price. Owing to coalescences on the vendor side and the discontinuation of the capital participation the payment occurs currently performance-related.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
In none of the 8 cases does such a regulation exist in the contract. Nevertheless, these ITOs exist for many years. Hence, the contractual arrangement of profit sharing clauses is evaluated as not relevant for ITO success.		

Discussion

ITO studies based on long-term ITO cases
According to the study of Saunders et al. (1997, pp. 72-77), ITO success depends on the establishment of a partnership by means of profit sharing.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
DiamondCluster (2005, p. 19) have recommended the structuring of an outsourcing partnership as a “win-win” relation as a "lesson learnt" from outsourcing experiences.

These studies stand in contrast to the results of this thesis. The investigated ITO cases are, with the exception of case D (further ITO), exclusively external or internal ITOs to family enterprises. This political connection could be a reason why profit sharing clauses are not necessary to maintain the ITO. Nevertheless, it is also conceivable that profit sharing models are not necessary if the cost / benefit relation fits for client and vendor. A further discussion in relation to the results of this thesis is not possible, because the mentioned studies in the discussion provide no information about the organisational form of the underlying ITO.

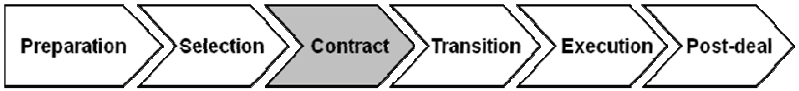
Success Factor Category: Vendor capability
Success Factor: Contract: Termination clause
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is a termination clause.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									

In all 8 cases, the admission of a termination clause in the contract is evaluated as compulsory for the achievement of ITO success.

Analysis and results

Relevance: Yes	Weighting: Mandatory	Process classification: 
The contractual agreement of a termination clause is compulsory for ITO success (see also success factor: ability to backsource/further outsource: Termination clause, understandable system documentation, obligation of the vendor to support and, if necessary, protection of rights).		

Discussion

The agreement of termination clauses in the ITO contract is also recommended by the following studies.

ITO studies based on long-term ITO cases
Lacity and Hirschheim (1993, pp. 81-85) give recommendations for the successful completion of ITO contracts, amongst other things the agreement of an exit clauses with adequate clauses of information and notice to facilitate a change free from problems. Also Saunders et al. (1997, pp. 72-77) look upon the diligent definition of all aspects of an outsourcing relationship as an important success factor (among other things: exit clause).

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Veltri (2008, pp. 19-21) recommends the exact definition of the approach for a necessary backsourcing before an ITO. This is the contractual fixing of exit clauses (procedure for an untimely termination of the contract / post-negotiations, transition process, financial punishments, minimum contract duration, etc.).

Success Factor Category: Vendor capability
Success Factor: Contract: Staff regulations / guarantees
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is regulations and guarantees for staff transferred from the client to the vendor.

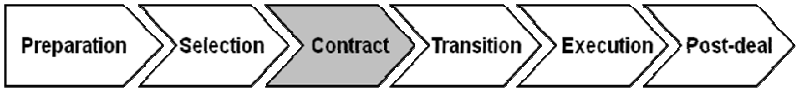
Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Not assessable	Not assessable	Yes	Not assessable	Yes	Not assessable	**Yes**
Weighting					Mandatory		Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract					X		X		**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	No personnel were transferred to the vendor.								
Contract B:	No personnel transfer took place.								
Contract C:	No employees of the partners were transferred to the joint venture. Employees were recruited in the market (from universities).								
Contract E:	Regulations and guarantees were agreed for transferred employees.								
Contract F:	No employees were shifted to the vendor bank. The institutes served by the group-internal IT vendor are migrated on a standard system. Employee which are transferred do not have this knowledge. However, an enterprise profits basically from experienced employees.								
Contract G:	No employees were outsourced.								
Contract H:	No personnel transfer took place.								

In 6 cases (A, B, C, D, F and H) no employees were transferred to the vendor, i.e. the success factor cannot be evaluated. In cases E and G, employees were transferred and suitable regulations were agreed. In cases E and G, the success factor is evaluated as compulsory. Case G points to the fact that the institutes served by

the group-internal IT vendor are migrated on a standard system. Employees which are transferred do not have the IT knowledge necessary for it. However, an enterprise profits from experienced employees.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
Contractual regulations and guarantees for staff transferred to the vendor are relevant in the case of a personnel transfer.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, p. 313) examined application outsourcing cases and also came to the conclusion that sensitive contact with affected employees, which comprises (amongst other things) guarantees for employees to be outsourced, was a "lesson learnt". A further discussion in relation to the results of this thesis is not possible, because this study provides no information about the kind of outsourced IT function (in particular: individual IT function or standard application)

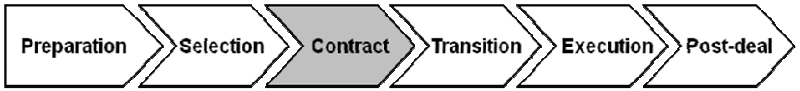
Success Factor Category: Vendor capability
Success Factor: Contract: Control rights
The contract must be comprehensive, clear and detailed before it is awarded to the vendor. An important aspect to regulate in the contract is control rights for the client and regulatory institutions.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The actual contract must be updated because the regulatory law has changed								

In all 8 cases the contractual arrangement of controlling rights for the outsourcing enterprise and for supervisory authorities is evaluated as compulsory for the achievement of success with ITO.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
All eight outsourcing enterprises are financial services enterprises and, hence, are governed by the respective European bank supervision right. The grant of controlling rights in the outsourcing contract, for the outsourcing bank as well as for the supervisory authorities, belongs to the standard requirements of the regulation authorities and is compulsory for success with ITO in order to ensure the legal capacity of the outsourcing enterprises.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Huber (1993, p. 127), in his case study, also mentions the importance of the early consideration of regulatory requirements and the communication with supervisory authorities. In particular, the subject's "accounting treatment, asset valuations, fees and service levels" were looked at by supervisory authorities.

Success Factor Category: Vendor capability
Success Factor: Contract review
Before contract conclusion, external advice should be engaged, as ITO is very complex and as vendors are normally more experienced compared to clients. Technical experts, for example, can help during the measurement of the baseline services to create technical performance measures for incorporation into the contract. Legal experts can help to get an adequate and complete contract negotiated, etc.

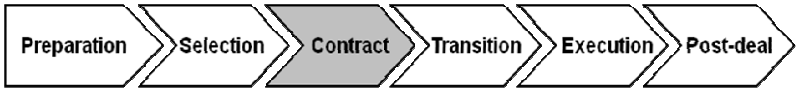
Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes / N/A	Yes	Yes	Yes / N/A	Yes	Yes	Yes / N/A	Not assessable	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory		**Mandatory**
Process Classification									
⇨ Preparation			X						
⇨ Selection			X						
⇨ Contract	X	X	X	X	X	X	X		**X**
⇨ Transition			X						
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The contract review was done by chartered accountants and lawyers.								
Contract C:	An external management consultant has accompanied the ITO process up to the start of operation and has embodied in particular a neutral position which has mediated between the companion banks of the newly founded joint venture.								
Contract D:	A lawyer's office was consulted.								
Contract E:	The connection between IT and right must be guaranteed. Thus, for example, technical measuring dimensions about contractual mechanisms must be able to be called, etc.								
Contract F:	In particular, a review by an Italian tax adviser was compulsory because of different tax rights between Germany and Italy.								
Contract G:	Yes: legal experts; No: technical experts.								

The consultation of external experts before contract conclusion was classified as compulsory in cases A, B, C, D, E, F and G. Legal experts were consulted predominantly (cases A, D, E, G). In case A, in addition, chartered accountants, in case F a tax adviser who was familiar with the country-specific tax rights of the newly founded establishment of the bank in Italy. Technical experts were not included in cases A, D and G. In case C a management consultant has looked after the out-

sourcing up to the first operation and has taken over a mediator's role between the companion banks of the newly founded IT vendor (joint venture). In case H, the success factor cannot be evaluated.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
In all cases that can be evaluated external experts were included before completion of the contract in the ITO project. Not only were the recommended legal experts and technical experts consulted, but also chartered accountants, a tax adviser and management consultants. The recommended technical experts were partially excluded. Hence, it is obvious that, depending on the experience of the outsourcing enterprise, different external experts should be included before completion of the contract in the contracting phase.		

Discussion

ITO studies based on long-term ITO cases
Saunders et al. (1997, p. 77) look upon the inclusion of external experts also as a success factor, because ITO is of a complicated nature. Saunders et al. (in 1997, p. 77) recommend technical experts for the measurement of the “baseline services”, performance parameters and legal experts for the compilation of the outsourcing contract and for the negotiations with the vendor. Lacity and Hirschheim (1993, p. 81) give advice on the negotiations of ITO contracts. Here, among other things, the inclusion of external experts is also recommended (technical experts during the measurement of the "baseline services" for the development of suitable measuring dimensions and for the translation of these into the language of the vendor; legal experts in the last phases of the negotiations to guarantee a legally flawless contract).

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Huber (1993, p. 126) recommends the support of externals to ensure the choice of a suitable vendor and to negotiate a suitable contract. Lacity and Willcocks (2009 d, p. 360) plead also for the inclusion of external help in the form of management consultants, lawyers' offices or interest groups for the access to experience and best practice approaches.

A further discussion in relation to the results of this thesis is not possible because these studies do not give information regarding the degree of experience of the outsourcing enterprise as a decisive criterion for the inclusion of external experts.

Success Factor Category: Vendor capability
Success Factor: Due diligence
A due diligence evaluation should be conducted to ensure that an adequate vendor is selected concerning company, price, solution, contract and customer references.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	No	No	No	Not assessable	No	No	No	Not assessable	**Yes**
Weighting									**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The vendor was given as a family enterprise of the banking group.								
Contract B:	If one has the choice between several IT vendors, a "due diligence" check makes sense. The vendor for the original outsourcing was certain, because the bank was a member of the bank association who operated the computer centre to which the original outsourcing occurred. The further outsourcing to another IT vendor of the banking group was also certain, because only this IT vendor looked after other banks of the banking group.								
Contract C:	The vendor was founded as a joint venture together with banks of the same banking group.								
Contract E:	If another IT function is outsourced to the same IT vendor a due diligence check is not necessary.								
Contract F:	The choice of the IT vendor was a strategic decision. The vendor is a 100% daughter of the outsourcing enterprise. There a competence centre was founded for the operation of this core banking system in the banking group.								
Contract G:	A group-internal IT vendor takes over the production of IT goods and services for all IT needs of the banking group.								
Contract H:	Before the purchase of the vendor some services were already produced there. The vendor was aimed successively at the needs of the East European daughters of the bank.								

In cases A, B, C, E, F and G the decision for the vendor was made from a strategic point of view (vendor is a family enterprise, foundation of a 100% daughter or a joint venture), i.e. the vendor was already certain regardless of a due diligence check. Cases E and H mention that, in the case of outsourcing another IT function to an existing vendor, a due diligence check is not necessary. Case B points to the fact that a due diligence check only makes sense if the choice exists between several vendors. In case D and in case H the success factor cannot be evaluated.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
In none of the cases that could be evaluated a due diligence investigation carried out before completion of the contract. Nevertheless, these ITO relations have existed for many years. With these ITOs strategic aims were central by which the vendor was fixed.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
A lesson learnt from the ITO experiences of DiamondCluster (2005, p. 19) was also to conduct a "due diligence" check in order to avoid surprises. Kern (2002, p. 48, 60) looks at a "due diligence" process before completion of the contract as a need to avoid a "winner's curse", a disadvantageous situation in which the vendor underbids the market prices to receive the award. A further discussion in relation to the results of this thesis is not possible, because these studies provide no information about the strategic objectives of the underlying ITOs.

Success Factor Category: Vendor capability
Success Factor: Contract amendments
Contract each work to be done in constituent contract amendments with its own pricing and service levels.

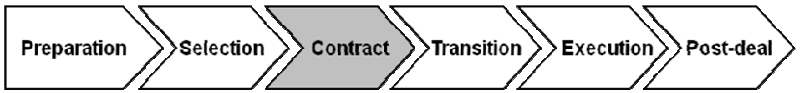
Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	No	Yes	No	Not assessable	Yes	No	No	Yes	**Yes**
Weighting		Partly necessary			Partly necessary			Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract		X			X			X	**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	A suitable level of detail should be chosen, which depends on the kind of service outsourced.								
Contract B:	Granularity so far meaningful.								
Contract E:	"Reasonable units". Not as detailed as possible, but as detailed as necessary dependent on the kind of performance.								
Contract F:	Contract content was a core banking system.								
Contract G:	Within the scope of a group-wide valid IT service model (services are defined with key performance indicators) the IT services are specified. Reference is made in the contracts to it.								
Contract H:	One works with annex. These will become more detailed in future to achieve even higher cost transparency.								

Single contract appendices per service are classified as not relevant in cases A, C, F and G. Case A points to the fact that a suitable level of detail should be chosen which depends on the kind of outsourced service. Case F believes that, with the core banking system, only one application was outsourced and, hence, no separate

contract appendices are necessary. In case G, separate contract appendices are not relevant, because the IT goods and services are group-wide standardised in the form of a product catalogue.
In case D, it is not possible to evaluate the success factor. In cases B and E, the success factor is classified as partly relevant to success. Case B mentions that a sensible granularity should be chosen. Also case E, here it was stated that "reasonable units" should be chosen (not as detailed as possible, but as detailed as necessary).
Case H evaluates as compulsory the production of single contract appendices per service and explains that these should be even more detailed in future to achieve a higher cost transparency.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
A clear and detailed performance description is important, no matter whether this is regulated in the main contract or in contract appendices. A meaningful granularity is recommended for the achievement of high-quality performance. The only compulsory assessment of the success factor in case H could be due to the fact that a large part of the applications is operated from this IT vendor. To this extent, contract appendices can become necessary to generate transparency. Also in the case G all applications are operated by the IT vendor. Nevertheless, in this case a standardised product catalogue exists which is why a performance description in the ITO contract is not necessary, only a reference to the product catalogue is made in the contract.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Aubert (1999, p. 3) recommends separate contract appendices per outsourced system with own service and price definitions to have the possibility to discontinue single contract components and to avoid with it a dependence situation with the vendor. A discussion in relation to the results of the thesis is not possible, because this study provides no information about the extent and the kind of the outsourced IT application (individual or standard application).

Success Factor Category: Vendor capability
Success Factor: Contract renegotiation
Early contract renegotiations can positively change service performance and the relationship between client and vendor.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	No	No	Yes	Yes	No	No	No	**Yes**
Weighting	Mandatory			Mandatory	Mandatory				**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution	X			X	X				**X**
⇨ Post-deal									
Comments									
Contract A:	Cost savings could be achieved by post-negotiations.								
Contract B:	The IT vendor was certain as a vendor of the banking group, price negotiations were not admitted, because all mandators pay the same prices.								
Contract C:	The prices are not negotiated, because the vendor (joint venture of client banks) has no profit achievement intention, but produces the performance to as low as possible costs.								
Contract D:	The vendor was changed because of cost and quality reasons. In the new contract the market justice of the production of IT goods and services is checked regularly by benchmarking. Contract adaptations are initiated if necessary.								
Contract E:	Significant cost savings could be achieved by post-negotiations.								
Contract F:	The vendor (100% daughter of the outsourcing bank) has no profit achievement intention, but should produce the IT performance to as low as possible costs. The price is fixed yearly. At the end of the year a restitution or additional payment occurs according to cost development. Benchmarking is not fixed in the contract. Nevertheless, it is carried out by the service vendor bank as a competence centre of the banking group for this core banking system.								
Contract G:	Group-internal vendor works not with profit achievement intention, but has the job of achieving the required IT services with as low as possible costs. If the actual costs at the end of the year are lower than the target cost ("flatrate" in the form of a fixed price), a restitution or additional payment occurs.								
Contract H:	Contracts are not post-negotiated, but are given by the bank (IT service provider is a 100% daughter).								

In cases C, F, G and H the vendor has no profit achievement intention, hence this success factor is not relevant in these cases. In case B, the success factor is also not relevant, because no post-negotiations are admitted by the vendor. In cases A, D and E, timely post-negotiations of the outsourcing contracts are evaluated as compulsory for success with ITO. In cases A and E, reduction in costs could be achieved by post-negotiations. In case D, a regular examination of the market justice of the sourced IT goods and services was agreed in the contract.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
In cases A and E (external ITO without / with capital participation), it appears that reductions in costs could be achieved by post-negotiations during the term of the ITO contract. With an internal ITO (cases F, G, H) or by foundation of a joint-venture (case C). So, in cases where the vendor has not got a profit achievement intention, or in cases where no price negotiations are admitted (case B), the success factor is not relevant.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Kern (2002, p. 61, 48) also sees early post-negotiation of the contract as advantageous. Kern (2002, p. 61, 48) believes that by post-negotiations of the contracts the performance of the vendor, the relationship between client and vendor and the operational effectiveness of the client can be improved. A further discussion in relation to the results of this thesis is not possible, because this study provides no information about the organisational form of the underlying ITO.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: High level management
In the client company, a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the needed support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. An important stakeholder is the high level management on the business and IT side. The promoter of ITO in the client company must achieve the commitment of the company´s high level management on the business and IT side to ensure the necessary decision-making authority and technical competence.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation	X	X	X	X	X	X	X	X	**X**
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition				X					**X**
⇨ Execution				X					**X**
⇨ Post-deal									
Comments									
Contract A:									
Contract B:	Outsourcing it not decided in a base-democratic procedure. The bank board of directors makes the decision. In our case, a wide renunciation of individualism resulted from it.								
Contract D:	The banks user departments must also accept that new demands can only be placed within the scope of the regular release committees at the vendor and that new demands cannot always be moved immediately (e.g. up to 6 months no changes are possible in the “Frozen zone” during annual accounts)								
Contract E:	All affected units of the bank are integrated by the board resolution.								

The support of the management towards the outsourcing on the business and IT side was judged in all cases as compulsory for success. Case D points to the fact that, in case of outsourcing software, changes are often only possible in agreed release cycles, and that these cannot be moved so flexibly any more compared to

internal performance. This must be accepted by the user units of the bank. Cases B and E mention that outsourcing decisions are made by the board of directors. In case E, all affected departments of the bank are included by circulation of the management decision.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The obtaining of management commitment on the business and IT side is mandatory for success with ITO. Before the outsourcing the support is necessary to receive a positive decision for the outsourcing and with it the approval for the completion of the contract and the terms agreed in it as well as to guarantee the necessary technical knowledge. During the contract term the management must help carry the consequences of the outsourcing (e.g. software changes only within agreed release cycles). Besides the relationship management with the vendor at management level (see success factor “Relationship building and management”) and acting as an escalation level in case of performance disputes (see success factor “Vendor performance reporting”) are part of the duties of the management.		

Discussion

The following studies also take up management support as a success factor in case of outsourcings.

ITO studies based on long-term ITO cases
The study of Collins and Millen (1995, p. 13) came to the conclusion that the support of the management is necessary for success with ITO.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, p. 312) examined application outsourcing cases and identified "a lack of board commitment" as a failure factor. Koh et al. (2004, p. 363, 369) see a significant dependence between outsourcing success and the ensuring that the senior management guides the outsourcing project, supports and helps. Lacity and Willcocks (2009d, p. 341, 354-355) gained as "lesson learnt" from outsourcing experiences that the decisions which were met by the senior management on business and IT had a higher likelihood of success, because in this constellation the political power is bundled up with the technical understanding of RFP's, for the evaluation of the vendor offers, and for the negotiations and management of the ITO contract. Huber (1993, p. 128) points to a mistake within the scope of the reported outsourcing: the CIO was not considered within the scope of the personnel plan, and one had not recognised that he faced a conflict of interest, as transfer offers were made by vendors.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: Just involve IT management open-minded against ITO
In the client company a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the needed support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. An important stakeholder is the high level management on the business and IT side. But the high-level IT management should only be involved in the vendor selection phase if they are open-minded against ITO.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Results
Relevance	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	**Not assessable**
Weighting									
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									

The success factor could not be evaluated in all cases and, hence, cannot be analysed and judged.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: Avoid conflict of interest of high-level IT management
In the client company a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the needed support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. An important stakeholder is the high level management on the business and IT side. Avoid the conflict of interest of the high-level IT management potentially caused by career opportunity offerings of vendors.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Results
Relevance	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	**Not assessable**
Weighting									
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									

The success factor could was not possible to evaluate in all cases and, hence, cannot be analysed and judged.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: Technical client staff
In the client company a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the needed support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. An important stakeholder is the client´s staff. Technically competent staff able to control the vendor on a day-to-day basis should be retained and involved in the ITO project already from the vendor selection phase.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Not assessable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting		Partly necessary	Mandatory	Partly necessary	Partly necessary	Mandatory	Mandatory	Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation		X	X	X	X	X	X	X	**X**
⇨ Selection		X	X	X	X	X	X	X	**X**
⇨ Contract		X	X	X	X	X	X	X	**X**
⇨ Transition		X	X	X	X	X	X	X	**X**
⇨ Execution		X		X	X	X	X	X	**X**
⇨ Post-deal		X		X	X	X	X	X	**X**
Comments									
Contract A:	The technical responsibility was transferred in the course of the outsourcing to the IT vendor. A 100% measurement of the sourced service is not possible from a cost / benefit point of view.								
Contract B:	No staff members were outsourced. Technical knowledge hardly exists anymore and is substituted with a bond of trust to the vendor.								
Contract C:	No personnel crossing took place. IT knowledge was consciously transferred by the companion banks to the vendor and should lie there. The responsibility for the technology lies with the society which has outsourced further development and the daily operation.								
Contract D:	During the first outsourcing employees with professional know-how were outsourced. Hence, this know-how exists only partly currently. Within the scope of the evaluation of the further outsourcing all IT hierarchy levels were integrated (among others the units which are responsible for the regular control of the vendor).								
Contract E:	Detailed knowledge is partially absent. Nevertheless, the maintenance of too much know-how makes the outsourcing obsolete. How much know-how should be kept back depends on the strategic significance of the software and the extent of the outsourcing (cost versus benefit). Nevertheless, ground knowledge must exist for the appraisal of offers / control.								
Contract F:	No employees were shifted to the vendor bank, because the outsourcing branch of the parent bank was built up anew. Nevertheless, technical know-how must exist for the control of the vendor.								
Contract H:	The bank is involved in strict controls on IT decisions. The IT architecture is also completely given by the bank. Org/IT employees in the parent bank steer and control the IT vendor.								

In case A, the success factor is not possible to evaluate. Case A notes that the technical responsibility was transferred onto the vendor in the course of the outsourcing and, hence, was substituted with service levels.
In cases B, D and E, the retention of technically competent staff and their involvement from the vendor selection phase is evaluated as partly relevant to success. In case B, technical knowledge in the outsourcing bank is substituted with a bond of trust to the vendor. Case D notes that, in the course of the first outsourcing, employees with professional know-how were outsourced which now only partly exists in the outsourcing bank. Within the scope of the further outsourcing project all IT hierarchy levels were integrated, thus also the responsible units for constant vendor control. Case E points to the fact that enough technical knowledge must exist for the appraisal of offers and for the vendor control. However, it is also noted that detailed technical knowledge is absent in the outsourcing bank. How much know-how should be kept back is dependent on the strategic significance and on the extent of the outsourcing (cost versus benefit).
In cases C, F, G and H the success factor is classified as compulsory relevant for success. In case C, technical knowledge was consciously transferred to the vendor society (joint-venture), because it has the technical responsibility for the outsourced application. Case F believes that technical knowledge must exist for the control of the vendor. In case H, the vendor is steered even technically by the outsourcing bank, hence there comprehensive IT competence is given.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The opinions differ about the relevance of the success factor. In cases A (not assessable), B, D and E (partly necessary) the outsourcings are ongoing for many years despite a missing or low technical knowledge on the client side. In all other cases the success factor was rated as mandatory. Client and vendor have, as a rule, different objectives: cost minimisation versus profit maximisation. Hence, an outsourcing enterprise should protect itself from opportunistic behaviour of the vendor and should also be able to judge the sourced IT function technically. In case A (not assessable), technical know-how could not be necessary, as standard bank functionality in retail banking is sourced externally, for which many comparison possibilities exist in the market. In case B (partly necessary) the costs are fixed and cannot be influenced (see comment on success factor “Contract re-negotiation”), thereby the trust between client and vendor is very important. In cases D and E (partly necessary) it was sufficient to have little IT knowledge. IT knowledge is to be ensured in the preparation phase if necessary (see also success factor “Client capability: IT knowledge”). The technically competent staff members are to be involved from the vendor selection phase and during the whole IT project.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
The following studies rate IT knowledge as relevant to ITO success. Willcocks and Fitzgerald (1993, p. 227) evaluate internal experiences about the outsourced IT function and the retention of this knowledge as success relevant. Willcocks and Fitzgerald (1994, p. 314) focused on the investigation of application outsourcing cases and also came to the conclusion that technical skills must be identified and retained on the client side. Aubert et al. (1998, pp. 688-690; 1999, p. 3) also investigated application outsourcing cases and saw a lack of experience and knowledge about the outsourced IT function on the client side as a danger for unexpected transition and management costs, as the client might not be capable of describing the expected performance in detail.
Employees must be trained to be able to negotiate the ITO contract and to govern the vendor. In particular, employees with IT affinity are necessary. Pei et al. (2007, p. 4381) evaluate IT capabilities on the client side as a critical success factor.
A “lesson learned” by Kern (2002, p. 48, 60) was that employees who implement the ITO contract in daily operation play an important role in the tendering/vendor selection phase.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: Instruction of client staff
In the client company a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the needed support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. An important stakeholder is the client´s staff. To the client´s staff who are doing the make or buy evaluation, detailed instructions should be given to avoid a simple vote against ITO. For example, the evaluation has to be done in separate elements, even down to the employee level, and recommendations should be given based on the evaluation of risks and advantages.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Yes	Not assessable	Not assessable	Not assessable	Yes	Not assessable	**Yes**
Weighting			Mandatory				Mandatory		**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection			X				X		**X**
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	A make or buy analysis was not carried out, as the existing core banking solution had a functional gap and because internally a lack of IT skill and capacity existed. An internal production was therefore not considered.								
Contract B:	An internal production was economically not possible anymore, because of the rising complexity of the requirements (in particular supervision right) and by consideration of the size of the bank.								
Contract D:	With the first outsourcing strategic objectives stand in the foreground (securing of IT location – Bavaria - by a central IT vendor of the banking group) which demanded an outsourcing. A backsourcing was not a strategic option, because employee capacity and skills were missing at the outsourcing bank. Hence a further outsourcing occurred to a third party because of cost and quality reasons.								
Contract E:	A make or buy analysis did not occur because of a strategic decision (Ensure of IT location – Bavaria - by a central IT vendor of the banking group).								
Contract F:	The strategic decision was made to bundle the support of the core banking system, which was primarily used in foreign branches, at one point in the group, in order to generate synergies.								
Contract G:	The decision to outsource to a group internal vendor was made based on a business case.								
Contract H:	The strategic decision was made produce the IT needs of the East European daughters by an IT vendor on site. No make or buy analysis was carried out.								

In 6 cases (A, B, D, E, F, H) no make or buy analysis was carried out, because the internal performance was not taken into consideration for strategic reasons (technically outdated system with functional gaps, lacking capacities and skills, enterprise size not enough to solve supervision-juridical demands economically and individually, protection of IT location in Bavaria, creation of competence centres in the banking group, performance by IT vendors in the market of the bank daughters), which is why this success factor cannot be evaluated in these cases. In case D, no backsourcing was taken into consideration in the absence of internal capacities and skills, but the IT function was shifted to a third party.
In cases C and G, a make or buy analysis was carried out. An adequate instruction of the employees is judged in these cases as mandatory.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
By realisation of a make or buy analysis in the vendor selection phase the adequate instruction of the employees is mandatory for success. In particular, detailed instructions should be given to avoid an easy refusal of the outsourcing (e.g. a recommendation for or against the outsourcing must occur on the basis of the explanation of chances and risks).		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Huber (1993, pp. 125-126) also mentions a detailed instruction of the employees responsible for the make or buy evaluation as a success factor to persuade sceptical people in the group of responsible persons. In particular, breaking down of the IT to be outsourced in separate elements, the investigation of the risks and advantages for every part, and based on that a recommendation for or against an outsourcing, are all recommended.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: IT user
In the client company a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the needed support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. An important stakeholder is the client´s staff. The IT user´s expectations necessary for satisfaction should be clear and respected.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	**Yes**
Weighting	Mandatory	Partly necessary	Mandatory	Mandatory	Mandatory		Mandatory	Partly necessary	**Partly necessary**
Process Classification									
⇨ Preparation	X	X	X	X	X		X	X	**X**
⇨ Selection	X	X	X	X	X		X	X	**X**
⇨ Contract	X	X	X	X	X		X	X	**X**
⇨ Transition		X	X	X	X		X		**X**
⇨ Execution		X	X	X	X		X		**X**
⇨ Post-deal									
Comments									
Contract B:	Standard software has its limits. On the functional side, wishes stay open.								
Contract C:	The departments of the bank conceive the legally necessary changes (Basel II).								
Contract D:	Desired changes of the kind of the customer data to be stored are implemented regularly.								
Contract E:	System changes are prioritised and, in case of a decision for the conversion, the vendor is instructed.								
Contract F:	The core banking system has no customer interface because it is a back office system.								
Contract G:	Indirectly by management representatives of these units. Necessary service level changes are ordered at the group-internal IT vendor by the service and partner management.								
Contract H:	What was feasible was illustrated. With a huge number of juridical demands and restricted resources everything is not always moveable. The demands of the users were not always high, because the people were relieved to become an IT application for working support generally.								

In cases A, C, D, E and G, the consideration of the user requirements at the time of the ITO and regularly during the external operation is seen as mandatory. In case C, the user departments of the banks define the system standards. In case D (CRM system), change requests of the user departments regarding the kind of

stored customer data are implemented regularly. In case E, all system changes are prioritised in a bank-wide committee. The vendor is instructed with the implementation in case of a positive vote. In case G, the user requirements are transported by the management representatives of the affected units to the vendor. In cases B and H, the consideration of the user standards is evaluated as partly relevant for success. Case B points to the fact that, with use of a standard application, wishes stay open on the functional side. In case H, the requirements must be implemented first (as, for example, legal demands) before other demands can be implemented. In case F, the success factor is not relevant because the outsourced system owns no customer interface.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
The consideration of the user requirements at the time of the outsourcing and regularly during the external operation is partly relevant to success. If the outsourced system has no customer interface, the success factor (see case F) is not relevant. By application of standard software, wishes on the functional side stay open. Instead, cost savings can be achieved by means of scale effects through standardisation (see case B). With restricted resources the conversion of legal demands becomes a higher priority than user requirements (see case H). The mandatory assessment of the success factor in cases A, C, D, E and G could be due to the kind of outsourced IT system. In case A, this could be explained by the direct bank status of the outsourcing bank. The core banking system is the main distribution channel which must be attractive for the customer to prevent business transactions not by functional defects. In cases C and E, primarily legal demands (Basel II, HGB/IFRS, BDSG, etc.) must be implemented system-sided, which must be fulfilled to 100%. A CRM system (case D) is sales relevant and herewith success relevant, which could also explain the need for a full conversion of the user requirements. In case G, various applications with different strategic significance are outsourced, because a 100% outsourcing on a standard system of a group-internal vendor has occurred. To sum up, the degree of the conversion of user requirements depends on the strategic significance of the outsourced application, on the objectives linked with the outsourcing and on the resource availability.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

The following studies also take up the importance of the consideration of user requirements. Willcocks and Fitzgerald (1994, p. 312) focused on the investigation of application outsourcing cases and saw in an insufficient integration of the user units a failure factor. Feeny and Willcocks (1998, p. 13) looked at the constructive integration of the user departments as one of 9 core competences of an IT unit. In particular, this contains: development of an understanding on customer side for the potentials of IT, effort to achieve successful cooperation between users and professional IT forces, the securing of satisfaction and responsibility on the user's side. According to Kern (2002, p. 48, 63), the use requirements should be integrated early in the requirements management, in particular during the transition phase, to avoid "winner's curse", a disadvantageous situation in which the vendor underbids the market price to receive the order.

A further discussion in relation to the results of the thesis is not possible because these studies provide no information on the objective of the outsourcings as well as the strategic significance of the outsourced IT application.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: Staff affected by ITO
In the client company a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the needed support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. An important stakeholder is the client´s staff. With client staff directly affected by ITO, an open, honest and credible communication is important. Therefore, an ITO concept should already exist to ensure that the staff can receive a realistic impression about the ITO venture, upcoming decision points, schedules, the influence on their job and possible options. This requires that vendor evaluations, testing and business case calculations should be done confidentially beforehand.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Yes	Not assessable	Not assessable	Yes	Not assessable	Yes	Not assessable	**Yes**
Weighting		Mandatory			Mandatory		Mandatory		**Mandatory**
Process Classification									
⇨ Preparation		X							**X**
⇨ Selection		X			X		X		**X**
⇨ Contract		X							**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	No employees were transferred to the vendor.								
Contract B:	For employees in the IT of the bank whose tasks change by the outsourcing.								
Contract C:	No personnel transfer took place from the companion banks to the society.								
Contract D:	By the first outsourcing employees were transferred to the IT vendor. By the further outsourcing no personnel transfer took place.								
Contract F:	No employees were shifted to the vendor bank, because the outsourcing branch of the parent bank was built up anew in Italy.								
Contract H:	No employees were outsourced, but were recruited in the local market.								

In cases A, C, D (further outsourcing), F and H the success factor is not valuable, as no employees were outsourced. In cases B, E und G the success factor is evaluated as mandatory. In case B no employees were outsourced, but the tasks of the remaining employees were changed by the outsourcing. Hence, informing affected internal employees is seen as mandatory.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The employees directly affected by the outsourcing (employees to be outsourced as well as employees which remain in the house and control the outsourcing) are to be informed openly and honestly before conversion of the outsourcing. In particular a realistic impression of the ITO plan, the upcoming decisions, the schedule and the effects on their work needs to be communicated. Hence, reliable data must already be given at that time. This requires that vendor evaluations, testing and business case calculations should be done confidentially beforehand. The success factor is relevant from the beginning of the outsourcing to shortly before completion of the contract.		

Discussion

The following studies also value adequate informing of client employees affected by the outsourcing as success relevant.

ITO studies based on long-term ITO cases
Lacity and Hirschheim (1993, p. 80, 85) give recommendations for the negotiation of ITO contracts, amongst others “take care of your people”. Affected employees should be informed early about ITO decisions and should be supported by the securing of new positions.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, p. 311, 313, VI) investigated application outsourcing cases and identified “staffing issues” as a core success factor. Important personnel with management competencies and technical abilities must be retained. Good communication is to be established with personnel affected by the outsourcing before and during the outsourcing, in particular in the decision phase. The transfer of personnel to the vendor is to be planned and done with care, to avoid disputes and to allow a good start for the external operation (e.g. management of cultural differences and conditions, guarantees for outsourced personnel, cooperation processes between outsourced and retained personnel). A lesson learned by Huber (1993, p. 126) from ITO experiences was the necessity for an open, honest and reliable communication with affected employees, but only after a reliable plan for the outsourcing venture had been developed.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: Long-term client employees
In the client company a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the necessary support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. An important stakeholder is the client´s staff. Ensure that long-term employees join the vendor by negotiation of ensure jobs and good working conditions on the vendor side. This fosters a smooth start of the external operation especially in case of not existing or incomplete system documentation of the IT function to be outsourced.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Not assessable	Yes	Yes	Not assessable	Yes	Not assessable	**Yes**
Weighting				Partly necessary	Partly necessary		Partly necessary		**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection				X	X		X		**X**
⇨ Contract				X	X		X		**X**
⇨ Transition				X	X		X		**X**
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	No employees were transferred to the vendor.								
Contract B:	No staff members were outsourced.								
Contract C:	No personnel transfer took place from the companion banks to the society.								
Contract D:	The CRM system is a purchased software (Siebel) by which resources can also be recruited in the market.								
Contract E:	In the case of the standard software enough know-how in the market existed.								
Contract F:	No employees were shifted to the vendor bank, because the outsourcing branch of the parent bank was built up anew.								
Contract G:	The know-how of long-standing employees is necessary, as long as the old systems still run. They do not have know-how about the target system. Long-standing employees are still very valuable on account of their experience.								
Contract H:	No employees were outsourced, but were recruited on the local market.								

In 5 cases (A, B, C, F und H) no personnel were transferred to the vendor, hence the success factor cannot be evaluated in theses cases. In cases D and E, the transfer of long-term employees to the vendor by negotiation of good working conditions was evaluated as partly necessary, because purchased software was outsourced. In these cases adequate resources can also be found in the market. In case G, the success factor was evaluated as partly necessary as well. Case G points out that the knowledge of long standing employees is necessary as long as the old systems are running. In course of the outsourcing a migration to a group wide standard system took place. Therefore the outsourced employees do not own the necessary skill for the new system, but are valuable despite this because of their deep work experience.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
If the knowledge necessary for the external operation cannot be sourced from the market, the outsourcing of long-term employees is helpful to ensure a smooth start to the external operation. In case of outsourcing of standard applications, a personnel transfer is not mandatory as a rule, as resources with adequate knowledge are available in the market. If a personnel transfer is relevant, it is to be ensured in the vendor selection phase of the ITO process until transition.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
In the case study of Huber (1993, pp. 127-128), the outsourcing bank needed to ensure the transfer of several long-standing IT employees, as the applications to be outsourced were not well documented. A further discussion in relation to the results of this thesis is not possible, as his study gave no information about the resource situation in the market and about the degree of standardisation of the outsourced applications.

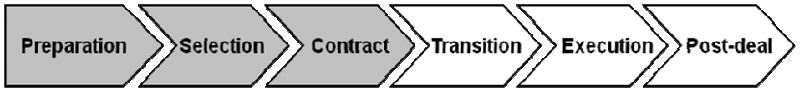
Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: Functional departments
In the client company a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the necessary support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. Important stakeholders are the functional departments (e.g. human resources, legal department) of the client company. Relevant functional departments should already be involved from the vendor selection phase.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation	X	X	X	X	X	X	X	X	**X**
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	For incorporation of necessary professional know-how.								
Contract B:	Legal department: yes. Human resources department: no, as no personnel transfer took place								
Contract D:	Legal department and functional departments of the bank. Primarily the functional departments, as the further outsourcing was motivated by functional reasons.								

In all 8 cases, the incorporation of the relevant functional departments of the outsourcing banks was evaluated as mandatory.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The incorporation of relevant functional departments (like the human resources department, legal department, etc.) in the forefront of the outsourcing (preparation until the contract phase) is mandatory.		

Discussion

ITO studies based on long-term ITO cases
Collins and Millen (1995, p. 13) also recommend the active incorporation of other functional departments (in particular the human resources department) in order to improve the quality of vendor evaluation and in order to ensure a smooth transition phase.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Stakeholder involvement: Public
In the client company a multitude of stakeholders exist whose interests must be aligned and balanced in a way that all stakeholders achieve their goals to ensure the necessary support from all sides. Proactive and credible communication must be maintained with this group of people continuously throughout the ITO process. An important stakeholder is the public. The public announcement of ITO creates positive stock market returns for client companies publicly listed.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	Not assessable	**Not assessable**
Weighting									
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution									
⇨ Post-deal									
Comments									
Contract D:	The new vendor also serves the first vendor, thus the relationship between these two companies suffers now.								

The success factor cannot be evaluated in any of the 8 cases, as the outsourcing companies are not publicly listed and as the public were not informed about the outsourcings. Hence, a further analysis is not possible.

Success Factor Category: Stakeholder management and structural organisation
NEW: Success Factor: External recruitment of vendor employees
Recruitment of employees for a newly founded vendor society (joint-venture) from the external market.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Contract C
Relevance			Yes						**Yes**
Weighting			Partly necessary						**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition			X						**X**
⇨ Execution			X						**X**
⇨ Post-deal									
Comments									
Contract C:	The employees of the society were recruited from universities. The advantage was that these young employees were highly motivated. Their primary aim was to fulfil the project goals and they were neutral (not related to single banks).								

In case C, the external recruitment of employees for the vendor (joint venture) within the transition and operation phase is classified as a success factor. These employees were highly motivated, their primary interest being to fulfil the project, and they were neutral (not related to single banks).

Analysis and results

Relevance: Yes	Weighting: Partly necessary	Process classification: 
By foundation of a joint venture as a service society the recruitment of the employees of the society in the transition and operation phase from the market has a positive effect on outsourcing success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Roles and responsibilities: Project manager
The roles and responsibilities (decision making rights, reporting, etc.) needed to perform and manage the outsourced IT function on the client and vendor side must be clearly delineated and defined. The unification of complex, multidimensional roles should be avoided. Amongst other roles, a project leader for managing the ITO project is necessary.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation	X	X	X	X	X	X	X	X	**X**
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution									
⇨ Post-deal									
Comments									
Contract A:	The project manager will be substituted in the execution phase with control roles (e.g. service level manager, relationship manager).								

A project leader is evaluated in all 8 cases as a success relevant role from the preparation until the transition phase of the ITO process. Case A mentions that the project leader is substituted with control roles during external operations (service level manager, relationship manager).

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The nomination of a project manager for the control of the ITO project from the preparation phase up to the end of the transition to the vendor, and the definition of the accompanying responsibilities, is a mandatory success factor. In the preparation phase the nomination of the project manager and the transference of the competence occur. The project manager then exercises his role up to the end of the transition phase of the ITO project.		

Discussion

The following studies report roles and responsibilities in the case of an outsourcing in general and evaluate the role oft he project leader as a success factor.

ITO studies based on long-term ITO cases
Kim and Chung (2003, p. 83, 87-88) found out that role integrity, in terms of highly complex and multidimensional roles, has a negative effect on ITO success.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, p. 310) investigated application outsourcing cases. They evaluated control topics as the main success factor. This means, amongst other things, a strong project leader and good change control. Poorly defined roles and responsibilities within an outsourcing project, in particular in vendor management, are rated as a failure factor. Koh et al. (2004, p. 369, 362) evaluate clear responsibilities on the client side as a success factor. This is explained by the clear delineation of the decision competencies and reporting needs of all relevant roles.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Roles and responsibilities: Account manager
The roles and responsibilities (decision making rights, reporting, etc.) needed to perform and manage the outsourced IT function on the client and vendor side must be clearly delineated and defined. The unification of complex, multidimensional roles should be avoided. Amongst other roles, an account manager for the outsourcing client on the vendor side facilitates a communication channel which positively influences a common understanding and which prevents vendor opportunism and the negative consequences of legal loopholes.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									

The definition of the vendor's account manager by name and its responsibilities was evaluated as mandatory in all 8 cases, in order to ensure good communication between client and vendor.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The definition of the vendor's account manager by name and its accompanying responsibilities is a mandatory success factor for an ITO project. The vendor's account manager is nominated in the vendor selection phase, the name is incorporated in the ITO contract (see success factor "communication channels") and in the transition and execution phase the vendor's account manager acts in his/her role as communication channel between client and vendor which positively influences a common understanding and which prevents vendor opportunism and the negative consequences of legal loopholes.		

Discussion

ITO studies based on long-term ITO cases
Lacity and Hirschheim (1993, pp. 81-85) give recommendations for successful ITO contracts. They also recommend the definition of the vendor's account manager and its incorporation into the contract by name in order to prevent vendor opportunism and the negative consequences of legal loopholes. Also Saunders et al. (1997, pp. 72-77) evaluate a careful definition of all aspects of an ITO contract as an important success factor (amongst other things, a defined account manager on the vendor side).

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Roles and responsibilities: Relationship managers
The roles and responsibilities (decision making rights, reporting, etc.) needed to perform and manage the outsourced IT function on the client and vendor side must be clearly delineated and defined. The unification of complex, multidimensional roles should be avoided. Amongst other roles, active relationship managers on both sides with adequate interpersonal skills are important for successful co-working and for the resolution of disputes.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Partly necessary	Partly necessary	Mandatory	Mandatory	Partly necessary	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract C:	Is performed by the person responsible for outsourcing in the business department.								
Contract D:	Professional know-how is more important than social competence. A suitable personal level is ascertained within the scope of the tendering.								
Contract E:	Relationship management exists as a job. It is done on three hierarchy levels: • Division leader (1 x per quarter) • Department manager (with discussion need in case of changed orders) • Operational employees (2 X months)								
Contract H:	The Vendor management is only under construction. Nevertheless, the major task to be carried out is less relationship management, but ensuring that the outsourcing runs. This contains primarily support in the areas of contract and finances.								

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Active relationship management on the client and the vendor side is classified in 5 cases (A, B, C, F and G) as mandatory for success. In cases D, E and H the success factor is judged as partly necessary. In case D a bigger emphasis is placed on the vendors' competencies and in case H on the contract and finances than on

social competence and relationship management. In case E, relationship managers are also evaluated as partly necessary, because there relationship management exists as a job and not as a role which is performed by three levels of hierarchy.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Different importance is placed on the relationship managers. In 5 of the 8 cases the success factor is evaluated as mandatory, in 3 cases as partly necessary. In case E (partly necessary) the job is done by 3 persons at different levels in the hierarchy. In case D and in case H more importance is placed on other aspects of an outsourcing, nevertheless relationship management is seen as relevant. Hence, the weighting is finally fixed as mandatory. In the vendor selection phase the people responsible for the relationship management are fixed and the competence is transferred. From the start of the external production in the transition phase the role of the relationship manager is exercised.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
The following studies also take up good relationship management as a success factor with ITO. Kern (2002, p. 48, 67) sees in active relationship management by competent relationship managers the possibility of straightening out good outsourcing cases again in a skewed situation. In the study of Feeny and Willcocks (1998, p. 13), relationship management is one of 9 core competences of an internal IT unity, and serves to overcome the cultural differences between "techies" and "users" and to support with it mutual trust, conformity of aim and successful communication.

Success Factor Category: Stakeholder management and structural organisation
Success Factor: Roles and responsibilities: Contract facilitator
The roles and responsibilities (decision making rights, reporting, etc.) needed to perform and manage the outsourced IT function on the client and vendor side must be clearly delineated and defined. The unification of complex, multidimensional roles should be avoided. In an environment where a company is using multiple external and internal sources of supply, the resolution of operational problems and conflicts must be ensured by a contract facilitator as a single point of contact for IT users.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Not assessable	Yes	Yes	Not assessable	Not assessable	Not assessable	**No**
Weighting				Mandatory	Mandatory				
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition				X	X				
⇨ Execution				X	X				
⇨ Post-deal									
Comments									
Contract B:	No "single point of contact", but a contact per (outsourced) application in the IT of the bank.								
Contract C:	Customer care centre lies on the vendor side.								
Contract D:	The business divisions of the bank have no direct contact with the vemdor. So-called requirement coordinators in the business department bundle up and prioritise demands and also grasp, if necessary, error tickets in the central ticket system of the outsourcing bank. The vendor is informed about the mistake and the status of the error removal is pursued in the central ticket system.								
Contract E:	At the outsourcing bank a central place exists for the capture of error messages. The IT vendor is informed about the mistake and the mistake removal is pursued centrally at the outsourcing bank.								
Contract F:	No single point of contact for all IT problems but a separate hotline at the vendor bank for the application. The IT functions were outsourced almost to 100%. With problems the vendor is contacted in each case.								
Contract G:	Helpdesk at the group-internal IT vendor.								
Contract H:	The vendor unwinds all IT needs of the southeast European daughters of the bank. There is a phone hotline and contacts for single applications.								

In cases A, B, C, F, G and H, the success factor cannot be evaluated, because no "single point of contact" exists for the announcement of IT problems in the outsourcing bank. In cases A, C, F, G and H a helpdesk is settled on the vendor side. In case B, a contact exists per outsourced application in the IT department of the outsourcing bank. In cases D and E, the success factor is judged as compulsory. In these cases a central phone hotline also exists at the outsourcing bank which is the drop-in centre for any kind of IT problems. The disturbances are grasped in a central ticket system and the suitable internal or external IT units of power are informed.

Analysis and results

Relevance: No	**Weighting: ./.**	**Process classification: ./.**
A "single point of contact" as a drop-in centre for the announcement of IT problems in the transition and execution phase exists only in cases D and E. In the other cases, the established organisational structures in the sturgeon case are built up differently (hotline at the vendor, hotline per outsourcing in IT department of the outsourcing bank) and seem to function with lasting effect. Hence, the success factor is not judged as relevant to success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Feeny and Willcocks (1998, p. 14) look at "contract facilitation" as one of nine core competences of an internal IT unity. Under it a "single point of contact" is meant to which users can turn in order to solve problems quickly with the use of a sourcing network from internal and external IT units. This stands in contrast to the result of this thesis in which other organisational solutions also emerge as proven in practice.

Success Factor Category: Stakeholder management and structural organisation
NEW Success Factor: Roles and responsibilities: Service level manager
The roles and responsibilities (decision making rights, reporting, etc.) needed to perform and manage the outsourced IT function on the client and vendor side must be clearly delineated and defined. The unification of complex, multidimensional roles should be avoided. For the regular monitoring and control of the vendor´s operational performance a service level manager on the client side is necessary.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes								**Yes**
Weighting	Mandatory								**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection	X								**X**
⇨ Contract	X								**X**
⇨ Transition	X								**X**
⇨ Execution	X								**X**
⇨ Post-deal									

In case A, a service level manager exists who is incorporated from the vendor selection phase in the ITO project and who exercises the running control of the vendor performance in the transition and execution phase.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The arrangement of service levels, measuring dimensions and reports in the contract was evaluated as compulsory for success (see success factor "Contract: Measurable service requirements, measures and reports"). Hence, the operational role which takes over this job is also compulsory for success. In the vendor selection phase the service level manager is nominated and the competence is transferred. Further on, the service level manager supports with the definition of the service levels. From the start of the external production in the transition phase he acts as a receiver for the agreed reports and exercises the running control of the vendor performance.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Stakeholder management and structural organisation
NEW Success Factor: Roles and responsibilities: Mediator
The roles and responsibilities (decision making rights, reporting, etc.) needed to perform and manage the outsourced IT function on the client and vendor side must be clearly delineated and defined. The unification of complex, multidimensional roles should be avoided. In case of further outsourcing from a 100% IT service company of a bank, a mediation role between the vendor and the bank is necessary.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes								**Yes**
Weighting	Partly necessary								**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection	X								**X**
⇨ Contract	X								**X**
⇨ Transition	X								**X**
⇨ Execution	X								**X**
⇨ Post-deal									

In case A, the bank outsourced its complete IT into a newly found IT service company (100% daughter). This IT service company itself further outsourced amongst other applications as well the core banking system (see case study). In this situation, the IT service company has to mediate between the bank and the vendor during the time of interaction between client and vendor.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
With outsourcing of the IT unity of the client in an IT service society which uses a sourcing network, mediation between the client and vendor is success-influencing during the duration of the cooperation. In the vendor selection phase / contract phase the mediator is nominated and the responsibility is transferred. From the beginning of the external production in the transition phase the mediator takes up its mediation role between client and vendor.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Control
Success Factor: Monitoring and control
The performance of the ITO vendor must be controlled tightly and constantly based on service level agreements and measures, cost targets and performance development goals defined in the contract. Therefore, a measurement system able to track tangible and intangible expectations over a long time-scale must be developed and established.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Partly necessary	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract C:	The regular control of the ITO occurs on the basis of an internal general working instruction developed for this. Essential controlling issues are: • The outsourcing report quarterly provided by the ITO enterprise with information about the observance of the SLA borders • From the internal auditing of the ITO enterprise, audit reports or audit year report provided • Within the scope of the committee meetings (in particular advisory board, companion's meeting) information is provided about the activities and the economic success of the ITO.								
Contract D:	A lot of reports are put aside. Nevertheless, the production of IT goods and services functions in accordance with the users in the business departments.								
Contract G:	Control “if possible to the smallest detail” is an important success factor.								
Contract H:	For cultural reasons a main success factor.								

In 7 cases (A, B, C, E, F, G, H), regular control of the vendor in the transition and execution phase concerning the fulfilment of the SLAs, cost aims and development objectives is looked upon as compulsory. Case G mentions that control “if possible to the smallest detail” is an important success factor. In particular, this plays a role in the case of cultural differences between the client and the vendor (see remark, case H). The essential controlling bases in case C are: outsourcing report including SLA report of the joint venture, audit report of the joint venture, the information provided within the scope of committee meetings.

In case D, a regular control of the vendor is classified as partly relevant to success. According to case D, a lot of vendor reports are put aside because of the production of IT goods and service functions.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The regular and strict control of the vendor in the transition and execution phase concerning the fulfilment of the ITO contract (SLAs, etc.), on the basis of a procedure for the measurement of tangible and intangible expectations, is seen as mandatory for success in 7 of 8 cases. In the only case with a partial necessary weighting it is stated that many reports were not followed. Nevertheless, the external performance functions despite this. With the help of the SLA report, for example, it would be recognisable if a deterioration of the vendor performance occurred. Thus the opportunity exists for taking measures early to avoid negative effects on the performance and the relationship between client and vendor. Therefore, the success factor is evaluated as compulsory for the achievement of ITO success.		

Discussion

Also the following studies take up regular vendor control as a success factor.

ITO studies based on long-term ITO cases
Kim and Chung (2003, pp. 87-88, 83) see a significant connection between vendor monitoring (development of standards for the external performance, measurement and analysis of the external performance) and ITO success. Controlling and coordination problems were called the main causes of dissatisfaction with ITO.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
DiamondCluster (2005, p. 19) derive as a "lesson learnt" from ITO experiences that, among other things, good control structures and proactive vendor management are key dimensions for ITO success. A "lesson learnt" of Landis et al. (2005, p. 24) was the need for realistic planning and control systems which enclose the vendor relationship. Van Lier and Dohmen (2007, p. 3444, 3438-3439) found out that a higher level of “benefits management” is coupled in with a raised level of ITO success. Willcocks and Fitzgerald (1994, pp. 310-311, 314, VI) examined application outsourcing cases and formulated as a "lesson learnt" the need for a regular performance measurement by adequate measuring dimensions and landmarks as well as a management reporting about the results. Bad and irregular vendor management, missing detailed measuring dimensions and a lack of performance monitoring were seen as failure factors. Heinzl (1993, p. 184, 186, 190, 193) reported that ITO success is influenced positively by its measurability. De Looff (1995, p. 294) believes that ITO should be carried out only if the service requirements can be specified before and measured later. DiamondCluster (2005, p. 6) evaluate the lack of vendor management as a failure factor. Cullen and Willcocks (2003, pp. 172-173) look upon control of the outsourcing contract and the processes as a success factor. Lacity and Willcocks (2009d, 341, 359-360) have derived regular contract

monitoring as a "lesson learnt" from ITO relations. For Feeny and Willcocks (1998, p. 14), the contract monitoring is one of nine core competences of an internal IT unity. Under it falls the control of the vendor performance concerning conformity with the service level agreement and the constantly developing performance standards of the market. Strict control is seen as a condition for the avoidance of "winner's curse", a disadvantageous situation in which the vendor underbids the topical market price to receive the order (Kern, 2002, p. 48, 65). Fritsch and Wahrenburg (2008, p. 8) believe that strict control mechanisms can increase the cost efficiency of the outsourcing, because the vendors are thereby forced to keep the agreed aims and SLAs. etc.

Success Factor Category: Control
Success Factor: Vendor payment
If the vendor performance gives no reason for complaint, vendor payments should be originated on time.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract B:	Business policies of a well-arranged businessman.								
Contract E:	At the beginning of the outsourcing monthly progress payments. Now, payments are dependent on performance.								
Contract F:	The costs are determined by the vendor bank every six months. The performances are paid once a year afterwards by the client banks.								
Contract G:	A fixed price is paid per quarter to the group-internal IT vendor which is fixed anew yearly. At the end of the year the actual costs are compared with the payments made and a restitution or additional payment occurs if necessary.								
Contract H:	If there are reasons for objections, the non-payment of the monthly rate is also used as an escalation mechanism.								

In all 8 cases a timely payment to the vendor, as a countermove to a contract-appropriate performance, was seen as mandatory for success. In case H, a non-payment is partially used as an escalation mechanism for lower or bad performance.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Vendor payment in time in case of satisfaction with the external performance is a compulsory success factor during the external execution.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Also Koh et al. (2004, p. 363, 369) reported that ITO success is connected with timely payment of the vendor.

Success Factor Category: Control
Success Factor: Checks on market standards
Regular checks on market standards concerning contract, processes, service metrics and price to ensure competitiveness.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Not assessable	No	Yes	Not assessable	Yes	Yes	Yes	**Yes**
Weighting	Mandatory			Partly necessary		Mandatory	Mandatory	Mandatory	**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution	X			X		X	X	X	**X**
⇨ Post-deal									
Comments									
Contract A:	Performance comparison often not possible 1:1. Auxiliary dimensions must be used partly. The examination of the marked standard entailed significant cost reductions.								
Contract B:	It has not been carried out up to now because the vendor is given as "a family enterprise".								
Contract C:	No comparable performance exists in the market.								
Contract D:	Economically only feasible for parts of the contract.								
Contract E:	Would be a central point basically. Responsibility is to be defined. 1 x year a planning conversation is carried out with the vendor (subjects: technology change, strategic points).								
Contract F:	Is taken over by the vendor bank as a competence centre of the banking group for this core banking system.								
Contract G:	Is done by the group-internal IT vendor.								
Contract H:	It is carried out by the bank. Partially a benchmarking with the market is not possible, because up to now there has been no IT support in the southeast European market for some services or this was qualitatively not satisfactory. The market standard becomes slowly higher and a market comparison more necessary.								

In cases B and E, the success factor cannot be evaluated. A comparison of the contract conditions with the market standard has not occurred in case B yet, with the argument that the vendor is given anyway as a family enterprise. In case E this has also not occurred yet. However, it is judged to be basically meaningful.
In case C, a regular control of the market standard and a comparison with the outsourcing contract is not relevant, because no comparable offer exists in the market.
In case D, the success factor is evaluated as partly relevant, as this is only possible for parts of the contract.
In cases A, F, G and H a regular market comparison is seen as compulsory for success with ITO. Case A notes that a recent market comparison entailed significant cost reductions. An efficiency comparison is often not possible 1:1 which requires the aid of auxiliary dimensions. In cases F and G, the vendor bank (internal outsourcing) takes over the market comparison. In case H, the market comparison is carried out by the parent bank. In case H, a benchmarking with the market is partially not possible, because either there is no IT support in the southeast European market for some services, or this is qualitatively not satisfactory. Nevertheless, the market standard has increasingly improved.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
A regular examination of the market competitiveness has not occurred in all investigated cases. Because of the missing comparison possibilities (cases C, A, H) or from a cost / benefit point of view (case D) a market comparison was not (or not completely) possible. Partially, a market comparison was not carried out in spite of feasibility (see cases B and E). In case B, the prices could not be negotiated with the vendor and the vendor was given as a family enterprise. In case E a hint regarding the usefulness of regular market comparisons can be found. In cases A and D a market comparison and, based on that, post-negotiations led to significant cost reductions (case A) or to a vendor change (case D; see case study). Hence, a market comparison is recommended as far as possible.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
For Feeny and Willcocks (1998, p. 14) the control of the vendor performance concerning conformity with service level agreements and the constantly developing performance standards of the market is an important core competence of the client. Kern (2002, p. 48, 65) sees, among other things, a regular control of the market price as a condition for the avoidance of the "winner's curse", a disadvantageous situation in which the vendor offers no costs-covering prices to receive the order.

Success Factor Category: Control
Success Factor: Vendor performance reporting
The results of the regular monitoring of vendor performance should be adequately summarised in management reports stressing core points and possible spheres of activity for the client´s management.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Not assessable	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Partly necessary	Mandatory		Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition	X	X	X	X	X		X	X	**X**
⇨ Execution	X	X	X	X	X		X	X	**X**
⇨ Post-deal									
Comments									
Contract C:	In companion meetings and advisory board.								
Contract D:	As long as the performance runs in regulated roads, not inevitably. The supervision is a job of the product manager responsible for the system in the bank. If something gets out of control, the management is to be integrated.								

A regular management reporting about the performance quality of the vendor in the transition and execution phase is judged in 6 cases (A, B, C, E, G and H) as compulsory. In case C, this occurs within the scope of the partners meeting and in the advisory board. In case D, the success factor is evaluated as partly necessary, because management reporting is carried out only in problem cases. In case F, the success factor cannot be evaluated.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
A regular management reporting of the vendor's performance in the transition and execution phase is compulsory to be able to recognise irregularities early and to create the basis to counteract the vendor's behaviour at a suitable management level. Partially the management reporting is limited to failure situations with which the monitoring responsibility is delegated at employee level (see case D).		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, pp. 310-311, 312, 314) examined application outsourcing cases and also identified as a success factor a regular measurement and check of vendor quality supported by effective management information with respect to ineffective reporting as a failure factor.

Success Factor Category: Control
Success Factor: Risk assessment and risk management
The risks inherent in ITO must be adequately assessed and managed by the client throughout the ITO process to achieve risk mitigation.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Not assessable	Yes	Not assessable	**Yes**
Weighting	Mandatory	Mandatory	Partly necessary	Partly necessary	Mandatory		Mandatory		**Mandatory**
Process Classification									
⇨ Preparation	X	X	X						**X**
⇨ Selection	X	X	X						**X**
⇨ Contract	X	X	X	X	X				**X**
⇨ Transition	X	X	X	X	X				**X**
⇨ Execution	X	X	X	X	X		X		**X**
⇨ Post-deal	X	X	X						**X**
Comments									
Contract C:	The audit department of the bank is integrated regularly. A risk assessment and risk management has a higher value if exclusively economic aims are pursued by the outsourcing (e.g. reduction in costs). In this case, risks which mostly lead to cost increases can turn the business case of the ITO negative and question the basis of the ITO. In this case, the motivation for the ITO was not primarily an economic business case, but content considerations respecting the basic enabling of performance for the outsourcing enterprises. Though the ITO was forced to succeed, nevertheless, smaller risks and with it slight cost increases could keep the ITO on course. A very great emphasis was placed on the risk management with regard to the classical project risks which were governed in close detail. However, these risks should be steered identically with a non-outsourcing and, hence, do not concern outsourcing risks.								
Contract D:	By contract creation given (SLAs, emergency defaults, etc.)								
Contract E:	By completion of the contract and at regular intervals risk stock-takings are carried out (incl. measures and supervision).								

Risk assessments and risk management are seen in cases A and B as compulsory during the whole ITO process. In case E, this is seen as compulsory from the contracting phase to the external execution, because risk stock-takings are carried out at completion of the contract and at regular intervals in the external operation. In case G, risk assessment and risk management is judged as compulsory in the execution phase.

In cases C and D, the success factor is judged as partly relevant to success. In case D, the risk consideration is reduced to contractual regulations like SLAs and emergency defaults. In case C, the audit department of the bank is informed regularly about the outsourcing. Because there are no cost reduction objectives, the fulfilment of legal demands stood in the foreground of the outsourcing. Less meaning was given to risk management here.
In cases F and H the success factor cannot be evaluated.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
The documented identification and the management of outsourcing risks is prescribed for German banks in §25a KWG. Before the outsourcing this is the basis for a sound motivation of the project and it allows recognising risks early and the implementation of measures for reducing risks. During the outsourcing risk assessment and management is necessary for the monitoring of risks and measures. After contract expiry it is the basis for the decision whether the outsourcing is continued with the current vendor. The extent of the risk management depends on the degree of risk of the outsourcing.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Aubert (1998, 1999) focused on the investigation of application outsourcing cases and also identified risk assessment and risk management as being important influencing factors regarding ITO success. Willcocks, Fitzgerald and Feeny (1995, p. 21) and Lacity and Willcocks (2001, p. xiii, 338) also look upon risk minimisation during ITO as a success factor.

Success Factor Category: Co-working
Success Factor: Communication
Good co-working is important for ITO success, which is fostered by clear and effective communication between client and vendor on a regular basis in order to generate a common understanding about performance expectations, governance structures, etc.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract A:	Effective communication contributes to rapid problem-solving.								
Contract C:	Of particular importance, because in this model many partners (companion banks) work together.								
Contract H:	Important in particular with cultural differences. There exist various communication problems (e.g. arrangements or communication ways in case of problems are not kept, etc.)								

In all 8 cases, unequivocal and effective communication between client and vendor is looked upon as compulsory from the vendor selection phase up to the external execution. Case A looks upon this as a condition for rapid problem-solving. In particular with cultural differences (case H) and if several partners work together (case C), this aspect gains even more significance.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Regular and effective communication between client and vendor from the vendor selection phase is mandatory for the achievement of ITO success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
The following studies also take up the communication between client and vendor as a success factor. DiamondCluster (2005, p. 19) see the ability of vendors to communicate clearly with the purchasing department of the client as a success factor. In particular, the creation of a mutual understanding about control structures, SLAs and performance expectations is success-critical. Regular and effective communication between the ITO partners is also seen by Cullen and Willcocks (2003, 172-173) as a success factor.

Success Factor Category: Co-working
Success Factor: Knowledge transferring and sharing
Good co-working is important for ITO success, which is fostered by knowledge transferring and sharing. Vendors should share the necessary knowledge for using the outsourced IT function. Clients should share their business knowledge for improving the vendor´s understanding of business requirements.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Partly necessary	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract B:	The vendor is influenced via committees.								
Contract C:	Know-how transfer from the companion's banks to the society.								
Contract D:	Professional know-how should pass over to the vendor only partly => competition relation. IT know-how should be transferred by the vendor to the bank.								

In 7 cases (A, B, C, E, F, G and H) a knowledge transfer between client and vendor during the takeover of the outsourced application and in the external execution phase is classified as compulsory. In case C, a joint venture was founded by several banks of the same banking group which has taken over the outsourced IT goods and services. In this case, the main focus was on the knowledge transfers from the companion banks to the common society.
In case D, the success factor is evaluated as partly relevant. In this case, IT unity exists at the outsourcing bank which sees a competitor in the outsourcing partner and, hence, would like to transfer only as little as necessary knowledge to the vendor. Nevertheless, IT know-how should be transferred by the vendor to the outsourcing bank.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Knowledge transfer between client and vendor is mandatory for success from the start of the external execution. Vendors should share the necessary knowledge for using the outsourced IT function. Clients should share their business knowledge for improving the vendor's understanding of business requirements. The stated competition relation in case D and the holding back of information by the client can go well, as long as the vendor is competent enough in this subject. Nevertheless, it could be that professional standards are not implemented in the absence of knowledge transfer in the desired quality, which can negatively affect the client. Therefore, the success factor is evaluated as mandatory for the achievement of ITO success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
The following studies take up the knowledge transfer between client and vendor as a success factor. From the point of view of Lee (2001, pp. 332-333), knowledge transfer is a major success factor in ITO. Pei et al. (2007, p. 4381) also consider knowledge transfer to be a critical success factor. In the study of Koh et al. (2004, p. 362, 369) effective knowledge transfer of the vendor to the client was an important factor of influence for the success of ITO.

Success Factor Category: Co-working
Success Factor: Change project management
Good co-working is important for ITO success, which is fostered by change project management practices ensuring quality.

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting		Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition									
⇨ Execution		X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract A:	Standard requirements; changes in the core banking system hardly necessary.								
Contract D:	In particular, ability in the re-planning of change projects and the management of project risks.								
Contract E:	Effective communication is a central condition during change projects. Professional know-how on client and vendor side lacking. Therefore, the vendor cannot carry out consultations for optimum conversions of the technical demands in the purchase software and the client lacks the possibility of evaluating the statements of the vendor from a business and economic point of view. During the conversion of system changes, many change requests are necessary which negatively affects the control expenditure of the outsourcing enterprise. On the vendor side there are personnel bottlenecks which cause a "conversion traffic jam". Necessary changes are often not implemented for months. This has already caused great discontent in the user departments of the bank and shows a challenge in the control of the vendor. Too many organisation units involved on the client side generate time delays in change projects (business department – key account manager – competence centre – account manager bank / customer account manager vendor, etc.). Every small change requirement is subtracted as a normal change, which leads to high change costs (several hundred changes per year).							

In 7 cases (B, C, D, E, F, G and H) a high-class project management within the scope of the conversion of system changes during the external execution was judged as compulsory. Especially important was the ability to re-plan change projects, the management of project risks and an efficient project organisation (as few as pos-

sible people involved on the client and vendor side). Case E points to different problems in connection with change projects: lack of professional know-how on client and vendor side leads to a situation in which the vendor can carry out no consultation for the optimum conversions of the technical demands and for the customer the possibility is absent of evaluating the statements of the vendor from a technical and economic point of view; conversion traffic jams on vendor side; many change requests by the vendor; too many integrated organisation units on the client side slow down the conversion duration; accounts of every small change requirement as a system change, which leads to high costs.
In case A, the success factor cannot be evaluated because a standard core banking system for the retail business of banks was outsourced. In this case change needs barely exist.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
A high-class change management during the external execution of the application is mandatory for ITO success. In particular, the following abilities matter: ability in the re-planning of change projects, management of project risks and construction of an efficient project organisation. The problems in case E show that sufficient business and technical knowledge on the client and vendor side (success factors “Client capability: Business / IT knowledge”, “Vendor capability: Business / IT knowledge”) and a detailed service definition have great importance for the achievement of ITO success (success factor “Contract: Measurable service requirements, measures and reports”).		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, p. 311) examined application outsourcing cases and identified an over-aggressive time plan in the change project as a failure factor. This aspect has not appeared in the investigated cases of the thesis and, hence, cannot be discussed.

Success Factor Category: Co-working
NEW Success Factor: Working packages and responsibility
By foundation of a joint-venture as a service society, the building of working packages and the definition of the responsibility for them have turned out to be relevant to success.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance			Yes						**Yes**
Weighting			Mandatory						**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition			X						**X**
⇨ Execution			X						**X**
⇨ Post-deal									
Comments									
Contract C:	Every bank has taken over the management of one / several working packages. Other banks have helped in the working packages. The processing of the project occurred at the location of the working package leader. To this day these banks have the responsibility for the further development of their modules. “Positive competition” has originated between the working packages.								

In case C, a joint venture was founded as service society together with other banks of the same banking group and this society was entrusted with the conversion of the legal Basel II demands. The legal requirements to be implemented were broken down into smaller packages. Every companion bank has taken over the management and responsibility for a part of these packages which was preserved till this day to co-ordinate necessary advancements. This organisation has turned out very success-influencing.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
By foundation of a joint venture as a service society, the introduction of working packages and the distribution of the responsibility for them among the partners have had a positive effect on ITO success. This is relevant at the beginning of the outsourcing in the transition phase, as well as in the case of technical changes during external execution.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Co-working
NEW Success Factor: Top balance
By foundation of a joint-venture as a service society, the introduction of a top balance between the companion banks has turned out to be relevant to the achievement of ITO success.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance			Yes						**Yes**
Weighting			Mandatory						**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition			X						**X**
⇨ Execution			X						**X**
⇨ Post-deal									
Comments Contract C:	To guarantee a fair price / performance relation with different engagement, one has introduced the "top balance" (success factor). It is documented to this day which bank performs how many personal days. A balance occurs by means of "additional payments" or "refunding" between the banks.								

In case C, a joint venture was founded as service society together with other banks of the same banking group and this society was entrusted with the conversion of the legal Basel II demands. The legal requirements to be implemented were broken down into smaller packages. Every companion bank has taken over the management and responsibility for a part of these packages which has been preserved to this day to co-ordinate necessary advancements. In order to guarantee a fair price / performance relation with different engagements, one has introduced the "top balance", which has turned out very success-influencing. It is documented to this day which bank performs how many personal days. A balance occurs by means of "additional payments" or "refunding" between the banks.

Analysis and results

Relevance: Yes	Weighting: Partly necessary	Process classification: 
By foundation of a joint venture as a service society the introduction of a top balance between the partners has a positive effect on outsourcing success. To guarantee a fair price / performance relation with different engagement of the partners in the transition and execution phase, it is documented which companion has performed how many personal days. A balance can occur by means of "post-payments" or "refunding" between the partners.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Co-working
NEW Success Factor: Neutral body
By foundation of a joint-venture as a service society, the introduction of a neutral body has turned out to be relevant to ITO success.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance			Yes						**Yes**
Weighting			Mandatory						**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition			X						**X**
⇨ Execution			X						**X**
⇨ Post-deal									
Comments									
Contract C:	External adviser Oliver Wyman was instructed by the boards of directors of the banks and served for a period of 2-3 years as neutral on “executive level” for the necessary votes between the working packages.								

In case C, a joint venture was founded as service society together with other banks of the same banking group and this society was entrusted with the conversion of the legal Basel II demands. The legal requirements to be implemented were broken down into smaller packages. Each companion bank has taken over the management and responsibility for a part of these packages which was preserved to this day to co-ordinate necessary advancements. An external adviser was instructed by the boards of directors of the companion banks and has served for a period of 2-3 years as a neutral body on the executive level for the necessary votes between the working packages, which has turned out as very success-influencing.

Analysis and results

Relevance: Yes	**Weighting: Partly necessary**	**Process classification:** 
By foundation of a joint venture as a service society, the introduction of a neutral body for the mediation and coordination of votes between the partners in the transition and execution phase has a positive effect on outsourcing success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Co-working
NEW Success Factor: Regular advisory board
By foundation of a joint-venture as a service society, regular advisory board meetings have turned out to be relevant to success.

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance			Yes						**Yes**
Weighting			Mandatory						**Partly necessary**
Process Classification									
⇨ Preparation									
⇨ Selection									
⇨ Contract									
⇨ Transition			X						**X**
⇨ Execution			X						**X**
⇨ Post-deal									
Comments									
Contract C:	4 x per year an advisory board meeting takes place in which the strategic direction of the society is discussed.								

In case C, a joint venture was founded as service society together with other banks of the same banking group and this society was entrusted with the conversion of the legal Basel II demands. The legal requirements to be implemented were broken down into smaller packages. Every companion's bank has taken over the management and responsibility for a part of these packages, which has been preserved to this day to co-ordinate necessary advancements. 4 x per year an advisory board meeting takes place in which the strategic direction of the society is discussed. This has turned out to be very success-influencing.

Analysis and results

Relevance: Yes	Weighting: Partly necessary	Process classification: 
By foundation of a joint venture as a service society, the holding of regular advisory board meetings during conversion of the outsourcing in the transition phase and regularly during external operation have a positive effect on outsourcing success.		

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
No studies known.

Success Factor Category: Co-working
Success Factor: Relationship building and management
Between the people involved in client-vendor interactions, a long-term relationship based on a partnership should be created and sustained, as certain elements of a partnership influence ITO success positively: trust, communication, cooperation, satisfaction, business understanding, benefit and risk share and commitment. The establishment of a partnership requires time, knowledge and dedicated resources with interpersonal skills on the client and vendor side, even before contract conclusion. Different types and intensities of relationship management are required dependent on the type of ITO contract (strategic partnership versus buyer/seller relationship).

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Weighting	Mandatory	Mandatory	Mandatory	Partly necessary	Mandatory	Mandatory	Mandatory	Mandatory	**Mandatory**
Process Classification									
⇨ Preparation									
⇨ Selection	X	X	X	X	X	X	X	X	**X**
⇨ Contract	X	X	X	X	X	X	X	X	**X**
⇨ Transition	X	X	X	X	X	X	X	X	**X**
⇨ Execution	X	X	X	X	X	X	X	X	**X**
⇨ Post-deal									
Comments									
Contract A:	Regular talks: ⇨ 2-weekly at working level ⇨ Monthly with leader service enterprise ⇨ Yearly with board of directors bank Among other things, definition of strategic direction of the partnership during the next 5 years.								
Contract C:	By foundation of a joint venture the readiness must be there to invest time in the relationship. ⇨ Partners' meeting (board of director's level) ⇨ Advisory board meeting (department manager's level)								
Contract D:	There is a regular steering committee in which the key account manager and the responsible IT department manager of the outsourcing bank as well as representatives from operation and development of the vendor take part. Nevertheless, closeness is avoided because of possible compliance topics.								

Contract E:	Relationship management exists as a job and is done by three hierarchy levels: ⇨ Division leader (1 x per quarter) ⇨ Department manager (with need for discussion in case of change orders) ⇨ Operational employees (2-weekly)
Contract F:	An open, honest relationship with the contacts on the vendor side and regular personal meetings with the vendor are important success factors. Meetings with the vendor take place regularly during the year.
Contract G:	At all management levels a regular exchange is maintained in the form of personal talks with the group-internal IT vendor: ⇨ Board of directors ⇨ Leader partner / service management, e.g. 2-weekly ⇨ Operational level
Contract H:	With the IT vendor a narrow relationship is maintained on account of the cultural differences. Weekly meetings at management level. The expatriates are every week in Austria and the Austrian management is often on site. Strict controls are mandatory.

In 7 cases (A, B, C, E, F, G and H), relationship building and management between client and vendor for the duration of the cooperation (vendor selection phase – external operation) is seen as compulsory for ITO success. In cases A, E and G this takes place at all hierarchy levels. In cases D, F and H it is pointed out to regular meetings taking place. In case C, the vendor is a joint venture of banks of the same banking group. There the relationship management takes place within the scope of the companion and advisory board meeting.
In case D, relationship management is judged as partly necessary. Here talks with the vendor take place regularly. Nevertheless, the construction of a narrow relationship is avoided on account of compliance topics.

Analysis and results

Relevance: Yes	**Weighting: Mandatory**	**Process classification:** 
Relationship building and management between client and vendor during the duration of the cooperation (vendor selection phase – external operation) is mandatory for success. In the 7 cases which classified the success factor as compulsory relevant for success can be assumed a relationship based on a partnership, because it concerns without exception internal or external outsourcings in family enterprises. In the case with a partially necessary assessment (case D), a pure external relationship is given. The more in partnership the cooperation is, the more intensely relationship management is pursued.		

Discussion

The following studies also take up relationship building and management as a success factor within the scope of ITO.

ITO studies based on long-term ITO cases
Kim and Chung (2003, pp. 82-83, 87-88) found out that a partnership between client and vendor correlates significantly with ITO success.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, p. 311) examined application outsourcing cases and identified an inadequate relationship between client (user) and vendor as a failure factor. A lack of trust between client and vendor was also identified as a failure factor, because this affects negatively the relationship. In the study of DiamondCluster (2005, p. 19) it was a "lesson learnt" from ITO experiences that client and vendor must be long-term partners. Poppo and Lacity (2009, p. 105) reported that a higher ITO performance could be achieved by relationship norms. In the study of Kern and Willcocks (2009, p. 146) the operational effectiveness of the client - vendor relationship was stated as a success factor. From the point of view of Kern (2002, p. 48, 63, 65-66), effective relationship management is a condition for the avoidance of a "winner's curse", a disadvantageous situation in which the vendor offers no cost-covering prices in order to receive the order. Kern recommends aligning the relationship management to the kind of the contract, and makes a distinction between four different contract kinds. Pei et al. (2007, p. 4380) calls the implementation of ITO with the construction of an inter-organisational relationship between client and vendor a critical success factor. Cullen and Willcocks (2003, pp. 172-173) see in a strong relationship between client and vendor, in team behaviour and in mutual understanding factors for success. The quality of the partnership also supports the knowledge transfer between client and vendor, which is seen as a main success factor (Lee, 2001, pp. 332-333). Grover et al. (1996, pp. 105-111) reported that elements of a partnership (trust, communication, satisfaction, cooperation) influence ITO success positively. Also Lee and Kim (1999, pp. 41-51) identified a partnership between customer client and vendor as a success factor. Besides, a co-operative relationship is supported by trust, branch know-how, benefit / risk division and commitment, etc.

Success Factor Dependency		**Dependency Type 2: Impact of success factors on other success factors**	
Success Factor Category (Cause)	**Environment**	**Success Factor Category (Effect)**	**Contract Relationship**
Dependency: A stable internal and external business environment supports the ability to define contractually stable IT requirements for the lifetime of the ITO contract. ITO in unstable environments should be handled by a flexible long-term contract with a strategic partner.			

Summary case studies

	Contract A		**Contract B**		**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	No	Yes	N/A	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Comments											
Contract A:	"Yes" with the exception of the external environment which has no influence on the outsourced application.										
Contract B:	The environment has an influence on the system requirements, the contract was closed with an IT vendor of the banking group, is unlimited with notice possibility. The success relevance of flexibility clauses could not be evaluated (see 6.2).										
Contract C:	In this case the environment is unstable (constant adaptation to changing legal demands inevitable). An adaptable long-term contract was concluded and a strategic partnership was chosen by the foundation of the joint venture.										
Contract D:	The outsourced application is partially dependent on the environment, the outsourcing contract is long term (boundless contract with term of notice), adaptable (e.g. adaptation to changing business and technical demands), contains mechanisms for the contract adaptation by change of the market standard (e.g. benchmarking) and was closed with a partner from the preferential supplier's circle of the bank.										
Contract E:	The environment is widely stable; the demands for operation are stable. The change requirements of the departments are high, nevertheless. The contract has long-term character by the boundless contract term and was closed with the IT vendor of the banking group.										
Contract F:	The contract is dependent on single points from the environment, is long-term (first contract: 10 years, prolongation: 7 years), contains flexibility clauses and was concluded with a 100% of the daughter of the outsourcing bank.										
Contract G:	The environment influences the outsourced application. The outsourcing has occurred to a group-internal IT vendor. The accompanying contract has a boundless contract term and contains flexibility clauses.										
Contract H:	The contract is influenced by the environment, is adaptable and put on in the long term (vendor is 100% daughter, the contract is unlimited). Nevertheless, the flexibility could become even bigger (e.g. protection of the rights in the source code with individually developed software).										

In cases C, D, F, G and H, the environment influences the outsourced application in different intensity. In all cases an adaptable, long-term contract (boundless terms with notice possibility; term 7 years) with a strategic partner (foundation of a joint venture, commissioning of a preferred partner, 100% of daughter of the outsourcing bank, group internal vendor) was concluded.
In case B, the environment is also unstable and the contract was closed in the long term (for an unlimited period with notice possibility) and with a strategic partner (group of financiers-internal service providers). Nevertheless, flexibility clauses are missing, which is why this aspect cannot be evaluated here.

In case A the outsourced application is hardly dependent on the environment. Case A agrees that a stable environment serves to be able to define stable requirements for the term of the ITO contract.
In case E, the environment is widely stable; nevertheless, the change requirements are high. The contract was closed with a group-internal vendor for unlimited time with notice possibility.

Analysis and results

Relevance of dependency: Yes
The dependence has been confirmed. A stable environment supports the ability of the client to make stable requirements for the system to be outsourced for the term of the outsourcing. With outsourcings in unstable environments it is recommended to conclude an adaptable, long-term contract with a strategic partner.

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
From the point of view of Willcocks, Fitzgerald and Feeny (1995, p. 10, 21) and Willcocks and Fitzgerald (1993, p. 227, 240) an adequate stability of the external environment is essential during the term of the ITO contract to be able to identify the demands for the outsourced IT function. This coincides with the results of the thesis.
With high insecurity an internal performance or an external performance within the scope of an adaptable, long term contract with a strategic partner or within the scope of a short-term contract is recommended. Also within this thesis the conclusion of a long-term, adaptable contract with a strategic partner is recommended in case of outsourcing in unstable environments.

Success Factor Dependency		Dependency Type 2: Impact of success factors on other success factors	
Success Factor Category (Cause)	**Environment**	**Success Factor Category (Effect)**	**Contract Control**
Dependency: The national regulatory authorities monitoring banks define requirements for ITO which have to be met. A German bank conducting ITO, for example, must regularly monitor the outsourced IT functions according to the German Banking Act to ensure the orderliness of this business or service. The federal financial supervisory authorities must further on have the right to audit and the ability to monitor the bank under its jurisdiction. This requires regular data collections by the bank and the federal financial supervisory authorities on the vendor side. These rights must be grounded in the ITO contract. Furthermore, the regulatory entities have published principles on how to mitigate ITO risks and how to comply with regulatory issues in this context.			

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**

Banks are subject to the supervision of regulation authorities which define requirements concerning the handling of outsourcings. In particular, risk management is to be pursued by the outsourcing bank, and controlling rights of the supervisory authorities and the outsourcing bank must be guaranteed in the outsourcing contract with the vendor. This was confirmed in all 8 cases.

Analysis and results

Relevance of dependency: Yes
The conversion of the legal requirements (regular vendor control, risk management, anchorage of controlling rights for supervisory authorities and the outsourcing bank in the ITO contract) in ITO are mandatory for success, in order to guarantee the legal capacity of the outsourcing bank. The supervision right to be kept for banks in Germany is described in Chapter 2.4 of this thesis.

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Also Huber (1993, p.127) mentions in his case study the importance of the early consideration of regulatory demands and the communication with supervisory authorities. In particular, the subjects "accounting treatment, asset valuations, fees and service levels" were looked at by supervisory authorities.

Success Factor Dependency		**Dependency Type 1: Success factors as precondition for other success factors**	
Success Factor Category (Precondition…)	**Strategy**	**(…for) Success Factor Category**	**Contract Co-working**
Dependency: The contractual description and articulation of objectives bounded with ITO must be realistic, clear and detailed for all people involved on the client and vendor side.			

Summary of case studies

	Contract A	**Contract B**	**Contract C**		**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Not assessable	**Yes**
Comments										
Contract A:	The higher objective is more important than SLAs if the relationship is right.									
Contract C:	The objectives linked with ITO were not described in the contract. However, they were discussed in the companion and advisory board meeting.									
Contract E:	With the exception of the "hidden agenda", objectives which should not be published.									
Contract G:	Key performance indicators are defined in the contract.									
Contract H:	Objectives were not laid down in writing and were not communicated.									

A realistic, clear and detailed contractual definition and communication of the objectives linked with the outsourcing is classified in cases A, B, D, E, F and G as relevant to success. Case A places even more value on the higher objectives of the outsourcing than on service level agreements. Case E points to the fact that objectives can exist which should not be published ("hidden agenda"). In case G, the objectives were reduced to key performance indicators. Although in case C the objectives linked with ITO were discussed within the scope of the companion and advisory board meeting, they were not described in the contract of utilisation. In case H the dependence cannot be evaluated, because the objectives linked with the outsourcing were not laid out in writing and were also not communicated.

Analysis and results

Relevance of dependency: Yes (partly)
The realistic, clear and detailed description and communication of the ITO objectives on the client and vendor side has been confirmed. A contractual anchorage is not mandatory. With capital interweaving between client and vendor, a possibility of influence exists over the vendor if necessary by committees. Thus case C can have renounced a written definition of the objectives, because influencing possibilities exist via the co-owner's role of the outsourcing bank in the newly founded vendor (joint venture). Nevertheless, a change of the ITO objectives or a missing written definition (see case H) leads to no break of outsourcings (see also success factor ITO objectives).

Discussion

The following studies support this result:

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Lacity and Willcocks (2001, p. xiii, 338-339) called, among other things, a clear definition of the expectations on an outsourcing in the contract a success factor. Willcocks and Fitzgerald (1994, p. 310) focused on the investigation of application outsourcing cases and looked at the pursuit of common aim settlements between client and vendor as a necessary generic ability within the scope of outsourcings. DiamondCluster (2005, p. 19) recommend vendors to make sure that the objectives of the client linked with the outsourcing are understood from the outset and can also be realised in case of changes.

Success Factor Dependency		**Dependency Type 2: Impact of success factors on other success factors**	
Success Factor Category (Cause)	**Strategy**	**Success Factor Category (Effect)**	**Contract Relationship**
Dependency: Strategic and company-specific IT functions and IT functions supporting the core business processes of a company or IT functions closely linked with these IT functions are only outsourced in connection with a detailed contract and the establishment of a strategic partnership.			

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Not assessable	Not assessable	Yes	Not assessable	Not assessable	Yes	Yes	Yes	**Yes**
Comments									
Contract A:	IT was not seen as a strategic or core function. And, because demands of a Retail bank were to be fulfilled, no IT functions specific to the company were given either.								
Contract B:	IT is valued as “commodity“.								
Contract C:	IT is looked upon in general as a "commodity“.								
Contract E:	The outsourced (IT) function supports the core business of the enterprise (rating of the credit worthiness of bank customers). Detailed contracts (contract of utilisation and companion's contract) were concluded and by foundation of the joint venture a strategic partnership was built up. The standard application was not classified as a core system.								
Contract F:	Successful outsourcing of the core banking system = "core". A long-term partnership was entered into by the creation of a competence centre for the operation of this core banking system in the banking group (long-term contract terms). The contract was detailed after completion of the contract successively.								
Contract G:	Complete outsourcing of the IT to a group-internal IT vendor with an unlimited, detailed contract.								
Contract H:	Contractual relationship has developed in this direction (successive detailing of service requirements, narrow control of the vendor).								

In 4 cases (A, B, D, E) this dependence could not be evaluated because the outsourced IT functions (core banking systems, customer relationship management system, standard system for accountancy, human resources and goods economy) were not evaluated as core or strategic functions from the outsourcing banks.
In case C, the outsourced IT function supports the core business of the bank (rating of the credit worthiness of bank customers) and detailed contracts were concluded and a strategic partnership was built up by the foundation of the joint venture. In case F, the outsourced core banking system was evaluated as a core function, and in cases G and H a complete outsourcing of the applications took place to a vendor. In cases F, G and H, strategic partnerships (service vendor as a group-internal family enterprise or 100% daughter) were built up and (partly successively) detailed contracts were closed.

Analysis and results

Relevance of dependency: Yes (Yes: core/strategic functions; not assessable: company specific IT functions)
The outsourcing of core functions or strategic functions only in connection with a detailed contract (see contract contents within success factor category contract) and with a strategic partner has been confirmed. Regarding company specific IT functions no statement can be made on account of missing data.

Discussion

The following studies support this result:

ITO studies based on long-term ITO cases
Saunders et al. (1997, pp. 75-76) found out that it is possible to outsource core IT functions if a detailed outsourcing contract is closed in order to limit the vulnerability of the strategic function and to be able to exercise enough control over the vendor.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Marcolin and McLellan (1998, pp. 659-661) are of the opinion that the strategic IT functions and IT functions with high asset specificity can be outsourced if a strategic partnership is built up with the vendor.

Success Factor Dependency		**Dependency Type 3: Need for alignment of success factor values**	
Success Factor Category (Align….)	**Strategy**	**(…with) Success Factor Category**	**Contract Relationship**
Dependency: The basic parameters of an ITO contract must be harmonised with each other for optimal support of ITO success. On this, the following recommendations are given in the literature: ITO objectives – ITO degree – contract duration – detail of contract: The achievement of a reduction in costs is supported ideally by a combination of selective outsourcing, a detailed service definition in the contract and medium-term contract terms. Strategic aims or innovations are achieved ideally by a combination of comprehensive outsourcing, a less detailed contract and a long-term partnership.			

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	**No**
Comments									
Contract A:	A substitute for the outdated core banking system used so far and the external coverage of internally missing IT capacity and skill (primarily) as well as a reduction in costs and standardisation (secondarily), were the aims of the outsourcing. This was achieved with a big-bang ITO and an unlimited contract with the IT vendor of the banking group. At the beginning the standard contract of the vendor was accepted. Service level adaptations occurred successively when required. The demands for the outsourced core banking system (retail business) are stable and less bank specific.								
Contract B:	Strategic aims (primarily: own developments could economically not be done alone any more due to rising legal demands; standardisation / creation of synergies with banks of the same banking group; external procurement of necessary technology and skill) and cost reduction aims are to be fulfilled with the outsourcing. This was achieved with a full outsourcing of the applications by a detailed, long-term contract (for an unlimited period) and a strategic partnership with an IT vendor of the banking group. The core banking system is a standard application. The demands are dependent on the external and internal environment. In the course of a new enterprise-political adjustment (development of a new European market), demands specific to the enterprise also arose which are moved at the expense of the bank.								
Contract C:	Pursuit of strategic aims (common coping with the legal demands from Basel II by a cooperation of banks of the same banking group, improvement of commercial process support by IT) with a long-term partnership (foundation of a joint venture) and a detailed, long-term contract. The system requirements are unstable, as they are partly dependent on the environment (in particular, constant adaptation to changing legal demands) and not company-specific.								
Contract D:	The principal purpose linked with the further outsourcing was to raise the performance quality and the customer satisfaction as well as to lower costs and to raise cost transparency. Besides the experience of the vendor with technology and skill should be used. In addition, it should be shown to the first vendor that contracts are also discontinued in case of discontent with the performance in order to achieve improvements in the remaining IT functions outsourced to the first vendor. Therefore, an unlimited, detailed contract with a preferential supplier of the bank was closed. The contract can be discontinued with a term of notice of 3 months. More value is placed on professional know-how than on a long term partnership. Here, rather a buyer / seller relationship is given. The system requirements are partially dependent on the environment. Demands of the departments regarding new customer data in the system are moved constantly. With a less detailed contract the quality suffers perhaps, in spite of sinking costs; only recommended if innovations can be achieved with the outsourcing.								
Contract E:	A deepening of the cooperation with the banking group, a protection of the IT location - Bavaria - and an optimum use of common resources and applications and thereby a reduction in costs should be achieved. The outsourcing contract is long-term (for an unlimited period), has a middle level of detail and is a selective outsourcing of IT functions to a strategic partner (IT vendor of the banking group).								

Contract F:	The aim of the outsourcing was an as low as possible IT-added value depth and the lowering of IT costs. An almost complete outsourcing of the IT to several IT vendors is given. The contract for the outsourcing of the core banking system is detailed, long-term and was concluded with a strategic partner (daughter bank). The system standards are partially dependent on the environment. Country-specific features were implemented.
Contract G:	All IT functions were bundled up at a group-internal IT vendor to create a competence centre for IT in the banking group and to lower IT costs by scale effects. The performances to be produced are specified in detail on the basis of key performance indicators in the contract. The contract term is boundless with notice possibility. Value is placed on relationship building and management to the group-internal IT vendor. The external environment has an influence on the system requirements.
Contract H:	Cost aims (use of the wage slope) and strategic aims (supply of the East European daughters with a local IT vendor) are to be moved with • a nearly 100% outsourcing • a detailed requirements definition (which was developed) • long-term contracts • an intensive relationship marked by a lot of control and pressure by the bank The system is dependent on the environment; the external environment changes constantly because of the running country development.

In 7 cases (A, B, D, E, F, G, H) cost aims and strategic aims were to be fulfilled with the outsourcing. In case C, strategic objectives existed. The shown combinations of aim, extent, contract term and the level of contract detail existed in all cases only partly.

Analysis and results

Relevance of dependency: No (asset specificity not assessable)
In 7 of the 8 cases at the same time strategic aims and cost aims were to be fulfilled in the course of the outsourcings. Strategic aims often also serve to lower costs (e.g. creation of competence centres in cases G and F in the banking group led to scale effects; the supply of banks on site with an IT vendor of the same country in case H serves, among other things, to use the wage slope in Europe; the bank in case B is too small to economically move the conversion of legal demands independently, etc.). Hence, strategic aims and cost aims cannot be viewed as apart from each other. These contracts have long contract terms (for an unlimited period or long-term contract), are detailed and were closed with a strategic partner (100% daughter, IT vendor of the banking group). In 5 cases the applications were outsourced almost to 100%. Therefore, the option combination of the strategic objective is more likely, with the exception of the detailed nature of the contract. In case C, exclusively strategic aims stood in the foreground which was also moved with a long-term, detailed contract and a strategic partner (foundation of a joint venture). The detailed nature of the contract seems to be relevant to success regardless of the outsourcing objective. In case D, strategic aims and cost aims should be achieved with selective outsourcing by an unlimited, detailed contract, but with a rather loose partnership (preferred partner, nevertheless, no connection with the banking group). Here the suggested combinations of the strategic aims do not apply, but rather those of the cost aims, with the exception of the contract term which is recommended to be medium term. However, it is unlimited here. But as the contract can be cancelled with a term of notice of 3 months, which is a relatively short notice period, it can be concluded that here rather the option combination of the cost aims applies. To sum up, the dependence does not exist in the examined cases in pure form. Also, mostly at the same time, strategic aims and cost aims are to be pursued, which is why these two objectives cannot be viewed as apart from each other.

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Lee et al. (2004, p.116, 126-127) recommend choosing congruent ITO strategies to be successful with ITO. Cost aims are supported ideally by selective outsourcing, a detailed specification of the demands and a medium-term contract. Strategic aims are supported ideally by comprehensive outsourcing and a little specified and long-term contract. This stands in contrast to the result of this thesis in which these combinations have not appeared in pure form. In most cases strategic aims and cost aims should be achieved at the same time, which is why these cannot be viewed as apart from each other.

Success Factor Dependency		**Dependency Type 3: Need for alignment of success factor values**	
Success Factor Category (Align…)	**Strategy**	**(…with) Success Factor Category**	**Contract Relationship**
Dependency: The basic parameters of an ITO contract must be harmonised with each other for the optimal support of ITO success. On this, the following recommendations are given in the literature: Kind of relationship – ITO objectives – stability of environment – detailed nature of contract – asset specificity: a "buyer-seller" relationship is optimum if the achievement of efficiency increases or reduction in costs is the objective of outsourcing, a stable environment allowing a detailed contract definition, and if low company-specific requirements are to be fulfilled. The development of a strategic partnership is promising in an unstable environment not allowing a stable definition of the service requirements in the contract, in case of high company-specific requirements, or in a stable environment in order to boost company-wide changes.			

Summary of case studies

	Contract A	**Contract B**	**Contract C**	**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	(Yes)	**No**
Comments									
Contract A:	A substitute for the outdated core banking system used so far and the external coverage of internally missing IT capacity and skill (primarily) as well as a reduction in costs and standardisation (secondarily), were the aims of the outsourcing. This was achieved with a big-bang ITO and an unlimited contract with the IT vendor of the banking group. At the beginning the standard contract of the vendor was accepted. Service level adaptations occurred successively when required. The demands for the outsourced core banking system (retail business) are stable and less bank specific.								
Contract B:	Strategic aims (primarily: own developments could economically not be done alone any more due to rising legal demands; standardisation / creation of synergies with banks of the same banking group; external procurement of necessary technology and skill) and cost reduction aims are to be fulfilled with the outsourcing. This was achieved with a full outsourcing of the applications by a detailed, long-term contract (for an unlimited period) and a strategic partnership with an IT vendor of the banking group. The core banking system is a standard application. The demands are dependent on the external and internal environment. In the course of a new enterprise-political adjustment (development of a new European market) demands specific to the enterprise also arose which were moved at the expense of the bank.								
Contract C:	Pursuit of strategic aims (common coping with the legal demands from Basel II by the cooperation of banks of the same banking group, improvement of commercial process support by IT) with a long-term partnership (foundation of a joint venture) and a detailed, long-term contract. The system requirements are unstable, as they are partly dependent on the environment (in particular, constant adaptation to changing legal demands) and not company-specific.								
Contract D:	The principal purpose linked with the further outsourcing was to raise the performance quality and the customer satisfaction as well as to lower costs and to raise cost transparency. Besides this, the experience of the vendor with technology and skill should be used. In addition, it should be shown to the first vendor that contracts are also discontinued in case of discontent with the performance in order to achieve improvements for the IT functions remaining there. Therefore, an unlimited, detailed contract with a preferential supplier of the bank was closed. The contract can be discontinued with a term of notice of 3 months. More value is placed on professional know-how than on a long-term partnership. Here, rather a buyer / seller relationship is given. The system requirements are partially dependent on the environment. Demands of the departments regarding new customer data in the system are moved constantly. With a less detailed contract, the quality suffers perhaps, in spite of sinking costs; only recommended if innovations can be achieved with the outsourcing.								
Contract E:	A deepening of the cooperation with the banking group, a protection of the IT location - Bavaria - and an optimum use of common resources and applications and thereby a reduction in costs should be achieved. The outsourcing contract is long-term (for an unlimited period), has a middle level of detail and is a selective outsourcing of IT functions to a strategic partner (IT vendor of the banking group). The system standards depend slightly on the environment; nevertheless, hundreds of changes must be moved per year.								

Contract F:	The aim of the outsourcing was an as low as possible IT-added value depth and the lowering of IT costs. An almost complete outsourcing of the IT to several IT vendors is given. The contract for the outsourcing of the core banking system is detailed, long-term and was concluded with a strategic partner (daughter's bank). The system standards are partially dependent on the environment. Country-specific features were implemented.
Contract G:	All IT functions were bundled up at a group-internal IT vendor to create a competence centre for IT in the banking group and to lower IT costs by scale effects. The performances to be produced are specified in detail on the basis of key performance indicators in the contract. The contract term is boundless with notice possibility. Value is placed on relationship building and management to the group-internal IT vendor. The external environment has an influence on the system requirements.
Contract H:	Cost aims (use of the wage slope) and strategic aims (supply of the East European daughters with a local IT vendor) are to be moved with • a nearly 100% outsourcing • a detailed requirements definition (which was developed) • long-term contracts • an intensive relationship marked by a lot of control and pressure by the bank The system is dependent on the environment; the external environment changes constantly because of the ongoing development at country level

In the cases A, B, D (first outsourcing), E, F, G and H also cost reduction was aimed with the outsourcing besides the strategic objectives. In all these cases a strategic partnership (100% daughter, IT vendor of the banking group) with a detailed contract was concluded. In cases B, D, E, F, G and H the environment influences the system requirements in different intensities and/or enterprise-wide changes were implemented (e.g. 100% outsourcing, outsourcing of a core banking system, foundation of a joint venture, grouping of the IT at an IT vendor of the banking group, purchase of an IT vendor in the southeast-European region). In all cases a detailed contract was concluded. In case D, the strategic partnership changed to a buyer/seller relationship within the scope of the further outsourcing in spite of the influence of the environment and regular system changes.

Analysis and results

Relevance of dependency: No (asset specificity not assessable)
In the examined cases rather the described combinations of a strategic partnership apply, however, with a detailed contract. A detailed contract seems always to be an important success factor (see success factors “Contract”). However, in case D the relationship developed from a strategic partnership into a buyer / seller relationship, in spite of the influence of the environment and regular system changes. To sum up, the dependence does not exist in the examined cases in pure form. Also mostly at the same time strategic aims and cost aims are to be pursued, which is why these cannot be viewed as apart from each other. The examined cases admit no assessment of the aspect asset specificity.

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Marcolin and McLellan (1998, pp. 659-661) look upon the right combination of outsourcing objectives, the stability of the environment, the enterprise specificity of the outsourced IT function and the kind of the relationship between client and vendor as success factors. A strategic partnership is recommended with strategic objectives, an unstable environment with a little known demand, with high enterprise specificity of the demands or in a stable environment if enterprise-wide changes need to be moved. A buyer/seller relationship is recommended with cost reduction objectives, a stable environment with known demands and with low enterprise specificity of the demands. This stands in contrast to the result of this thesis in which these combinations have not appeared in pure form. In most cases strategic aims and cost aims should be achieved at the same time, which is why these cannot be viewed as apart from each other.

Success Factor Dependency		Dependency Type 2: Impact of success factors on other success factors	
Success Factor Category (Cause)	**Contract**	**Success Factor Category (Effect)**	**Relationship**
Dependency: A long-term partnership is promoted, while customers and service providers can participate mutually in advantages from the contract (monetary participation of the partner in efficiency improvements, cost reductions, etc.). This occasions the partner to support the achievement of advantages at the counterparty. In order to create a formal basis for this "profit sharing model", it will be fixed in the ITO contract. If the vendor does not benefit from the ITO contract, it will probably take every chance to charge additional costs or to reduce the quality of the delivered service which both negatively affect the relationship between client and vendor.			

Summary of case studies

	Contract A	Contract B	Contract C	Contract D	Contract E	Contract F	Contract G	Contract H	Result
Relevance	Not assessable	No	Yes	Not assessable	Not assessable	No	No	No	**No**
Comments									
Contract A:	The partnership with the vendor is an important condition for a win-win situation. If only the costs play a role, the danger exists that employees of the vendor are exploited, which can negatively affect the vendor performance.								
Contract B:	The bank has a share in the IT vendor and, hence, has companion status. The aim of the vendor is not to make a profit, but to produce the performance to as low as possible costs. Synergies on the vendor side which lead to cost savings are transmitted to the partners.								
Contract C:	The aim of the society (IT vendor) is to produce the performance for the companion banks to as low as possible costs, not profit maximisation. Hence, the outsourcing banks are co-owners of the vendor. The cost block resulting from the vendor is reduced with the profit gained with third customers. 7% profit is considered in favour of the society (dividend after taxes) and the remaining costs are distributed to the partners.								
Contract D:	No profit sharing was agreed.								
Contract E:	A profit sharing model was not necessary at the beginning of the partnership, because the performance was produced by the IT vendor to cost of sales. At the beginning of the year the prospective costs were determined and paid in monthly rates. Caused by the coalescences of the vendor and the discontinuation of the capital participation, the reimbursement occurs currently dependent on performance.								
Contract F:	The vendor bank is to be seen as a competence centre for this core banking system within the banking group of the mother bank. Hence, there exists no profit achievement intention, but the aim is to pursue this core banking system with as low as possible costs for all client banks. Then the costs are divided between the client banks.								
Contract G:	Group-internal vendor works not with profit achievement intention, but has the job of achieving the required IT services at as low as possible cost. If the actual costs at the end of the year are lower than the target cost ("Flatrate" in the form of a fixed price), restitution or an additional payment occurs.								
Contract H:	The IT service provider should produce the services at as low as possible costs, a big black "0" must be the aim. Hence, a profit achievement intention does not exist.								

In cases B, F, G, H a profit sharing model is judged as unnecessary because the vendor (100% daughter, vendor of banking group) has no profit achievement intention, but produces the performance at as low as possible costs for the bank.
In case C, an IT vendor was founded with banks of the same banking group (joint venture). Here, also, no profit achievement intention exists, but the companion banks profit from low costs of the vendor, because the vendor uses the profit > 7% gained from third party services to reduce the costs for the companion banks.

In the cases A, D and E the success factor cannot be evaluated, because no profit sharing was agreed.

Analysis and results

Relevance of dependency: No
In none of the examined cases is a real profit sharing model given. In case C, a low profit sharing is connected implicitly by the organisational form of the outsourcing (joint venture). Nevertheless, all examined cases have a long contract term (between 2 and 17 years). Hence, a contractually agreed profit-sharing model (monetary participation of the partner on efficiency increases, cost reductions, etc.) cannot be necessary.

Discussion

ITO studies based on long-term ITO cases
According to the study of Saunders et al. (1997, pp. 72-77), outsourcing success depends on the establishment of a partnership by means of profit-sharing.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
DiamondCluster (2005, p. 19) have recommended as a "lesson learnt" the structuring of an outsourcing partnership as a win-win relation.

These studies stand in contrast to the results of this thesis. The outsourcing cases of this thesis illustrate, with the exception of case D, exclusively external or internal outsourcings to family enterprises. This political attachment could be a reason for the fact that benefit sharing arrangements are not necessary to maintain the outsourcing relationship. Nevertheless, it is also conceivable that these profit sharing models are not necessary if the cost/benefit relation of the cooperation fits from the client's and vendor's points of view.

Success Factor Dependency		**Dependency Type 1: Success factors as precondition for other success factors**	
Success Factor Category (Precondition…)	**Vendor selection**	**(…for) Success Factor Category**	**Contract Control**
Dependency: The necessary service level requirements, measures and reports as well as cost and development goals are identified in great detail during the vendor selection phase and fixed in the ITO contract. The contract is then the fundamental basis for a regular and detailed monitoring and measuring of vendor performance. Furthermore, the ITO contract includes, among other things, control mechanisms to motivate the vendor to act according to the contract (e.g. cash penalties for under performance), to ensure competitiveness (e.g. renegotiation option in case of changing market standards) and to terminate the contract if needed (termination clause).			

Summary of case studies

	Contract A	**Contract B**	**Contract C**		**Contract D**	**Contract E**	**Contract F**	**Contract G**	**Contract H**	**Result**
Relevance	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes	**Yes**
Comments										
Contract A:	Dependence exists. Restrictions exist with regard to the time of the detection and agreement of the service requirements (see success factor “Measurement of service requirements upfront in baseline period”) and the contract contents (see success factors “Contract: …”).									
Contract B:	With restrictions regarding contract contents (see success factors “Contract: …”).									
Contract C:	The first part is appropriate (service level requirement, measures, reports as well as cost and development objectives). Nevertheless, the second part is not, or only to a very limited extent, regulated by contract (control mechanisms for the support of the contract observance, e.g. penalties in case of mal or bad performance), for the protection of competitiveness (e.g. post-negotiations option in case of changing market standards). The reason for this is in particular that, by the double role (user + companion) some of these classical clauses have no effect (e.g. penalties do indeed reduce the costs, but also the participation yield). This is why, in case of serious problems, it is planned to come within the committees (advisory board, partners meeting) in a consensus for an improvement.									
Contract D:	The contract contains not all the points in accordance with success factors “Contract: …”.									
Contract E:	Not all contract contents in accordance with success factors “Contract: …” agreed.									
Contract F:	Nevertheless, the service requirements were specified after completion of the contract (see success factor “Measurement of service requirements upfront in baseline period”) and the contract contains not all the points from success factors “Contract: …”									
Contract H:	The service requirements were specified after completion of the contract successively (see success factor “Measurement of service requirements upfront in baseline period”) and restrictions exist regarding the contract clauses (see success factors “Contract: …”).									

In all cases, the service standards agreed in the contract (independently of whether they are agreed within the scope of the completion of the contract or successively ascertained and agreed after completion of the contract), as well as cost aims and development objectives (by contract or orally agreed) are the basis for the regular vendor control. Concerning the recommended contract clauses, restrictions exist in 7 of 8 cases (shown within success factors “Contract: …”).

Analysis and results

Relevance of dependency: Yes
The service level requirements, measures and reports investigated within the scope of the vendor selection phase and agreed in the ITO contract, as well as cost aims and development objectives, are the basis for the regular vendor control. The existence of the recommended contract clauses for the support of the vendor control is displayed within success factors “Contract: …”

Discussion

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration
Willcocks and Fitzgerald (1994, pp. 310-311, 314) examined application outsourcing cases and also came to the conclusion that active vendor management is a success factor, thereby the agreed contract is, among other things, the basis for regular vendor control.
De Looff (1995, p. 294) recommend ITO only if the demands can be specified in the forefront and measured later. From this the subsequent vendor control can be derived based on the agreed service standards in the contract.

Success Factor Dependency		**Dependency Type 2: Impact of success factors on other success factors**	
Success Factor Category (Cause)	**Client/Vendor capability** **Contract** **Co-working**	**Success Factor Category (Effect)**	**Relationship management** **Control**
Dependency: Elements of a partnership - like trust, communication, cooperation, satisfaction, business understanding, benefit and risk share and commitment- have an impact on ITO success. The establishment of a partnership requires time, knowledge and dedicated resources with interpersonal skills on the client and vendor side already, before contract conclusion. Furthermore, an incomplete and unclear contract requires ongoing discussions between client and vendor about what is fixed in the contract and what not. The right definition of the required service levels allows an early detection of critical vendor performance which helps to avoid escalation and negative consequences for the relationship.			

Summary of case studies

	Contract A		**Contract B**	**Contract C**		**Contract D**		**Contract E**		**Contract F**	**Contract G**	**Contract H**		**Result**
Relevance	Yes	N/A	Yes	Yes	No	Yes	N/A	Yes	N/A	Yes	Yes	Yes	No	**Yes (partly)**
Comments														
Contract A:	A division of benefit and risk is not given.													
Contract B:	If it is referred to the contract. This is basically a bad sign. Because not everything can be regulated in detail by contract, risks exist in spite of the contract.													
Contract C:	Knowledge process outsourcing. The development of the rating methodology and the operation/further development of the rating system lies in the responsibility of the common society. In this frame the same aims are pursued.													
Contract D:	With the exception of the benefit/risk division. A profit-sharing model or other forms of benefit/risk divisions are not given. The contract should be specified; nevertheless, one will never reach an absolute "depth" because of cost/benefit reasons.													
Contract E:	Billing occurs dependent on the performance. A benefit / risk division is not given.													
Contract H:	Yes: satisfaction, branch know-how, division of benefit and risk, commitment. No: trust and communication were substituted with control. The existing contract was never properly understood by the vendor. However, completeness in the contract can also complicate the contractual relationship. Facilities are possible, e.g.: • Limitation of standard clauses (basic contract contents are regulated by reference to respective laws) • No detailed description of the infrastructure, but e.g. "state of the art". Flexibility should be guaranteed in future by annex which needs to be yearly agreed. Thus service standards, technology, costs and processes (in particular, CRs and governance) should be subjected to an annual control and should be adapted when required ("living documents").													

In all cases, the elements trust, communication, cooperation, satisfaction, commercial understanding and commitment influence the success with ITO, with the exception of "trust" and "communication" in case H. Here, these points must be substituted on the basis of cultural differences, with control.

In none of the examined cases is a real profit-sharing model given, hence the point “benefit and risk share” cannot be judged finally. The construction of a partnership claims time and in addition the application of suitable people on the client and the vendor side with social abilities already before completion of the contract.

Cases B, D and H point to the problems of detailed contracts. There is the difficulty that a 100% description of the service standards (cases B and D) can not be done, which bears risks. As a countermove, in addition too much detail can also complicate a contract relationship (case H) and can thereby have a negative effect on the relationship between client and vendor. In case H, the contract was currently revised and it was planned to regulate that service requirements, technology, costs and processes can be checked yearly and can be adapted when required. Thus weak spots can be removed quickly from the contract and the contract can be adapted regularly and simply.

Analysis and results

Relevance of dependency: Yes (partly)
The following elements of a partnership influence the ITO success positively: trust, communication, cooperation, satisfaction, commercial understanding and commitment. Benefit and risk share is given in none of the examined ITO cases (see success factor benefit sharing arrangements) and, hence, cannot be evaluated. With existing cultural differences the elements trust and communication must be substituted with control. The construction of a partnership claims time and, in addition, the application of suitable people with social abilities on the client and vendor side already, before completion of the contract. An incomplete and unclear contract should be avoided, because this leads to discussions between client and vendor. The agreement of the right service standards permits a timely recognition of critical performance. This serves to avoid escalation and negative consequences for the client-vendor relationship. Nevertheless, with regard to the detailing of the ITO contract, it is to be noted that not “as detailed as possible”, but a meaningful level of detail is vital.

Discussion

The following studies support this result.

ITO studies based on long-term ITO cases
No studies known.

ITO studies based on short-term ITO cases / ITO cases of unknown duration

Grover et al. (1996, pp. 105-111) also report that elements of a partnership (trust, communication, satisfaction, cooperation) influence ITO success positively. Also Lee and Kim (1999, pp. 41-51) identified a partnership between client and vendor as a success factor. Besides, a cooperative relationship is supported by trust, branch know-how, division of risk-benefit and commitment.

APPENDIX D

Comments of ITO experts on the ITO Model

Appendix D – Comments of ITO experts on the ITO Model

Ad. Environment: Vendor market

Expert 1:

The availability of a vendor market is recommended regardless of the organisational form of the ITO to allow a market comparison before and during the ITO and to guarantee with it the market justice of the outsourcing contract.

Expert 2:

The availability of a vendor market is of fundamental importance - before the ITO and during the ITO - to have an exit scenario.

Expert 3:

Possibilities of comparison with the market are also necessary for a joint venture or for internal ITOs to be able to measure the efficiency of the vendor. Partially, a market comparison cannot be possible if the requirements are too group specific.

Ad. Environment: Corporate culture

Expert 1:

Basically approved. Partially, even cultural differences in the onshore area (for example, between Hesse and Bavaria) are to be managed. The same language simplifies the communication. However, the comprehensibility of the language/of the dialect must be guaranteed for the opponent.

Expert 3:

The biggest risk with nearshore and offshore cases is cultural difference. Accordingly, an active management of cultural differences is mandatory for success with ITO. The meaning of the success factor also depends on the degree of maturity of the IT function to be produced externally. With "Commodity" IT functions cultural differences play do not play so big a role. With less standardised IT functions, which demand a higher degree of communication and process know-how for problem solution, a management of cultural differences is mission critical.

Ad. Environment: Corporate terms

Expert 1:

Within the scope of effective communication the common concepts are developed during the conversation. It is better, one defines the concepts before. Thus the communication can be formed more efficiently. This point is very important, because even under the same concepts often different meanings are associated.

Expert 2:

A concept definition between client and vendor is a very important point, because often different things are understood by the same concepts. It is necessary to look actively for a uniform language.

Expert 3:

A good communication as a substitute for concept definitions is only restrictedly possible. Language is a big source of error, above all if linguistic differences come in addition. The definition of common concepts prevents misunderstandings.

Ad. Strategy: ITO Strategy / Business-IT-Alignment

Expert 1:

The alignment of the IT or ITO objectives to the business objectives is not always directly possible. Political aims are also often pursued with ITOs. If one considers within every ITO the objectives: raising of flexibility and lowering of costs, among other things, a continuation of the ITO is also understandable in the case of changing business objectives.

Expert 2:

The derivation of the ITO objectives from the business objectives is fundamentally important.

The use of ITO as an innovative source can be possible. For example, if the vendor has know-how that the outsourcing enterprise does not have. Innovation can also be possible by more efficient processes on the vendor side. With outsourcing of standard software the potential is low for innovations. If the outsourcing is linked with a change of internal development into standard software, flexibility can be won thereby; for example, innovative products can originate from the combination of standard bank products.

Expert 3:

The continuation of outsourcings in spite of changed basic conditions could also be due to the fact that backsourcing is not wanted any more.

Ad. Strategy: IT functions/Critical systems

Expert 1:

With the use of a standard application, also critical systems, like the core banking system, can be outsourced. Individual demands can also be implemented to a limited extent by the vendor.

Expert 3:

The existence of standard core banking systems, as for example Avaloq, shows that the outsourcing of commercial-critical systems is also possible.

Ad. Strategy: IT functions/Very interconnected IT functions

Expert 1:

Basically approved. Complexity is no reason not to outsource. Nevertheless, the right definition of the interface is of great importance. Detailed assessments are therefore necessary. Another possibility would be to reduce the complexity before or after the ITO.

Ad. Strategy: Joint projects

Expert 1:

Basically approved. Common projects also generate necessary coordination between the banks. This generates additional costs. Hence, outsourcings should rather be done alone if possible.

Ad. Strategy: Contract duration (3-5 years)

Expert 1:

The bases for the calculation of the optimum contract term are the business case and the break even calculations. The contract term should be long enough to be able to achieve the cost aims linked with the outsourcing.

Expert 3:

The contract term must be long enough to achieve cost effects. Transition costs are compensated, according to experience, not before 5-10 years.

Ad. Strategy: Vendor switching

Expert 1:

The possibility of changing the vendor is an important success factor. An adequate exit possibility and the support of the vendor in case of a further outsourcing (system documentation, etc.) are standard clauses in an outsourcing contract.

NEW Ad. Strategy: IT-Architecture

- The IT architecture of the vendor is seen as a success factor. Just for the sustainability of an application outsourcing solution an adaptable IT architecture (modularisation, service orientation => SOA – service-oriented architecture) on the vendor side is inevitable.
- If a backsourcing of the application is a strategically possible solution, the IT architecture on the client side must be suitable (data model, processes, etc.).

Ad. Client capability: IT knowledge

Expert 1:

Holding available IT knowledge about the outsourced IT function on the client side is not mandatory, as long as before the outsourcing the market justice of the contract conditions is guaranteed by obtaining several offers and as long as regular benchmarkings are carried out during the external operation. The costs for these benchmarkings are shared by client and vendor as a rule.

Expert 3:

IT knowledge about the outsourced IT functions at the outsourcing bank is fundamentally important to be able to judge the price/performance relation. With standard software this matters less. IT knowledge can also be substituted with regular benchmarking if a market exists.

Ad. Client capability: Acceptance of the vendor

Expert 1:

The quality of the performance influences directly the acceptance of the vendor. The employees of the outsourcing bank have the possibility to report discontent to the responsible management. There the decision for or against a continuation of the ITO is made.

Ad. Client capability: Internal IT capability

Expert 1:

The internal conversion of individual demands not covered by the standard applications of the vendor can make sense in isolated cases. It would be better if the individual demands could be implemented by the vendor. This can be anchored in the ITO contract.

Ad. Client capability: Problem management

Expert 1:

Yes, it is covered by ITIL to which many vendors refer.

Ad. Vendor selection: Tendering process / Operational information gathering

Expert 1:

The accomplishment of a tender is always recommended regardless of the organisational form of the ITO. Even if the vendor is already certain for strategic reasons, a tender-

ing serves to raise the market conditions. The application of the market conditions to the vendor guarantees the competitiveness of the outsourcing bank.

Expert 3:

To carry out a tendering is always an advantage, because with it vendors can be put under pressure to produce the performance to conditions in line with market requirements. A precondition is the tendering ability of the requirements; a market must exist for it.

Ad. Vendor selection: Requirements specification

Expert 3:

The specification of the requirements before the ITO during the vendor selection phase makes sense regardless of the organisational form, because with it the capability and economic efficiency of the elected vendor can be guaranteed in the pre-field of the outsourcing.

Ad. Vendor selection: In-house capabilities

Expert 1:

The full leverage of the internal abilities before an outsourcing is not mandatory. The optimisation can be also carried out within the scope of a transformation phase on the vendor side. For this transformation, one-off costs occur for the outsourcing bank, but thereby the external operation gets cheaper. If this optimisation is not carried out, presumably political instead of cost reduction aims stand in the foreground of the outsourcing.

Expert 2:

Optimisation must not happen before the outsourcing, but can also occur within the scope of a transformation by the vendor.

While reductions of the "Baseline" (topical IT costs at the time of the outsourcing) are agreed by contract with the vendor, the client can also profit from the optimisation financially.

The realisation of internal optimisation before the outsourcing can also lead to the fact that the outsourcing is not carried out any more. With an outsourcing after an internal optimisation it is more difficult for the vendor to achieve additional savings.

Expert 3:

Optimisation can also occur within the scope of a transformation phase on the vendor side.

Ad. Vendor selection: Reasonable vendor profit

Expert 3:

This is classified as partly necessary. An outsourcing relationship will only be able to exist on a continuing basis if both sides earn a profit from it. Low margins are often a reason for a vendor to allocate less qualified staff for these cases, which ends in worse service quality and can negatively affect the outsourcing enterprise.

Ad. Vendor capability: Staff management

Expert 2:

Low employee fluctuation on the vendor side is fundamentally important. The meaning of the success factor depends on how specific the required specialist knowledge is and how easy or hard it is to cover this knowledge by the market.

Expert 3:

It would be meaningful to agree with the vendor a maximum fluctuation rate in % by contract. Besides, the mentioning of key players by name is important for ITO success.

The vendor must own, in particular, a sufficient number of personnel to be able to solve problems in the outsourced application independently.

Ad. Vendor capability: Attraction of customers

Expert 1:

It is more advantageous to an outsourcing bank to outsource to bigger vendors who already have an adequate established clientele. An outsourcing to smaller vendors who still have to acquire customers implies more risk. An economic conversion of complicated regulatory demands is often possible only by an outsourcing; thereby scale effects in further development occur.

Ad. Vendor capability: Short response time in case of problems

Expert 3:

The response time is only one SLA-measure, the vendor must be able to fulfil the whole SLA (solution time, operation duration, maintenance time, maximum number of returning tickets, etc.).

Ad. Contract: Individual contract

Expert 1:

An ITO contract always contains specifics of the outsourcing bank and is therefore individual. It is important that the contract fits the need.

Expert 2:

The ITO contract can be called basically individual, because enterprise specific aspects are always included. The contract must fulfil the demands.

Expert 3:

An ITO contract is always individual. Nevertheless, the standard contract of the vendor is a good basis. For an outsourcing enterprise it is important to negotiate the contract according to the demand. Besides, the cooperation with external advisers is recommended, because there extensive ITO knowledge exists from the support of several clients.

Ad. Contract: Escalation procedures / process for resolution of performance disputes

Expert 3:

Would also be for the joint venture of advantage in order to guard against communication problems and, hence, is evaluated as mandatory.

Ad. Contract: Renegotiation clause

Expert 3:

Also vendors who have no profit achievement intention (joint venture, internal ITO) build up buffers, as a rule. Therefore, a benchmarking and based on that post-negotiations of the prices also make sense in these cases.

Ad. Contract: Communication channels

Expert 1:

The mentioning of the responsible person for the client on the vendor side by name is not categorical necessary. Nevertheless, a general definition of the required roles ("customer responsible person") in the contract and the naming of contact data is necessary.

Ad. Contract: Termination clause

Expert 1:

Vendors often demand distance payments in notice clauses in case of an untimely notice. It is recommended to agree on sinking payments depending on the temporal progress of the outsourcing.

Ad. Contract: Contract review

Expert 1:

Management consultants can profit from a lot of experience due to the consulting of several ITO clients. This comprehensive experience cannot be built up by an outsourcing bank itself, as a rule. Hence, the incorporation of management consultants always makes sense to guarantee an ITO contract which corresponds to the market standard.

Expert 3:

The inclusion of external support is basically recommended.

Ad. Contract Due diligence

Expert 1:

The realisation of a due diligence checks makes sense regardless of the organisational form. Even if the vendor is already certain for strategic reasons, a due diligence check serves to guarantee the efficiency of the vendor and the market justice of the contract.

Expert 2:

A due diligence investigation should always be carried out.

Expert 3:

The realisation of a due diligence checks makes sense regardless of the organisational form. simply so that the efficiency of the vendor and the market justice of the conditions can be guaranteed, unless no market comparison is possible because of enterprise specific demands.

Ad. Contract: Contract amendments

Expert 1:

Separate contract appendices, in particular separate performance notes, are recommended to be able to specify every output in detail and if necessary to give notice.

Neu: Ad. Contract

Expert 3:

Beside the already mentioned elements should the ITO contract contain the following additional components:

- Disaster recovery concept and planning
- Regulatory demands for data security
- Approval of subcontractors (liability, data protection, etc.)
- Directives of the bank to be kept
- Position fixing and, if necessary, transformation

- Key players transferred to the vendor

Ad. Stakeholder management: Instruction of client staff

Expert 1:

It is recommended to incorporate external advisors in the Make or Buy analysis to guarantee the neutrality of the investigation.

Ad. Stakeholder involvement: Long-term client employees

Expert 1:

Personnel expenditure is a main cost block in IT. Hence, the outsourcing of staff to the vendor is often necessary to hold the business case. This competence is also partly required by the vendor.

Expert 2:

A personnel transfer is of greater importance the more company-specific the application is and if no standard application is used. If the necessary know-how is also available in the market, a personnel transfer is not necessary.

Ad. Roles and responsibilities: Relationship manager

Expert 1:

The relationship management on the vendor side is often done by the account manager.

Ad. Roles and responsibilities: Service level manager

Ad. Control: Monitoring and controlling

Expert 1:

Vendor control in general in order to ensure contract fulfilment is a mandatory success factor. One must always have strict controls.

Neu: Ad. Roles and responsibilities: Service manager

Expert 3:

The counterpart to the service level manager on the client side is the service manager on the vendor side. The service manager has to make sure that the daily operation of the application functions smoothly. This role should be considered in the ITO Model.

Ad. Control: Check of market standards

Expert 1:

Without a regular examination of the outsourcing contract regarding market justice (benchmarking) the competitiveness of the outsourcing company can be affected on a continuing basis.

Other expert opinions regarding a regular market comparison during outsourcing can also be found under the point "Strategy: Vendor market".

Ad. Co-working: Knowledge transferring and sharing

Expert 3:

The knowledge transfer is in particular of great importance if no staff members are transferred to the vendor and if cultural differences exist.

Ad. Co-working: Change project management

Expert 1:

A change data base and tools for tracking the changes is seen as helpful within change project management.

Ad. Dependency: Environment ↔ Contract/Relationship

Expert 1:

An unstable environment is no reason not to outsource. This is why an ITO is often chosen, because vendors have better possibilities to implement necessary changes economically on account of scale effects.

APPENDIX E

ITO Model – detailed –

ITO Model

Preparation | Selection | Contract | Transition | Execution | Post-deal

External

External Environment

- Vendor market
- Regulatory compliance
- Corporate culture vendor
- Corporate terms vendor
- Roles and responsibilities: Account manager vendor
- Roles and responsibilities: Relationship manager vendor
- Roles and responsibilities: Service manager vendor

Vendor Capability

- Business knowledge
- IT knowledge
- ITO knowledge
- Interpersonal skills
- Organisational learning capability
- Staff management: quality, capacity, working conditions, allocation
- Staff management: low staff turnover
- Flexibility: business and technology changes
- Reliable, professional job completion
- Minimum customer involvement
- Attraction of customers
- Financial stability/ Cost and financial management
- IT Architecture (vendor)

Vendor Capability

- Partnership´s portential

Internal (client organisation)

Firm level

Internal Environment

- Corporate culture client
- Corporate terms client

IT level

Client Capability

- Business knowledge
- IT knowledge outsourced IT function
- ITO knowledge
- Interpersonal skills
- Organisat. learning cap.
- Flexibility: business changes
- Flexibility: technology changes
- Organisational learning capability
- Flexibility: business changes
- Flexibility: technology changes
- Partnership´s portential
- Vendor acceptance
- IT capability
- Problem management
- Problem management

Strategy

- ITO strategy
- Business – T – Alignment
- ITO objectives
- Inhouse IT functions: vendor management
- Inhouse IT functions: interconnected and critical IT functions
- Joint projects
- Contract duration 3-5 years
- Renegotiation and restructuring of ITO contract / Vendor switching
- Backsourcing
- IT Architecture (client)

Strategy

- Renegotiation and restructuring of ITO contract / Vendor switching
- Backsourcing

Vendor Selection

- Tendering process
- Requirements specification
- Operational information gathering
- Evaluation of bids
- Vendor profit
- Leverage in-house capabilities
- Realisation of scale effects

Contract

- Individual
- Contract: Measurable service requirements, measures, reports
- Contract: Processes: escalation / resolution of performance disputes
- Contract: Financial penalties
- Contract: Improvement targets
- Contract: Flexibility terms
- Contract: Renegotiation / Benchmarking clause
- Contract: Communication channels
- Contract: Termination clause
- Contract: Staff regulations / guarantees
- Contract: Regulatory requirements
- Contract: Directives outsourcing company
- Contract: Fluctuation rate / key players
- Contract:ITO objectives
- Contract review
- Due diligence
- Contract amendments

Contract

- Contract renegotiations

Control

- Monitoring and control
- Vendor payment
- Regular check of market standards
- Vendor performance reporting
- Risk assessment and risk management

Co-work

- Communication
- Knowledge transferring and sharing
- Change project management practices
- Working packages and responsibility
- Top balance
- Neutral body
- Regular advisory board

Stakeholder Management

- Stakeholder involvement: High-level management
- Stakeholder involvement: Technical client staff
- Stakeholder involvement: Instruction of client staff
- Stakeholder involvement: IT user
- Stakeholder involvement: Staff affected by ITO
- Stakeholder involvement: Long-term client employees
- Stakeholder involvement: Functional departments
- Roles and responsibilities: Project manager
- Roles and responsibilities: Account manager
- Roles and responsibilities: Relationship manager
- Roles and responsibilities: Service level manager
- Roles and responsibilities: Mediator between client and vendor
- External recruitment of vendor employees

Relationship Management

- Relationship building and management

ITO project level

Outsourcing Process Phase: Preparation

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Stakeholder Management	Stakeholder involvement: High level management	**Ensure the commitment of the high level management on business and IT side**		The commitment of the high-level management on the business and IT side is necessary from the start of the ITO project till the contracting phase to receive a positive decision for the ITO and with it the approval for the completion of the contract and the basic conditions agreed in it as well as to guarantee the necessary technical know how.				
Stakeholder Management	Roles and responsibilities: Project manager	**Install an ITO project leader**		The nomination of a project manager for the governance of the ITO project from the preparation phase up to the end of the transition to the vendor, and the specification of the accompanying responsibilities, is a mandatory success factor. In the preparation phase the nomination of the project manager and the transference of the competence occurs.				
Strategy	ITO strategy	**Develop a clear and detailed ITO strategy in terms of "a plan what IT to source how and why currently and in the future", but be aware that changing surrounding conditions can prevent the implementation of the strategy**	**Environmental stability**	The development of a clear and detailed ITO strategy in terms of "a plan what IT to source, how and why currently and in the future" in the forefront of ITOs makes sense to carry out ITOs in a purposive way and thus to generate advantages for the outsourcing enterprise. But, surrounding conditions can change during an ITO project, which makes a long-term sourcing plan not always possible. For example, objectives bonded originally with the ITO changed. However, this was not a reason to discontinue running ITO projects in the past, the fulfilment of the ITO contract was still central. Hence, an ITO strategy can be valued as direction-giving but not mandatory for the continuity of an ITO in case of changes.				
Strategy Dependency between: • Strategy • Contract • Co-Work	ITO objectives	**Define realistic and detailed ITO objectives and avoid the conflict of objectives, but be aware that changing surrounding conditions can prevent the implementation of the strategy**	**Environmental stability**	The definition of realistic, clear and detailed objectives linked with the ITO (in or beyond the ITO contract) and the avoidance of aim conflicts is partly relevant for success. Basically, only if the objectives are known on the client and vendor side can both parties try to achieve the settled aims and support the achievement of the business objectives of the outsourcing company (see success factor "business-IT-alignment"). Nevertheless, triggered by volatile surrounding conditions the objectives originally linked with the ITO can change. However, this was not a reason to discontinue running ITO projects in the past, the fulfilment of the ITO contract was still central. Though the definition of the ITO objectives is direction-giving, it is not mandatory for the continuity of the ITO in case of changes. The ITO objectives are to be defined in the preparation phase of the ITO process, are to be fixed in the contract if necessary (see success factor "contract: ITO objectives") and are to be communicated regularly (see success factor "communication").				

Outsourcing Process Phase: Preparation

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Vendor Selection	Realisation of scale effects	**Ensure the realisation of scale effects (strategically or economically)**	**Scale effects should be achieved with ITO**	An investigation of whether scale effects can be realised by the ITO and the execution of ITO just in this case was relevant, if the achievement of strategic or economic scale effects belonged to the ITO objectives linked with the ITO. Whether scale effects should and can be realised with the ITO must be checked in the forefront of the ITO, in the preparation and vendor selection phase.				■
Strategy	Business – IT – Alignment	**Align ITO objectives with business objectives, but be aware that changing surrounding conditions can prevent the implementation of the strategy.**	**Environmental stability**	• The support of the business objectives by the ITO objectives of the outsourcing company in the forefront of an ITO is a partly relevant success factor. The alignment of the ITO objectives with the business objectives is fundamentally necessary to guarantee the competitiveness of the outsourcing company in the future. Nevertheless, the business objectives can change because of volatile surrounding conditions. However, this was not a reason to discontinue running ITO projects in the past, the fulfilment of the ITO contract was still central, though the adjustment of the ITO objectives to business in the preparation phase of the ITO is direction-giving but not mandatory for the continuity of the ITO in case of changes. • The utilisation of ITO as an innovative source has its limitations and, hence, is partly necessary for the achievement of ITO success. Innovation by ITO is possible if the vendor disposes of know-how which does not exist on the client side or by more efficient processes. The use of standard software as an innovative source is limited. The application of standard software makes the functionality available to all users and complicates thereby the differentiation in the market. Innovations which should serve for differentiation are to be implemented - internally or externally - individually. Nevertheless, the combination of standard bank products in standard applications can allow the generation of innovative bank products.			■	
Strategy	Inhouse IT function: Interconnected functions	**Outsource highly interconnected IT functions**	**Technical complexity can be encapsulated on the vendor side**	• In the preparation phase of the ITO process the type of ITO (see Figure 2 and Table 1) must be decided, which also includes the choice of the IT subject (IT function) to be outsourced. • Very interconnected IT functions were only outsourced in cases where the complexity with respect to the interconnected IT functions could be encapsulated on the vendor side.			■	

Outsourcing Process Phase: Preparation

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Strategy	IT function	**Don`t outsource vendor management**		In the preparation phase of the ITO process the type of ITO (see Figure 2 and Table 1) must be decided, which also includes the choice of the IT subject (IT function) to be outsourced. The vendor management cannot be outsourced. The internal accomplishment of this IT function is mandatory for the achievement of success with ITO.			■	
Strategy	Joint projects	**Form joint projects with other ITO clients**	**Cost / benefit relation can be improved**	In the preparation phase of the ITO process the type of ITO (see Figure 2 and Table 1) must be decided, which also includes the choice whether the outsourcing is done independently or in co-work with other outsourcing companies. Joint projects with other ITO clients can generally influence the ITO costs positively. But, if the costs / benefit relation is also competitive with individual ITOs, joint projects were not seen as mandatory for ITO success by the investigated cases. The cost /benefit analysis of common projects must also consider necessary vote costs between the co-operating enterprises.			■	
Strategy	Contract duration	**Choose a contract duration long enough to achieve operational cost savings**	**Cost reduction objective**	In the preparation phase of the ITO process the type of ITO (see Figure 2 and Table 1) must be decided, which also includes the decision about the duration of the ITO contract. Previously discussed shorter contract terms of 3-5 years are partly relevant for success. Investigated ITO cases had unlimited or longer contract durations. No specified contract duration emerged as vital, but a contract term long enough to be able to boost desired cost effects. According to experience, a period of 5-10 years is necessary to compensate for the high transition costs of ITO.			■	
Dependency between: • Environment • Contract • Relationship		**Outsource only to a strategic partner (Relationship) with a flexible, long-term ITO contract (Contract).**	**Environmental dynamism (Environment)**	Generally, a stable internal and external business environment supports the ability to define contractually stable IT requirements for the lifetime of the ITO contract. An ITO in unstable environments (success factor category “environment”) only in connection with a flexible, long-term contract (success factor category “contract”) and to a strategic partner (success factor category “relationship”) has been confirmed. The existence of the trigger for the dependency, an unstable environment, must be checked at the beginning of an ITO. If an unstable environment is given, the contract creation as well as the choice of the kind of partnership is influenced. For this reason, the temporal relevance of the success factor dependency is ascertained to the three ITO process phases: preparation, selection and contract.	■			■

Outsourcing Process Phase: Preparation

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Dependency between: • Strategy • Contract • Relationship		**Outsource only to a strategic partner (Relationship) with a detailed contract (Contract)**	**Core or strategic IT functions (Strategy)**	The ITO of core functions or strategic functions (see success factor category "strategy") only in connection with a detailed ITO contract (see relevant contract contents in success factor category "contract") and to a strategic partner (see success factor category "relationship") has been confirmed. The decision about the IT function to be outsourced is taken in the preparation phase of the ITO process. If a core function or strategic function is outsourced, the contract creation as well as the choice of the kind of partnership is influenced. For this reason the temporal relevance of the success factor dependency is ascertained to the three ITO process phases: preparation, selection and contract.			■	■
Strategy	Renegotiation and restructuring of ITO contract / Vendor switching	• **Ensure that the existing contract is renegotiated and restructured early before implementing another solution (vendor switching / backsourcing)** • **Ensure the possibility of switching to another vendor**		The possibility of giving notice to the vendor during the external execution of the outsourced IT function and the ability to further outsource the IT function to another vendor is mandatory for ITO success. On the one hand, this avoids a dependency situation from the vendor. On the other hand, this gives an incentive to the vendor to produce the outsourced IT function continuously in a high quality in order to ensure keeping the order in the long run. The ITO strategy has to contain the renegotiation and restructuring of existing contracts before switching the vendor or backsourcing, as the change to a new vendor involves high switching costs.			■	
Strategy	Backsourcing	**Ensure the ability to backsource**	**ITO strategy allows still an internal IT production**	The possibility to give notice to the vendor during the external execution of the outsourced IT function and subsequently the ability to backsource the IT function helps to avoid a dependency situation with the vendor and gives an incentive to the vendor for a high-quality production of IT goods and services. But in some investigated cases the ability to backsource was not seen as relevant, as the internal production of IT goods and services for the respective IT function was not any longer part of the IT strategy of the outsourcing company.			■	
Strategy	IT Architecture	**Ensure a flexible and state of the art IT application landscape at the client side**	**Backsourcing is a strategic option**	If an outsourcing enterprise likes to keep open the possibility to backsource during or at the end of the contract term, the application landscape on the client side must allow this (data model, processes, etc.). These aspects contain IT technical settings in the forefront of the ITO (preparation phase) to enable necessary changes in the future.			■	

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Preparation 								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Business knowledge	• **Ensure the existence of business knowledge about the business supported by the outsourced IT** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• Knowledge about the banking business supported by the IT function to be outsourced is a core competence of the outsourcing bank and, hence, must basically exist there. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge of the ITO dispose of the business knowledge. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases of selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.				
Client Capability	IT knowledge outsourced IT function	**Ensure the existence of IT knowledge about the outsourced IT function**	**Market comparison not possible**	Generally, the client should have mature management capacity with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings were done. If no market exists, the success factor is relevant. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge of the ITO dispose, if necessary, of this IT knowledge.				

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Preparation 								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Client Capability	IT capability	**Ensure the internal capability to implement individual IT demands not covered by standard applications of vendors**	**External ITO or Joint-Venture or Internal ITO with minor influencing possibility towards the vendor and partly ITO and no innovative market strategy**	• Generally, the full conversion of necessary IT demands by the vendor should be pursued. The internal implementation of individual demands not covered by standard applications of vendors is partly necessary and depends on the market development strategy and on the kind and extent of the ITO. • If a bank wanted to operate innovatively in the market, the application of standard software was generally seen as not recommended, because the introduction of new products in a standard system depends often on the acceptance of the change by a bigger user group. And in case of implementation, these changes are normally available to all users. Hence, a differentiation in the market is not possible thereby. With an innovative market strategy, the individual implementation of new products is necessary. This can be done internally as well as externally. The definition of the market development strategy as a basis for the choice of a standard or individual system is to be done in the forefront of an ITO. • The success factor was relevant in case of partly ITOs with the organisational forms "external ITO", "joint venture" or "internal ITO with minor possibility of influencing the vendor". Generally, if only parts of the IT are outsourced, the integration of the outsourced IT function in the application landscape of the outsourcing company is to be carried out in the transition phase, for which capacity and skill must be held available at the beginning of the ITO. In one partly ITO case the outsourcing company is a companion of the vendor (joint venture). In this case a capacity balance in terms of allocation of employees of the outsourcing company on the vendor side was agreed between the partners. This requires also the securing of IT capacity and skill on the client side. In case of a partly internal ITO, normally enough influencing possibility exists on the vendor to make the external implementation of individual demands by the internal vendor possible. But, in one partly internal ITO case the influencing possibility on the internal vendor was limited, which made the success factor relevant again. • In case of a full ITO the IT capacity does not anymore exist for internal solutions which makes the success factor not relevant in this case. Within the scope of the preparation phase of the ITO it is to ensure that the outsourcing company disposes if necessary of this IT capability.				
Client Capability	ITO knowledge	**Ensure the existence of ITO knowledge**		The client must have mature management capacity with experience and expertise about ITO to ensure a successful planning and execution of ITO. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge of the ITO dispose of this ITO knowledge.				

Outsourcing Process Phase: Preparation

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Interpersonal skills	• **Ensure the existence of interpersonal skills** • **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence a good relationship building (Relationship).**		• The employees of the client concerned with ITO must have interpersonal skills to support the interaction with the vendor and to positively influence a common understanding, knowledge sharing and the establishment of inter-organisational relationships. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge of the ITO dispose of these interpersonal skills. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills).	■	■	■	■
Client Capability	Organisational learning capability	**Ensure the existence of organisational learning capability**		The capability of the client to learn or acquire the needed knowledge from the vendor is mandatory during the transition and execution phase of the ITO process for an effective knowledge sharing which positively influences ITO success. Within the scope of the preparation phase of the ITO it is to ensure that the employees in charge of the ITO dispose of this organisational learning capability.		■	■	
Client Capability	Flexibility: business changes	**Ensure the capability to cope flexibly with business changes**		The client must have the capability to cope with changes of business requirements during the execution phase of the ITO process for the benefit of a permanent and adequate business support by the outsourced IT function. Within the scope of the preparation phase of the ITO it is to ensure that the outsourcing company disposes of this functional flexibility.		■	■	
Client Capability	Flexibility: technology changes	**Ensure the capability to cope flexibly with technology changes**	• **Technology adaptations affect the client** • **Technological governance is done by the client**	The capability to cope with changes of technology requirements during the execution phase of the ITO process emerged as relevant if technology adaptations affected the client (e.g. interconnections of the outsourced IT function into the application landscape of the outsourcing company) or if the technological governance was done by the client (e.g. internal ITO with technological governance by the outsourcing company). Within the scope of the preparation phase of the ITO it is to ensure that the outsourcing company disposes of this technical flexibility.			■	

Outsourcing Process Phase: Preparation

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Client Capability	Problem management	**Ensure the capability to solve operational problems rapidly in a multi vendor environment**		When using a sourcing network, and consequently with availability of several disturbance sources, a quick problem solution on the client side is compulsory in the transition and execution phase of the ITO process regardless of how it is organised. In the preparation phase of the ITO it is to ensure that this rapid problem-solving ability exists.				
Stakeholder Management Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Stakeholder involvement: Staff affected by ITO	**Inform directly affected employees before execution of the ITO openly and honestly about upcoming decision points, schedules, the influence on their job and possible options**		• The employees directly affected by the ITO (employees to be outsourced as well as employees remaining in-house and becoming responsible for the control of the ITO) are to be informed openly and honestly before conversion of the ITO. In particular, a realistic plan of the ITO, the upcoming decisions, the time schedule and the effects on their work are to be communicated. Hence, reliable data must already be given at that time. This requires that vendor evaluations, testing and business case calculations should be done confidentially beforehand. The success factor is therefore relevant from the beginning of the ITO till shortly before completion of the ITO contract. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills).				
Stakeholder Management	Stakeholder involvement: Functional departments	**Involve relevant functional departments in the forefront of the ITO**		In the early stages of the ITO (preparation – contracting phase), also the inclusion of relevant business divisions (e.g. human resources, legal department, etc.) is to be ensured to consider all relevant aspects and to support a smooth processing of the decision for or against ITO.				
Stakeholder Management	Stakeholder involvement: Technical client staff	**Retain technically competent staff able to control the vendor on a day-to-day basis**	**Market comparison not possible**	The retention of technically competent staff and their involvement in the ITO project is partly relevant for success. IT knowledge about the outsourced IT function is in general necessary to be able to judge the cost / benefit ratio of the IT function sourced externally and thus to exert control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings are done. If no market exists, the success factor is relevant. If necessary, the availability of technical know how is to be guaranteed at the beginning of the ITO and technically competent staff are to be retained.				

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Preparation 								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Stakeholder Management	Stakeholder involvement: IT user	**Consider the IT users' requirements for satisfaction**	• **Existing user interface and sourcing of no standard functionality** • **Existing user interface and sourcing of core/strategic IT function**	The consideration of the user requirements in the forefront of an ITO and regularly during the external execution is generally recommended to ensure the support of this stakeholder group for ITO. But this was not confirmed in any investigated ITO case without limitations. In one application outsourcing case no user interface existed, which made the success factor not relevant. In another case a standard application was sourced externally. Thereby not all wishes on functional side could be considered. However, cost savings could be achieved by means of scale effects through standardisation. In other cases, the implementation of the desired user requirements emerged as dependent on the strategic significance of the outsourced application, e.g. with distribution relevance of an application or in case of user requirements related to legal demands, user requirements became a high priority.				
Vendor Selection	Leverage in-house capabilities	**Fully leverage in-house capabilities before ITO**	**ITO strategy still allows for an internal IT production**	• An investigation in the forefront of the ITO, whether the vendor`s conditions can also be achieved internally, and the execution of an ITO just in case the external market offers advantages, is partly relevant for ITO success. If strategic reasons stand in the foreground of the ITO, the success factor cannot be relevant. The internal production of IT goods and service, for example, was not any longer part of the IT strategy of investigated ITO cases. In such a case it also occurred that, indeed, a make or buy investigation was done, but thereby just the topical state of internal efficiency and not its potentials was considered. The investigation whether the vendor conditions can be achieved internally occurs, if necessary, in the forefront of the ITO, in the preparation and vendor selection phase. Then the investigation should be done by taking into account the service requirements, internal IT costs and ITO costs. • Optimisation measures can be implemented also by the vendor within the scope of a transformation phase. If this is used, it is advisable to anchor a reduction of the baseline (topical IT costs) by contract (see success factor "improvement targets concerning costs and service levels"). For this transformation one-off costs occur for the outsourcing enterprise, but thereby the operation costs can be reduced with lasting effect.				

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Preparation 								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Control Dependency between: • Environment • Contract • Control	Risk assessment and risk management	**Carry out an identification and management of ITO risks, depending on the given risk potential**		The documented identification and the management of ITO risks are compulsory for European banks regarding legal regulations. Before the actual ITO, this is necessary for the benefit of a sound motivation of the ITO, to recognise risks early and to to put in place measures for the benefit of risk reduction from the start. The extent of the risk management is to be chosen depending on the risk content of the ITO.			

Outsourcing Process Phase: Selection

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Stakeholder Management	Roles and responsibilities: Project manager	**Leverage the ITO project leader**		The project manager steers the project from their nomination and responsibility transference in the preparation phase of the ITO up to the end of the transition to the vendor.				
Stakeholder Management	Stakeholder involvement: High level management	**Ensure the commitment of the high level management on business and IT side**		The commitment of the high-level management on business and IT side is necessary from the start of the ITO project till the contracting phase to receive a positive decision for the ITO and with it the approval for the completion of the contract and the basic conditions agreed in it as well as to guarantee the necessary technical know how.				
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Business knowledge	• **Ensure the application of business knowledge about the business supported by the outsourced IT** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• Knowledge about the banking business supported by the IT function to be outsourced is a core competence of the outsourcing bank and, hence, must basically exist there. During the course of the ITO project the business knowledge is to be applied to the advantage of the ITO. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. Where cultural differences exist the elements of trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases of selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.				
Client Capability	IT knowledge outsourced IT function	**Ensure the application of IT knowledge about the outsourced IT function**	**Market comparison not possible**	Generally, the client should have mature management capacity with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings are done. If no market exists, the success factor is relevant. During the course of the ITO project the IT knowledge is to be applied, if necessary, to the advantage of the ITO.				

Outsourcing Process Phase: Selection

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Client Capability	IT capability	**Ensure the application of internal capability to implement individual IT demands not covered by standard applications of vendors**	**External ITO or Joint-Venture or Internal ITO with minor possibility of influencing the vendor and partly ITO and no innovative market strategy**	• Generally, the full conversion of necessary IT demands by the vendor should be pursued. The internal implementation of individual demands not covered by standard applications of vendors is partly necessary and depends on the market development strategy and on the kind and extent of the ITO. • If a bank wants to operate innovatively in the market, the application of standard software was generally seen as not recommended, because the introduction of new products in a standard system depends often on the acceptance of the change by a bigger user group. And in case of implementation, these changes are normally available to all users. Hence, a differentiation in the market is not possible thereby. With an innovative market strategy, the individual implementation of new products is necessary. This can be done internally as well as externally. The definition of the market development strategy as a basis for the choice of a standard or individual system is to be done in the forefront of an ITO. • The success factor was relevant in case of partly ITOs with the organisational forms "external ITO", "joint venture" or "internal ITO with minor influencing possibility at the vendor". Generally, if only parts of the IT are outsourced, the integration of the outsourced IT function in the application landscape of the outsourcing company is to be carried out in the transition phase, for which capacity and skill must be held available at the beginning of the ITO. In one partly ITO case, the outsourcing company is a companion of the vendor (joint venture). In this case a capacity balance in terms of allocation of employees of the outsourcing company on the vendor side was agreed between the partners. This requires also the securing of IT capacity and skill on the client side. In case of a partly internal ITO, normally enough possibility of influencing the vendor exists to make the external implementation of individual demands by the internal vendor possible. But, in one investigated, partly internal ITO case the influencing possibility was limited, which made the success factor relevant again. • In case of a full ITO the IT capacity no longer exists for internal solutions, which makes the success factor not relevant in this case. During the course of the ITO the internal implementation of individual IT demands not covered by standard applications of vendors is to be carried out, if necessary.			■	
Client Capability	ITO knowledge	**Ensure the application of ITO knowledge**		A mature management capacity with experience and expertise about ITO is to be applied during the course of the ITO to ensure a successful execution of ITO.			■	

Outsourcing Process Phase: Selection

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Interpersonal skills	• **Ensure the application of interpersonal skills** • **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence good relationship building (Relationship).**		• The employees of the client concerned with ITO must apply interpersonal skills to support the interaction with the vendor from the selection phase till the external execution and to positively influence a common understanding, knowledge sharing and the establishment of inter-organisational relationships. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills).	■	■	■	■
Environment	Vendor market	**Ensure that an adequate number of vendors able to perform the IT function to be outsourced exists on the market**	**Market comparison possible**	Generally, the possibility of changing the vendor in case of dissatisfaction with vendor performance should exist to avoid over-reliance on one vendor. This requires the existence of other vendors in the market able to perform the outsourced IT function. After contract conclusion this success factor cannot be influenced by the ITO project, which is why it is to be ensured in the vendor selection phase. But, sometimes a vendor market does not exist. For example, in the case of a joint venture, a monopoly was consciously founded.	■			
Stakeholder Management	Stakeholder involvement: Instruction of client staff	**Ensure an adequate instruction of the client staff how to conduct the make or buy evaluation**	**Internal production of IT goods and services is a strategic option**	By accomplishment of a make or buy analysis an adequate instruction of the employees in charge is relevant for ITO success in the vendor selection phase. In particular, detailed instructions should be given to avoid a simple vote against ITO. For example, the evaluation has to be done in separate elements even till down the employee level and recommendations should be given based on the evaluation of risks and advantages. The inclusion of external advisers in the make or buy analysis makes sense to guarantee the neutrality of the investigation. In most of the investigated ITO cases a make or buy evaluation was not carried out as the internal production of IT goods and services was not part of the ITO strategy anymore.				■
Stakeholder Management	Stakeholder involvement: Technical client staff	**Involve technically competent staff able to control the vendor on a day-to-day basis**	**Market comparison not possible**	Generally, the client should have technically competent staff with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings are done. If no market exists, the success factor is relevant. If necessary, the existence of IT knowledge on the client side is to be ensured in the preparation phase (see success factor IT knowledge) and technically competent staff members are to be involved from the vendor selection phase till the end of the ITO project.				■

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Selection Preparation > Selection > Contract > Transition > Execution > Post-deal								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Vendor Selection Dependency between: • Vendor selection • Contract • Control	Requirements specification	• **Develop a detailed service requirements specification and related cost and development goals** • **Take the investigated (Vendor Selection) contractual agreed SLAs, measures and reports as well as development goals (Contract) as basis for the regular vendor monitoring and control (Control).**		• A detailed requirements specification during the vendor selection phase is a mandatory success factor to secure that the chosen vendor is able to perform the required IT function in line with the market. The description of the service requirements in the request for proposal should already show a high level of detail. • The service level requirements, measures and reports if necessary investigated in the vendor selection phase (see success factor category "vendor selection") and contractually agreed in the contracting phase (see success factor category "contract") are the basis for the regular vendor control (see success factor category "control") during the transition and execution phase of the ITO project.				
Stakeholder Management	Stakeholder involvement: IT user	**Consider the IT users requirements for satisfaction**	• **Existing user interface and sourcing of no standard functionality** • **Existing user interface and sourcing of core/strategic IT function**	The consideration of the user requirements in the forefront of an ITO and regularly during the external execution is generally recommended to ensure the support of this stakeholder group for ITO. But this was not confirmed in any investigated ITO case without limitations. In one application outsourcing case no user interface existed, which made the success factor not relevant. In another case, a standard application was sourced externally. Thereby not all wishes on functional side could be considered. However, cost savings could be achieved by means of scale effects through standardisation. In other cases, the implementation of the desired user requirements emerged as dependent on the strategic significance of the outsourced application, e.g. with distribution relevance of an application or in case of user requirements related to legal demands, user requirements became a high priority.				
Vendor Selection	Tendering process	• **Execute a rigorous tendering process** • **Invite internal bids beside external bids**	• **Vendor market** • **Internal production of IT goods and services is a strategic option**	• The accomplishment of a tendering in the vendor selection phase is generally recommended if a market comparison is possible. This ensures a price / performance ratio of the ITO contract in line with the market and strengthens the competitiveness of the outsourcing enterprise. • If a tendering process is conducted, it should be accomplished by invitation of external and internal bids. But, the invitation of internal bids cannot be relevant if the internal production of IT goods and services is not any longer part of the IT strategy.				

Outsourcing Process Phase: Selection

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Co-Work Dependency between: • Strategy • Contract • Co-Work Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Communication	• **Communicate clearly and effectively** • **Communicate ITO objectives (Strategy) clearly and effectively (Co-Work).** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• A clear and effective communication between client and vendor on a regular basis is compulsory for the achievement of success with ITO from the vendor selection phase up to the execution phase in order to generate a common understanding about ITO objectives, performance expectations, governance structures, etc. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases of selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.	■	■	■	■
Environment	Corporate terms	**Define common terms**		The use of uniform terms within the communication between client and vendor generates a mutual understanding about communication contents. Uniform terms can be agreed by a terminology or a service catalogue. The common terms are to be defined in the early stages of the interaction, before completion of the ITO contract (ITO process phases: selection and contract).	■	■		
Environment	Corporate culture	**Ensure a shared culture or determine cultural differences between you and the vendor**		Culture influences the behaviour and the communication of client and vendor and thus has an influence on the cooperation, though in the vendor selection phase the cultural background of the vendor is to be determined. Existing cultural differences must be managed during the cooperation (see success factor corporate culture in the ITO process phases contract, transition and execution).	■	■		
Vendor Selection	Operational information gathering	**Ensure sufficient operational information gathering by vendors**	**Market comparison is possible**	The collection of sufficient operational information by vendors in the vendor selection phase is generally a success factor to ensure a realistic vendor bid. This ensures the capability of the vendor to perform the required IT function in line with the market and strengthens the competitiveness of the outsourcing enterprise.				■

Outsourcing Process Phase: Selection

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Vendor Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Business knowledge	• **Ensure the existence of business knowledge about the client´s industry at the vendor side** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• Business knowledge of the vendor about the branch of the client is mandatory to achieve ITO success. The outsourcing company has to secure in the vendor selection phase that the vendor disposes of this business knowledge about the client`s industry. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases of selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.	■	■		■
Vendor Capability	IT knowledge outsourced IT function	**Ensure the existence of IT knowledge about the outsourced IT function on the vendor side**		Specialist knowledge of the vendor about the outsourced IT function and the underlying technology belongs to the core competence of the vendor and is mandatory for the success with ITO. The outsourcing company has to secure in the vendor selection phase that the vendor disposes of this IT knowledge.	■			
Vendor Capability	ITO knowledge	**Ensure the existence of ITO knowledge on the vendor side**		Knowledge and experience about ITO on the vendor side is compulsory to ensure ITO success. The outsourcing company has to secure in the vendor selection phase that the vendor disposes of this ITO knowledge.	■			
Vendor Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Interpersonal skills	• **Ensure the existence of interpersonal skills on the vendor side** • **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence good relationship building (Relationship).**		• Social competence of the vendor, in particular the ability to communicate with the client and to build up relations with the client, is mandatory for the achievement of success with ITO. The outsourcing company has to secure in the vendor selection phase that the vendor disposes of these interpersonal skills. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills).	■	■	■	■

Outsourcing Process Phase: Selection

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Vendor Capability	Organisational learning capability	**Ensure the existence of organisational learning capability on the vendor side**		The capability of the vendor to learn or acquire the needed knowledge from the client is mandatory for an effective knowledge sharing which positively influences ITO success. The outsourcing company has to secure in the vendor selection phase that the vendor disposes of this organisational learning capability.				
Vendor Capability	Staff management	**Ensure the capability of professional staff management on the vendor side in terms of staff quality, capacity, working conditions and allocation**		Professional personnel management by the vendor from takeover of the IT function is mandatory for a successful external execution of the outsourced IT function. In particular, a high staff quality, sufficient staff capacity, good working conditions and a good management of staff allocation needs to be ensured in the vendor selection phase.				
Vendor Capability	Staff management	**Ensure a low staff turnover on the vendor side**	• **The client serves not as source of competence for the vendor** • **Know how necessary for the external execution of the outsourced IT function is not available in the market**	A low staff turnover as another aspect within the vendor's personnel management emerged as a specific success factor. By choice of the organisational form of a joint venture employee fluctuation on the vendor side was seen as less critical. In this case it was contractually agreed that the client was obliged to pass over client employees to the vendor if needed. Besides this, the importance of a low employee's fluctuation on the vendor side depends on the degree of specificity of the required specialist knowledge and consequently how simply it can be covered by the market. The outsourcing company has to secure in the vendor selection phase that the vendor has a low employee fluctuation, if necessary. The arrangement of a maximum fluctuation rate in % and the notable naming of key players in the contract is recommended (see success factor "Contract: fluctuation rate / key players").				
Vendor Capability	Flexibility: business and technology changes	**Ensure the existence of flexibility on the vendor side regarding the implementation of changing client and IT needs**		The implementation of changing business and IT requirements by the vendor during the external execution of the outsourced IT function is mandatory for a successful ITO. The outsourcing company has to secure in the vendor selection phase that the vendor disposes of this functional and technical flexibility.				
Vendor Capability	Reliable, professional job completion	**Ensure the capability of reliable, professional job completion on the vendor side**		Reliable and professional principles of value performance on the vendor side are mandatory for the achievement of success with ITO. The outsourcing company has to secure in the vendor selection phase that the vendor disposes of this capability.				
Vendor Capability	Financial stability / Cost and financial management	**Ensure financial stability of the vendor and the capability of a professional cost and financial management**		Financial stability and a professional financial management of the vendor are necessary for the success of ITO to avoid negative effects on the external production of IT goods and services. The outsourcing company has to secure in the vendor selection phase that the vendor disposes of financial stability and a professional financial management.				

Outsourcing Process Phase: Selection

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Vendor Capability	Minimum customer involvement	**Ensure the capability of the vendor to accomplish external execution with minimum customer involvement**	**Cultural similarities and the client serves not as source of competence for the vendor**	A minimum customer participation in the external production of IT goods and services by the vendor is partly relevant for success. With big cultural differences between client and vendor the opposite, a maximum customer involvement, emerged as mandatory. Cultural differences required an on site management (managers of the vendor were expatriates of the outsourcing bank) and strict controls in one case. In another case with the organisational form of a joint venture intensive customer participation is even welcome. The joint-venture is led by the companions together and the companions own the business and decision competence for the outsourced rating modules. If necessary, the outsourcing company has to secure in the vendor selection phase that the vendor disposes of this capability.				
Vendor Capability	Attraction of customers	**Ensure the capability of the vendor to attract customers**	**Cost/benefit relation does not fit and vendor serves a group of customers beyond the bank group**	The capability of the vendor to win new customers during the term of the ITO is partly relevant for success. If the cost / benefit relation of the ITO fits, no need exists for acquiring new customers from the point of view of several ITO clients of investigated cases. In other cases the vendor operated mainly for banks within a bank group, which made the success factor not relevant. The outsourcing company has to secure in the vendor selection phase that the vendor disposes, if necessary, of the capability to attract new customers.				
Vendor Capability	IT Architecture	**Ensure a flexible and state of the art IT application landscape on the vendor side**		A flexible application landscape on the vendor side which is on the topical state of technology (modularisation, service orientation => SOA - service oriented architecture) is a precondition in particular for application outsourcing to secure a sustainable external solution. These aspects contain IT technical settings on the vendor side to enable necessary changes in the future.				
Environment	Regulatory compliance	**Ensure the capability of the vendor to implement legal business requirements**		The fulfilment of legal requirements for outsourced systems is compulsory for success during the whole ITO process to maintain the legal capacity of the outsourcing enterprise. Hence, the ability of the vendor to implement these business requirements is to be guaranteed in the vendor selection phase.				
Vendor Selection	Evaluation of bids	**Evaluate bids thoroughly**	**Vendor market**	The accomplishment of a tendering and a thorough evaluation of the bids in the vendor selection phase is generally recommended if a market comparison is possible. This ensures a price / performance ratio of the ITO contract in line with the market and strengthens the competitiveness of the outsourcing enterprise.				

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Selection Preparation > Selection > Contract > Transition > Execution > Post-deal								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Vendor Selection	In-house capabilities	**Fully leverage in-house capabilities before ITO**	**ITO strategy allows still an internal IT production**	• An investigation in the forefront of the ITO, whether the vendor`s conditions can also be achieved internally, and the execution of an ITO just in case the external market offers advantages, is partly relevant for ITO success. If strategic reasons stand in the foreground of the ITO, the success factor cannot be relevant. The internal production of IT goods and service, for example, was not any longer part of the IT strategy of investigated ITO cases. In such a case it also occurred that, indeed, a make or buy investigation was done, but thereby just the topical state of internal efficiency and not its potentials was considered. The investigation of whether the vendor conditions can be achieved internally occurs if necessary in the forefront of the ITO, in the preparation and vendor selection phase. Then the investigation should be done by taking into account the service requirements, internal IT costs and ITO costs. • Optimisation measures can be implemented also by the vendor within the scope of a transformation phase. If this is used, it is advisable to anchor a reduction of the baseline (topical IT costs) by contract (see success factor "improvement targets concerning costs and service levels"). For this transformation one-off cost occur for the outsourcing enterprise, but thereby the operation costs can be reduced with lasting effect.				
Vendor selection	Vendor profit	**Ensure a reasonable vendor profit**	• **External ITO** • **Joint-Venture**	The securing of a sufficient profit on the vendor side is basically important, because an outsourcing relationship will only exist on a continuing basis if both sides achieve an advantage with it. Too low margins should be avoided, because this often brings the vendor to introduce less qualified staff, which can result in service deterioration. In case of a joint venture, even the client benefits from the profit of the service society. However, in the case of internal ITOs the success factor is not relevant, because no profit achievement intention exists.				
Vendor Selection	Realisation of scale effects	**Ensure the realisation of scale effects (strategically or economically)**	**Scale effects should be achieved with ITO**	An investigation if scale effects can be realised by the ITO and the execution of ITO just in this case was relevant, if the achievement of strategic or economic scale effects belonged to the ITO objectives linked with the ITO. Whether scale effect should and can be realised with the ITO must be checked in the forefront of the ITO, in the preparation and vendor selection phase.				

Outsourcing Process Phase: Selection

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Dependency between: • Environment • Contract • Relationship		**Outsource only to a strategic partner (Relationship) with a flexible, long-term ITO contract (Contract).**	**Environmental dynamism (Environment)**	A stable internal and external business environment supports the ability to define contractually stable IT requirements for the lifetime of the ITO contract. An ITO in unstable environments (success factor category "environment") only in connection with a flexible, long-term contract (success factor category "contract") and to a strategic partner (success factor category "relationship") has been confirmed. The existence of the trigger for the dependency, an unstable environment, must be checked at the beginning of an ITO. If an unstable environment is given, the contract creation as well as the choice of the kind of partnership is influenced. For this reason, the temporal relevance of the success factor dependency is ascertained to the three ITO process phases: preparation, selection and contract.	■			■
Dependency between: • Strategy • Contract • Relationship		**Outsource only to a strategic partner (Relationship) with a detailed contract (Contract)**	**Core or strategic IT functions (Strategy)**	The ITO of core functions or strategic functions (see success factor category "strategy") only in connection with a detailed ITO contract (see relevant contract contents in success factor category "contract") and to a strategic partner (see success factor category "relationship") has been confirmed. The decision about the IT function to be outsourced is done in the preparation phase of the ITO process. If a core function or strategic function is outsourced, the contract creation as well as the choice of the kind of partnership is influenced. For this reason the temporal relevance of the success factor dependency is ascertained to the three ITO process phases: preparation, selection and contract.			■	■
Stakeholder Management Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Stakeholder involvement: Staff affected by ITO	**Inform directly affected employees before execution of the ITO openly and honestly about upcoming decision points, schedules, the influence on their job and possible options**		• The employees directly affected by the ITO (employees to be outsourced as well as employees remaining in-house and becoming responsible for the control of the ITO) are to be informed openly and honestly before conversion of the ITO. In particular, a realistic plan of the ITO, the upcoming decisions, the time schedule and the effects on their work are to be communicated. Hence, reliable data must already be given at that time. This requires that vendor evaluations, testing and business case calculations should be done confidentially beforehand. The success factor is therefore relevant from the beginning of the ITO till shortly before completion of the ITO contract. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills).				■
Stakeholder Management	Stakeholder involvement: Functional departments	**Involve relevant functional departments in the forefront of the ITO**		In the early stages of the ITO (preparation – contracting phase), also the inclusion of relevant business divisions (e.g. human resources, legal department, etc.) is to be ensured to consider all relevant aspects and to support a smooth processing of the decision for or against ITO.				■

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Selection 								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Stakeholder Management	Stakeholder involvement: Long-term client employees	**Ensure long-term client employees join the vendor**	**Know how necessary for the external execution of the outsourced IT function is not available in the market**	The switch of long-term employees of the outsourcing enterprise to the vendor by negotiations of secure jobs and good terms of employment is partly relevant for success. If know how necessary for the external execution of the outsourced IT function is not available in the market (ITO of individually developed applications without good system documentation, or ITO of standard applications with resource bottlenecks in the market) the outsourcing of long-standing client employees helps to guarantee a good start of the external execution. In case of outsourcing of standard applications a personnel transfer is not necessary, as a rule, because in the market resources with suitable know how are available. A personnel transfer on the vendor is often necessary to realise the business case of the ITO. A necessary personnel transfer has to be secured in the ITO process phases selection, contract and transition.				
Stakeholder Management	Roles and responsibilities: Account manager	**Ensure that an account manager is installed on the vendor side**		A notably agreed account manager on the vendor side and the specification of the accompanying responsibilities is a compulsory success factor as he or she facilitates a communication channel which positively influences a common understanding and which prevents vendor opportunism and negative consequences of legal loopholes. In the vendor selection phase the vendors account manager is nominated.				
Stakeholder Management	Roles and responsibilities: Service manager	**Ensure that a service manager is installed on the vendor side**		The service manager on the vendor side is the counterpart to the service level manager on the client side. The service manager has to make sure that the daily operation of the outsourced IT application runs smoothly from takeover in the transition phase.				
Stakeholder Management	Roles and responsibilities: Relationship manager	**Install active relationship managers at the client and vendor side**		One or several active relationship managers on client and vendor side with adequate interpersonal skills are mandatory as they support a successful co-work and the resolution of disputes. In the vendor selection phase the people responsible for the relationship management are fixed and the competence is transferred.				
Stakeholder Management	NEW: Roles and responsibilities: Service level manager	**Install a service level manager**		The agreement of service levels, measures and reports was valued as mandatory for achievement of ITO success. Hence, the operational role which fills this job with life is also compulsory. In the vendor selection phase the service level manager is nominated and the competences are transferred. Subsequently, the service level manager supports the definition of the service requirements.				
Stakeholder Management	NEW: Roles and responsibilities: Mediator	**Ensure that the vendor takes a mediation role between you and 2 tier vendors**	**Internal ITO to a vendor using a sourcing network**	By founding of an IT spin-off (1 tier vendor) by the client which uses a sourcing network (2 tier vendors) for the performance of IT goods and services, mediation between the client and the 2 tier vendors by the IT spin-off is success-influencing during the time of cooperation. In the selection / contract phase the mediator on the side of the IT spin-off is to be nominated and the responsibility is to be transferred.				

Outsourcing Process Phase: Selection

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Relationship Management Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Relationship building and management	• **Build and manage a relationship to the vendor with the intensity dependent from the degree of partnership.** • **Ensure trust building with the vendor, a good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendor's commitment towards the ITO contract to positively influence a good partnership (Relationship).** • **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence a good relationship building (Relationship).** • **Ensure the right definition of the required service levels (Contract) allowing an early detection of critical vendor performance which helps to avoid escalation and negative consequences on the relationship (Relationship).**		• Relationship building and management between client and vendor during the duration of the cooperation (ITO process phases vendor selection - execution) is mandatory for ITO success. The more in partnership the cooperation is, the more intensely relationship management is to be pursued. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases of selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills). • Ensure the right definition of the required service levels (Contract) allowing an early detection of critical vendor performance during external execution which helps to avoid escalation and negative consequences on the relationship (Relationship).				
Control Dependency between: • Environment • Contract • Control	Risk assessment and risk management	**Carry out an identification and management of ITO risks, depending on the given risk potential**		The documented identification and the management of ITO risks are compulsory for European banks regarding legal regulations. Before the actual ITO, this is necessary for the benefit of a sound motivation of the ITO, to recognise risks early and to put in place measures for the benefit of risk reduction from the start. The extent of the risk management is to be chosen depending on the risk content of the ITO.				

Outsourcing Process Phase: Contract

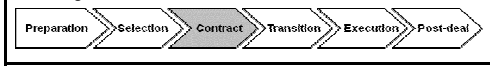
Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Stakeholder Management	Roles and responsibilities: Project manager	**Leverage the ITO project leader**		The project manager steers the project from his nomination and responsibility transference in the preparation phase of the ITO up to the end of the transition to the vendor.				■
Stakeholder Management	Stakeholder involvement: High level management	**Ensure the commitment of the high level management on business and IT side**		The commitment of the high-level management on the business and IT side is necessary from the start of the ITO project till the contracting phase to receive a positive decision for the ITO and with it the approval for the completion of the contract and the basic conditions agreed in it as well as to guarantee the necessary technical know how.				■
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Business knowledge	• **Ensure the application of business knowledge about the business supported by the outsourced IT** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• Knowledge about the banking business supported by the IT function to be outsourced is a core competence of the outsourcing bank and, hence, must basically exist there. During the course of the ITO project the business knowledge is to be applied to the advantage of the ITO. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases of selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.	■	■		■
Client Capability	IT knowledge outsourced IT function	**Ensure the application of IT knowledge about the outsourced IT function**	**Market comparison not possible**	Generally, the client should have mature management capacity with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings were done. If no market exists, the success factor is relevant. During the course of the ITO project the IT knowledge is to be applied, if necessary, to the advantage of the ITO.			■	

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Contract Preparation > Selection > **Contract** > Transition > Execution > Post-deal								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Client Capability	IT capability	**Ensure the application of internal capability to implement individual IT demands not covered by standard applications of vendors**	**External ITO or Joint-Venture or Internal ITO with minor influencing possibility with respect to the vendor and partly ITO and no innovative market strategy**	• Generally, the full conversion of necessary IT demands by the vendor should be pursued. The internal implementation of individual demands not covered by standard applications of vendors is partly necessary and depends on the market development strategy and on the kind and extent of the ITO. • If a bank wants to operate innovatively in the market, the application of standard software was generally seen as not recommended because the introduction of new products in a standard system depends often on the acceptance of the change by a bigger user group. And in case of implementation, these changes are normally available to all users. Hence, a differentiation in the market is not possible thereby. With an innovative market strategy, the individual implementation of new products is necessary. This can be done internally as well as externally. The definition of the market development strategy as a basis for the choice of a standard or individual system is to be done in the forefront of an ITO. • The success factor was relevant in case of partly ITOs with the organisational forms "external ITO", "joint venture" or "internal ITO with minor influencing possibility at the vendor". Generally, if only parts of the IT are outsourced, the integration of the outsourced IT function in the application landscape of the outsourcing company is to be carried out in the transition phase, for which capacity and skill must be held available at the beginning of the ITO. In one partly ITO case the outsourcing company is a companion of the vendor (joint venture). In this case a capacity balance in terms of allocation of employees of the outsourcing company on the vendor side was agreed between the partners. This requires also the securing of IT capacity and skill on the client side. In case of a partly internal ITO, normally enough influencing possibility exists on the vendor to make the external implementation of individual demands by the internal vendor possible. But, in one investigated partly internal ITO case the influencing possibility was limited, which made the success factor relevant again. • In case of a full ITO the IT capacity no longer exists for internal solutions which makes the success factor not relevant in this case. During the course of the ITO the internal implementation of individual IT demands not covered by standard applications of vendors is to be carried out, if necessary.				
Client Capability	ITO knowledge	**Ensure the application of ITO knowledge**		A mature management capacity with experience and expertise about ITO has to be applied during the course of the ITO to ensure a successful execution of ITO.				

Environment			
External	Internal Firm	Internal IT	Internal ITO Project

Outsourcing Process Phase: Contract

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Interpersonal skills	• **Ensure the application of interpersonal skills** • **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence good relationship building (Relationship).**		• The employees of the client concerned with ITO must apply interpersonal skills to support the interaction with the vendor from the selection phase till the external execution and to positively influence a common understanding, knowledge sharing and the establishment of inter-organisational relationships. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills).
Stakeholder Management	Stakeholder involvement: Technical client staff	**Involve technically competent staff able to control the vendor on a day-to-day basis**	**Market comparison not possible**	Generally, the client should have technically competent staff with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings were done. If no market exists, the success factor is relevant. If necessary, the existence of IT knowledge on the client side is to be ensured in the preparation phase (see success factor IT knowledge) and technically competent staff have to be involved from the vendor selection phase till the end of the ITO project.
Co-Work Dependency between: • Strategy • Contract • Co-Work Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Communication	• **Communicate clearly and effectively** • **Communicate ITO objectives (Strategy) clearly and effectively (Co-Work).** • **Ensure trust building with the vendor, a good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• A clear and effective communication between client and vendor on a regular basis is compulsory for the achievement of success with ITO from the vendor selection phase up to the execution phase in order to generate a common understanding about ITO objectives, performance expectations, governance structures, etc. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. Where cultural differences exist the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases of selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.



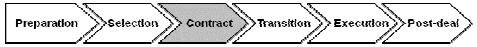
Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Environment	Corporate terms	**Define common terms**		The use of uniform terms within the communication between client and vendor generates a mutual understanding about communication contents. Uniform terms can be agreed by a terminology or a service catalogue. The common terms are to be defined in the early stages of the interaction, before completion of the ITO contract (ITO process phases: selection and contract).				
Environment	Corporate culture	**Proactively manage cultural differences**	• **Cultural differences and joint-venture** • **Cultural differences and nearshore delivery model** • **Cultural differences and onshore delivery model and effective communication is restricted**	• The country culture and enterprise culture influence the behaviour and the communication of client and vendor and thus have an influence on the cooperation. • In investigated cases with the organisational form of a joint venture and / or with a nearshore delivery model similar cultures and accordingly an active management of cultural differences (e.g. strict controls) was seen as mandatory for the achievement of ITO success. In case of the joint venture, enterprise decisions must be made by the companions together which can be positively influenced by a common enterprise culture or an active management of cultural differences. The cultural differences which were based on different land cultures (nearshore) were rated as the highest risk in ITO and as hardly controllable or even not controllable at all, which requires an active management of cultural differences. The meaning and extent of the management of cultural differences depend on the kind of the outsourced IT function. With a commodity IT function the need is lower, because the performance and the process of performance production are standardised. With less standardised IT functions problem solution requires a good communication and process know how to a higher extent for which a management of cultural differences has great importance. • On the other hand, in ITO cases with an onshore delivery model it was said that a good communication can overcome cultural differences (see also success factor "communication"). Hereby it has to be ensured that the language or dialect is comprehensible for the counterpart. In these cases, client and vendor had a culture of one and the same country, though similar behaviour patterns regarding communication can exist. • The success factor is relevant during the interaction between client and vendor (vendor selection - external execution). Existing cultural differences are to be managed during the client/vendor-interaction.				

Outsourcing Process Phase: Contract

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Contract	Individual contract	• **Accept the vendor's standard contract as far as possible** • **Do not accept the vendor's standard contract**	• **External ITO or internal ITO and scale effects as ITO objective** • **External ITO or internal ITO and the vendors´ standard contract does not fit your needs**	The refusal of the vendors standard contract and, instead, the negotiation of an individual contract is partly relevant for ITO success. With the organisational form of a joint venture the success factor was not seen as relevant, because the contract was developed by the companions together according to their needs. In case of an external or internal organisational form the outsourcing company should be aware that the contract meets the demand, no matter whether this is already considered in the standard contract or if it must be negotiated separately. In particular, if an outsourcing company pursues ITO to achieve scale effects, it was recommended to accept the vendors' standard contract as far as possible in investigated cases.				
Contract Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control		**Ensure the right level of detail in the ITO contract (Contract) to avoid negative consequences for the relationship between client and vendor (Relationship).**		Ensure the right level of detail in the ITO contract (Contract) to avoid discussions between client and vendor about the contract content and to allow an early detection of critical vendor performance for avoidance of escalation and negative consequences on the relationship between client and vendor (Relationship).				
Contract Dependency between: • Strategy • Contract • Co-Work	ITO objectives	**Include realistic and detailed ITO objectives (Strategy) in the ITO contract (Contract) but be aware that changing surrounding conditions can prevent the implementation of the strategy**	**Alternate agreement not existing**	• The definition of realistic, clear and detailed objectives linked with the ITO (in or beyond the ITO contract) and the avoidance of aim conflicts is generally recommended. Only if the objectives are known on the client and vendor side can both parties try to achieve the settled aims and support with it the achievement of the business objectives of the outsourcing company (see success factor "business-IT-alignment"). • The ITO objectives are to be defined in the preparation phase (see success factor category strategy, success factor ITO objectives), are to be fixed in the ITO contract (see success factor category "contract") if necessary and are to be communicated during the phases of client/vendor interaction (see success factor category co-work, success factor communication).				

Environment			
External	Internal Firm	Internal IT	Internal ITO Project

Outsourcing Process Phase: Contract



Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description
Contract Dependency between: • Vendor selection • Contract • Control Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Measurable service requirements, measures and reports	• **Include service requirements, measures and reports in the ITO contract.** • **Take the investigated (Vendor Selection) and contractual agreed SLAs, measures and reports as well as development goals (Contract) as basis for the regular vendor monitoring and control (Control).** • **Ensure the right definition of the required service levels (Contract) allowing an early detection of critical vendor performance which helps to avoid escalation and negative consequences for the relationship (Relationship).**		• A detailed specification of the requirements and the linked measures and report in the ITO contract is a mandatory success factor to secure that the chosen vendor is able to perform the required IT function in line with the market. Aspects regulated within service levels are for example, the ability of the vendor to respond quickly to problems on the client side, solution time, operating time, maintenance time, maximum number of returning tickets, etc. • The service level requirements, measures and reports investigated in the vendor selection phase (see success factor category "vendor selection") and contractually agreed in the contracting phase (see success factor category "contract") are the basis for regular vendor control (see success factor category "control") during the transition and execution phase of the ITO project. • Ensure a complete and clear ITO contract, in particular the right definition of the required service levels (Contract). This avoids ongoing discussions between client and vendor about contract contents and allows an early detection of critical vendor performance during external execution which both helps to avoid escalation and negative consequences for the relationship (Relationship).
Stakeholder Management	NEW: Roles and responsibilities: Service level manager	**Leverage the service level manager**		The agreement of service levels, measures and reports before or after contract conclusion (see success factors "Requirements specification" and "Measurable service requirements, measures and reports") was rated as success influencing. Hence, the operational role which fills this job with life is also compulsory. The service level manager supports with the definition of the service levels in the contracting phase.
Stakeholder Management	Stakeholder involvement: IT user	**Consider the IT users requirements for satisfaction**	• **Existing user interface and sourcing of no standard functionality** • **Existing user interface and sourcing of core/strategic IT function**	The consideration of the user requirements in the forefront of an ITO and regularly during the external execution is generally to be recommended to ensure the support of this stakeholder group for ITO. But this was not confirmed in any investigated ITO case without limitations. In one application outsourcing case no user interface existed, which made the success factor irrelevant. In another case a standard application was sourced externally. Thereby not all wishes on the functional side could be considered. However, cost savings could be achieved by means of scale effects through standardisation. In other cases, the implementation of the desired user requirements emerged as dependent on the strategic significance of the outsourced application, e.g. with distribution relevance of an application or in case of user requirements related to legal demands, user requirements became a high priority.

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Contract Preparation > Selection > Contract > Transition > Execution > Post-deal								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Environment	Regulatory compliance	**Include the implementation of legal business requirements in the outsourced IT function in the contract**		The fulfilment of legal requirements for outsourced systems is compulsory for success during the whole ITO process to maintain the legal capacity of the outsourcing enterprise. Hence, the operational implementation of these business requirements during the external execution by the vendor is to be anchored in the ITO contract.	■			■
Contract	Flexibility terms	**Include flexibility terms in the ITO contract**		Flexibility clauses in the contract to secure the possibility of contract adaptation with changing business or technical demands are mandatory for ITO success. From case to case different flexibility clauses are necessary (e.g. avoidance of minimum purchase, approach for implementation of application changes, arrangement of growth rates or volume ranges for services, etc.)				■
Contract	Communication channels	**Include communication channels between you and the vendor in the ITO contract**		The contractual fixation of communication channels between client and vendor is compelling for the achievement of ITO success. Thereunder falls, for example, the naming of the vendors' account manager (see success factor roles and responsibilities: account manager). At least the role and contact data needs to be contractually defined.				■
Stakeholder Management	Roles and responsibilities: Account manager	**Include the vendors' account manager in the ITO contract**		A notably agreed account manager on the vendor side and the specification of the accompanying responsibilities is a compulsory success factor for an ITO project. In the contracting phase the name is taken up in the ITO contract.				■
Contract	Termination clause	**Include a termination clause and the support of the vendor in that case in the ITO contract**		The contractual arrangement of exit clauses is a mandatory factor for achievement of success with ITO. This contains notice possibilities as well as the necessary support of the vendor for backsourcing or further outsourcing to another vendor. Vendors often demand the contractual arrangement of compensation payments in case of termination. Depending on the temporal progress of the ITO contract sinking compensation payments should be agreed.				■
Contract Dependency between: • Environment • Contract • Control	Regulatory requirements	**Include the following regulatory requirements into the ITO contract: control rights, business continuity, data security, subcontractors**		Bank regulation authorities or specific banking legislation demand several regulations in the ITO contract: control rights for the outsourcing bank as well as for the supervisory authorities, business continuity concept and planning for business critical systems, data security regulations, approval of subcontractors (liability, data protection, etc.).	■			■
Contract	Directives and guidelines	**Include relevant directives and guidelines of your company in the ITO contract**		The directives and guidelines of the outsourcing enterprise which the vendor needs to adhere to are to be implemented in the ITO contract.				■
Contract	Processes: escalation / resolution of performance disputes	**Include escalation procedures and a process for the resolution of performance disputes in the ITO contract**		The contractual agreement of escalation procedures and processes for the resolution of performance disputes in case of insufficient performance or malperformance of the vendor is mandatory.				■

	Environment			
	External	Internal Firm	Internal IT	Internal ITO Project

Outsourcing Process Phase: Contract

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description				
Contract	Financial penalties	**Include financial penalties for non-performance in the ITO contract**	• **External ITO without equity holding and sourcing of no standard functionality** • **Internal ITO**	The contractual fixation of financial penalties is an incentive to keep the vendor performing according to the arrangements in the ITO contract. Nevertheless, this was not relevant in all cases. In a case which sources a standard application externally with low divergences from the standard functionality, the success factor was not seen as relevant. No performance improvements were expected thereby. In case of external ITOs with capital interweaving between client and vendor, no financial penalties were agreed either. In these cases, influencing possibilities exist on the vendor by committees which can make the contractual fixation unnecessary. In a case with the organisational form of a joint venture, the success factor was not relevant either, because financial punishments would curtail the income from investment. Hence, the success factor is relevant in the case of external ITOs sourcing no standard functionality externally and without equity holding between client and vendor. In the investigated internal ITO cases even a 100% capital participation of the client in the vendor exists and thus influencing possibilities are given as well. But internal ITOs rated financial punishments in the ITO contract as mandatory for ITO success. Internal ITOs can look at financial punishments as a necessary contractual mechanism to keep the vendor acting according to the arrangements in the ITO contract despite a certain order situation.				
Contract	Improvement targets	**Include positioning and improvement targets in the ITO contract**	**A transformation phase is agreed with the vendor to boost optimisation**	Optimisation measures can be implemented also by the vendor within the scope of a transformation phase. If this is used, the determination of the current position of the client and a reduction of this baseline (topical IT costs) needs to be anchored by contract. For this transformation one-off costs occur for the outsourcing enterprise, but thereby the operation costs can be reduced with lasting effect.				
Contract	Renegotiation clause	**Include occasions for renegotiation in the ITO contract**	**Price renegotiation possible**	The contractual fixation of regular renegotiation possibilities gives the possibility to guarantee contract conditions in line with market requirements and is generally to be recommended. Also in the case of ITO contracts without profit achievement intention (e.g. internal ITO, joint venture), as these vendors strive to set up buffers as well. One exception emerged within the multiple case study, an external ITO with equity holding to a vendor acting within a banking group. Here price negotiation was not possible as all mandators pay the same price.				
Contract	Staff regulations/guarantees	**Include regulations and guarantees for transferred staff**	**Staff transferred to the vendor**	Contractual regulations and guarantees for staff transferred to the vendor are relevant in case of a personnel transfer.				

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Contract Preparation > Selection > Contract > Transition > Execution > Post-deal								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Contract	Fluctuation rate / Key players	**Include a maximum fluctuation rate for vendor employees and key players into the ITO contract**	• **The client does not serve as source of competence for the vendor** • **Know how necessary for the external execution of the outsourced IT function is hardly available in the market**	The arrangement of a maximum fluctuation rate in % and the notable naming of key players in the contract is recommended,especially in the cases where the know how necessary for the external execution of the outsourced IT function is hardly available in the market and in cases where the client does not serve as a source of competence for the vendor (only the case with a joint-venture as service society).				■
Contract	Contract review	**Conduct a contract review by external experts depending on your knowledge needs**		Before contract conclusion, external advice is to be engaged in the contracting phase as ITO is very complex and as vendors are normally more experienced compared to clients. Depending on the individual experience of the outsourcing client with ITO, different external experts should be included relating to the respective topic (legal expert, technical experts, chartered accountants, tax advisers, management consultants etc.).				■
Contract	Due diligence	**Conduct a due diligence evaluation before contract conclusion**	**Vendor market**	The accomplishment of a due diligence check before completion of the ITO contract helps to ensure that company, price, solution, contract and references are suitable for the ITO needs and ensures a competitive price/performance ratio. Condition is amongst others that the requirements for the IT system to be outsourced allow a market comparison.				■
Dependency between: • Environment • Contract • Relationship		**Outsource only to a strategic partner (Relationship) with a flexible, long-term ITO contract (Contract).**	**Environmental dynamism (Environment)**	A stable internal and external business environment supports the ability to define contractually stable IT requirements for the lifetime of the ITO contract. An ITO in unstable environments (success factor category "environment") only in connection with a flexible, long-term contract (success factor category "contract") and to a strategic partner (success factor category "relationship") has been confirmed. The existence of the trigger for the dependency, an unstable environment, must be checked at the beginning of an ITO. If an unstable environment is given, the contract creation as well as the choice of the kind of partnership is influenced. For this reason, the temporal relevance of the success factor dependency is ascertained to the three ITO process phases: preparation, selection and contract.	■			■

Outsourcing Process Phase: Contract

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Dependency between: • Strategy • Contract • Relationship		**Outsource only to a strategic partner (Relationship) with a detailed contract (Contract)**	**Core or strategic IT functions (Strategy)**	The ITO of core functions or strategic functions (see success factor category "strategy") only in connection with a detailed ITO contract (see relevant contract contents in success factor category "contract") and to a strategic partner (see success factor category "relationship") has been confirmed. The decision about the IT function to be outsourced, is taken in the preparation phase of the ITO process. If a core function or strategic function is outsourced, the contract creation as well as the choice of the kind of partnership is influenced. For this reason the temporal relevance of the success factor dependency is ascertained to the three ITO process phases: preparation, selection and contract.				
Stakeholder Management Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Stakeholder involvement: Staff affected from ITO	**Inform directly affected employees before execution of the ITO openly and honestly about upcoming decision points, schedules, the influence on their job and possible options**		• The employees directly affected by the ITO (employees to be outsourced as well as employees remaining in-house and becoming responsible for the control of the ITO) are to be informed openly and honestly before conversion of the ITO. In particular, a realistic plan of the ITO, the upcoming decisions, the time schedule and the effects on their work are to be communicated. Hence, reliable data must already be given at that time. This requires that vendor evaluations, testing and business case calculations should be done confidentially beforehand. The success factor is therefore relevant from the beginning of the ITO till shortly before completion of the ITO contract. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills).				
Stakeholder Management	Stakeholder involvement: Functional departments	**Involve relevant functional departments in the forefront of the ITO**		In the early stages of the ITO (preparation – contracting phase), the inclusion of relevant business divisions (e.g. human resources, legally department etc.) is also to be ensured to consider all relevant aspects and to support a smooth processing of the decision for or against ITO.				

Outsourcing Process Phase: Contract

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Stakeholder Management	Stakeholder involvement: Long-term client employees	**Ensure long-term client employees join the vendor**	**Know how necessary for the external execution of the outsourced IT function is not available in the market**	The switch of long-term employees of the outsourcing enterprise to the vendor by negotiations of secure jobs and good terms of employment is partly relevant to success. If know how necessary for the external execution of the outsourced IT function is not available in the market (ITO of individually developed applications without good system documentation, or ITO of standard applications with resource bottlenecks in the market) the outsourcing of long-standing client employees helps to guarantee a good start of the external execution. In case of outsourcing of standard applications a personnel transfer is not necessary, as a rule, because in the market resources with suitable know how are available. A personnel transfer on the vendor is often necessary to realise the business case of the ITO. A necessary personnel transfer has to be secured in the ITO process phases selection, contract and transition.				■
Contract	Contract amendments	**Make constituent contract addendums for each work to be done**	**Standard service catalogue does not exist on the vendor side**	The need of separate contract appendices per IT good and service with separate price and service level agreements emerged as partly relevant to ITO success. A detailed specification of the requirements and costs as well as the termination of each IT good and service separately must be guaranteed. This is possible either by reference on a standardised product catalogue of the vendor or with separate contract appendices, for example, performance notes.				■
Stakeholder Management	Roles and responsibilities: Relationship manager	**Leverage active relationship managers on the client and vendor side**		One or several active relationship managers on client and vendor side with adequate interpersonal skills are mandatory as they support successful co-working and the resolution of disputes. During the client-vendor-interaction in the ITO process phases of selection, contract, transition and execution, relationship management is pursued.				■
Stakeholder Management	NEW: Roles and responsibilities: Mediator	**Ensure that the vendor takes a mediation role between you and 2 tier vendors**	**Internal ITO to a vendor using a sourcing network**	By founding of an IT spin-off (1 tier vendor) by the client which uses a sourcing network (2 tier vendors) for the performance of IT goods and services, mediation between the client and the 2 tier vendors by the IT spin-off is success-influencing during the time of cooperation. In the selection / contract phase the mediator on the side of the IT spin-off is to be nominated and the responsibility is to be transferred.				■

Outsourcing Process Phase: Contract

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Relationship Management Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Relationship building and management	• **Build and manage a relationship to the vendor with an intensity dependent on the degree of partnership.** • **Ensure trust building with the vendor, a good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).** • **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence good relationship building (Relationship).** • **Ensure the right definition of the required service levels (Contract) allowing an early detection of critical vendor performance which helps to avoid escalation and negative consequences on the relationship (Relationship).**		• Relationship building and management between client and vendor during the duration of the cooperation (ITO process phases vendor selection - execution) is mandatory for ITO success. The more in partnership the cooperation is, the more intensely relationship management is to be pursued. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills). • Ensure the right definition of the required service levels (Contract) allowing an early detection of critical vendor performance during external execution which helps to avoid escalation and negative consequences for the relationship (Relationship).	■	■	■	■
Control Dependency between: • Environment • Contract • Control	Risk assessment and risk management	**Carry out an identification and management of ITO risks, depending on the given risk potential**		The documented identification and the management of ITO risks are compulsory for European banks regarding legal regulations. Before the actual ITO, this is necessary for the benefit of a sound motivation of the ITO, to recognise risks early and to to put in place measures for the benefit of risk reduction from the start. The extent of the risk management is to be chosen depending on the risk content of the ITO.	■			■

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Stakeholder Management	Roles and responsibilities: Project manager	**Leverage the ITO project leader**		The project manager steers the project from his nomination and responsibility transference in the preparation phase of the ITO up to the end of the transition to the vendor.				■
Stakeholder Management	Stakeholder involvement: High level management	**Ensure the commitment of the high level management on business and IT side**		The obtaining of the commitment of the high-level management on the business and IT side is necessary for success with ITO. During the contract term the management must carry some of the consequences of the ITO (e.g. software changes only within agreed release cycles). Besides, customer relationship management to the vendor at management level (see success factor relationship management) and acting as an escalation way in case of performance disputes (see success factor vendor performance reporting) belong to the tasks which need to be performed by the management during ITO.				■
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Business knowledge	• **Ensure the application of business knowledge about the business supported by the outsourced IT** • **Ensure trust building with the vendor, a good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• Knowledge about the banking business supported by the IT function to be outsourced is a core competence of the outsourcing bank and, hence, must basically exist there. During the course of the ITO project the business knowledge is to be applied to the advantage of the ITO. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases of selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.	■	■		■
Client Capability	IT knowledge outsourced IT function	**Ensure the application of IT knowledge about the outsourced IT function**	**Market comparison not possible**	Generally, the client should have mature management capacity with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings are done. If no market exists, the success factor is relevant. During the course of the ITO project the IT knowledge is to be applied, if necessary, to the advantage of the ITO.			■	

Environment			
External	Internal Firm	Internal IT	Internal ITO Project

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	External	Internal Firm	Internal IT	Internal ITO Project
Client Capability	IT capability	**Ensure the application of internal capability to implement individual IT demands not covered by standard applications of vendors**	**External ITO or Joint-Venture or Internal ITO with minor influencing possibility regarding the vendor and part ITO and no innovative market strategy**	• Generally, the full conversion of necessary IT demands by the vendor should be pursued. The internal implementation of individual demands not covered by standard applications of vendors is partly necessary and dependent on the market development strategy and on the kind and extent of the ITO. • If a bank wants to operate innovatively in the market, the application of standard software was generally seen as not to be recommended, because the introduction of new products in a standard system depends often on the acceptance of the change by a bigger user group. And, in the case of implementation, these changes are normally available to all users. Hence, a differentiation in the market is not possible thereby. With an innovative market strategy, the individual implementation of new products is necessary. This can be done internally as well as externally. The definition of the market development strategy as a basis for the choice of a standard or individual system is to be done in the forefront of an ITO. • The success factor was relevant in the case of part ITOs with the organisational forms "external ITO", "joint venture" or "internal ITO with minor influencing possibility at the vendor". Generally, if only parts of the IT are outsourced, the integration of the outsourced IT function in the application landscape of the outsourcing company is to be carried out in the transition phase, for which capacity and skill must be held available at the beginning of the ITO. In one partly ITO case the outsourcing company is a companion of the vendor (joint venture). In this case a capacity balance in terms of allocation of employees of the outsourcing company at the vendor side was agreed between the partners. This requires also the securing of IT capacity and skill on the client side. In the case of a part internal ITO, normally enough influence exists over the vendor to make the external implementation of individual demands by the internal vendor possible. But, in one investigated partly internal ITO case the influencing possibility was limited, which made the success factor relevant again. • In the case of a full ITO, the IT capacity does not anymore exist for internal solutions, which makes the success factor not relevant in this case. During the course of the ITO the internal implementation of individual IT demands not covered by standard applications of vendors is to be carried out, if necessary.				

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Client Capability	ITO knowledge	**Ensure the application of ITO knowledge**		A mature management capacity with experience and expertise about ITO has to be applied during the course of the ITO to ensure a successful execution of ITO.			■	
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Interpersonal skills	**Ensure the application of interpersonal skills** **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence good relationship building (Relationship).**		The employees of the client concerned with ITO must apply interpersonal skills to support the interaction with the vendor from the selection phase till the external execution and to positively influence a common understanding, knowledge sharing and the establishment of inter-organisational relationships. Partnership building (Relationship) claims the time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills).	■	■	■	■
Client Capability	Organisational learning capability	**Ensure the application of organisational learning capability**		The application of the clients' capability to learn or acquire the needed knowledge from the vendor is mandatory during the transition and execution phase of the ITO process for an effective knowledge sharing which positively influences ITO success.		■	■	
Client Capability	Vendor acceptance	**Ensure the acceptance of the vendor**		The acceptance of the vendor on the client side during the external execution of the outsourced IT function (ITO process phases ITO transition and execution) was seen as success relevant in all investigated ITO cases. Three cases stated that this was given in a sense by conclusion of the ITO contract. The quality of the vendor performance influences directly the acceptance of the vendor. Dissatisfied employees of the vendor can report to the responsible management. There, the decisions for or against the ITO are made.		■	■	
Stakeholder Management	Stakeholder involvement: Long-term client employees	**Ensure long-term client employees join the vendor**	**Know how necessary for the external execution of the outsourced IT function is not available in the market**	The switch of long-term employees of the outsourcing enterprise to the vendor by negotiations of secure jobs and good terms of employment is partly relevant for success. If know how necessary for the external execution of the outsourced IT function is not available in the market (ITO of individually developed applications without good system documentation, or ITO of standard applications with resource bottlenecks in the market) the outsourcing of long-standing client employees helps to guarantee a good start of the external execution. In case of outsourcing of standard applications a personnel transfer is not necessary, as a rule, because in the market resources with suitable know how are available. A personnel transfer on the vendor is often necessary to realise the business case of the ITO. A necessary personnel transfer has to be secured in the ITO process phases of selection, contract and transition.				■
Stakeholder Management	NEW: External recruitment of vendor employees	**Recruit the employees of the vendor from the market**	**Joint-Venture**	In the case of the organisational form of a joint venture, the recruitment of the employees for the joint venture in the transition and execution phase from the market had a positive effect on the achievement of ITO success.				■

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Co-Work	NEW: Neutral body	**Establish a neutral body**	**Joint Venture**	In the case of the organisational form of a joint venture, the introduction of a neutral body to the mediation and coordination of votes between the companions in the transition and execution phase had a positive effect on ITO success.				
Co-Work	NEW: Working packages and responsibility	**Build working packages and transfer the responsibility to companion banks**	**Joint Venture**	In the case of the organisational form of a joint venture, the generation of working packages and the distribution of the responsibility for it on the companions had a positive effect on ITO success. This was relevant at the beginning of the external execution in the transition phase, as well as by technical changes during the runtime of the ITO.				
Co-Work	NEW: Top balance	**Introduction of a top balance between companion banks**	**Joint Venture**	In the case of the organisational form of a joint venture, the introduction of a "top balance" between the companions had a positive effect on ITO success. To guarantee a fair prize / performance relation with different engagement of the companions in the transition and execution phase, it was documented which companion had performed how many man-days. A balance occurred by means of "additional payments" or "reimbursements" between the companions.				
Co-Work	NEW: Regular advisory board	**Call regular advisory board meetings**	**Joint Venture**	In the case of the organisational form of a joint venture, regular advisory board meetings during implementation of the ITO in the transition phase and during external execution had a positive effect on ITO success.				

	Environment			
	External	Internal Firm	Internal IT	Internal ITO Project

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	External	Internal Firm	Internal IT	Internal ITO Project
Control Dependency between: • Environment • Contract • Control Dependency between: • Vendor selection • Contract • Control Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Monitoring and control	• **Regularly monitor and control vendor performance based on a measurement system able to track tangible and intangible expectations over a long time-scale.** • **Take the investigated (Vendor Selection) and contractual agreed SLAs, measures and reports as well as development goals (Contract) as basis for the regular vendor monitoring and control (Control).** • **Ensure trust building with the vendor, a good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship). Replace trust and communication (Co-Work) with control (Control) in case of cultural differences.**		• The regular and strict control of the vendor in the transition and execution phase concerning the fulfilment of the ITO contract (SLAs, etc.) is compulsory. A regular vendor's control is even prescribed by regulation authorities legally to ensure the orderliness of the outsourced business or service. The regular monitoring and control of the vendor's performance is to be done on the basis of a procedure to measure tangible and intangible expectations over a long time-scale. In particular with the help of the SLA reports it is recognisable if a deterioration of the vendor performance occurs. Thus the opportunity exists of taking measures early to avoid negative effects on vendor performance and on the relationship between client and vendor. • The service level requirements, measures and reports investigated in the vendor selection phase (see success factor category "vendor selection") and contractually agreed in the contracting phase (see success factor category "contract") are the basis for regular vendor control (see success factor category "control") during the transition and execution phase of the ITO project. • The following elements of a partnership (see success factor category "relationship management") influence ITO success ITO positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of customer client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control").				
Stakeholder Management	NEW: Roles and responsibilities: Service level manager	**Leverage the service level manager**		The agreement of service levels, measures and reports before or after contract conclusion (see success factors "Requirements specification" and "Measurable service requirements, measures and reports") was rated as success influencing. Hence, the operational role which fills this job with life is also compulsory. From the start of the external execution in the transition phase the service level manager acts as a receiver for the agreed service level reports and exercises the regular control of the vendor performance.				

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Stakeholder Management	Stakeholder involvement: Technical client staff	**Involve technically competent staff able to control the vendor on a day-to-day basis**	**Market comparison not possible**	Generally, the client should have technically competent staff with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings are done. If no market exists, the success factor is relevant. If necessary, the existence of IT knowledge on the client side is to be ensured in the preparation phase (see success factor IT knowledge) and technically competent staff have to be involved from the vendor selection phase till the end of the ITO project.				■
Control	Vendor performance reporting	**Ensure a regular management reporting of vendor performance**		A regular reporting of the vendor performance in the transition and execution phase to the management level of the outsourcing company is necessary for ITO success. This helps to recognise the appearance of imperfection in the vendor performance early and to create with it the basis to counteract against the insufficient vendor performance at suitable management level. Partially the management reporting is limited to failure situations with which the general monitoring responsibility is delegated at the employee level.				■
Client Capability	Problem management	**Solve operational problems rapidly in a multi vendor environment**		When using a sourcing network and consequently with availability of several disturbance sources a quick problem solution on the client side is compulsory in the transition and execution phase of the ITO process regardless how it is organised (e.g. hotline on the vendor side, hotline per ITO in IT departments of the outsourcing company, central hotline for all internal and external IT interests at the outsourcing company).		■	■	

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Co-Work Dependency between: • Strategy • Contract • Co-Work Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Communication	• **Communicate clearly and effectively** • **Communicate ITO objectives (Strategy) clearly and effectively (Co-Work).** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• A clear and effective communication between client and vendor on a regular basis is compulsory for the achievement of success with ITO from the vendor selection phase up to the execution phase in order to generate a common understanding about ITO objectives, performance expectations, governance structures, etc. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phase's selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.	■	■	■	■
Stakeholder Management	Roles and responsibilities: Account manager	**Leverage the vendors' account manager**		A notably agreed account manager on the vendor side is a compulsory success factor for an ITO project. In the transition and execution phase of the ITO process the account manager practises their function as a communication channel between client and vendor which positively influences a common understanding and which prevents vendor opportunism and the negative consequences of legal loopholes.				■
Stakeholder Management	Roles and responsibilities: Service manager	**Leverage the vendors' service manager**		A service manager on the vendor side is a compelling success factor for an ITO project. In the transition and execution phase of the ITO process the service manager takes care of a smooth daily operation of the outsourced IT application.				■
Environment	Corporate terms	**Communicate based on common terms**		The use of uniform terms within the communication between client and vendor generates a mutual understanding about communication contents. Uniform terms can be agreed by a terminology or a service catalogue. The common terms defined in the selection/contracting phase are to be used in communication during the transition and external execution of the outsourced IT function.	■	■		

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Environment	Corporate culture	**Proactively manage cultural differences**	• **Cultural differences and joint-venture** • **Cultural differences and nearshore delivery model** • **Cultural differences and onshore delivery model and effective communication is restricted**	• The country culture and enterprise culture influence the behaviour and the communication of client and vendor and thus have an influence on the cooperation. • In investigated cases with the organisational form of a joint venture and / or with a nearshore delivery model similar cultures and accordingly, an active management of cultural differences (e.g. strict controls) was seen as mandatory for the achievement of ITO success. In the case of a joint venture, enterprise decisions must be made by the companions together which can be positively influenced by a common enterprise culture or an active management of cultural differences. The cultural differences which were based on different land cultures (nearshore) were rated as the highest risk in ITO and as hardly controllable or even not controllable at all, which requires an active management of cultural differences. The meaning and extent of the management of cultural differences depend on the kind of the outsourced IT function. With a commodity IT function the need is lower, because the performance and the process of performance production are standardised. With less standardised IT functions problem solution requires a good communication and process know how to a higher extent for which a management of cultural differences has great importance. • On the other hand, in ITO cases with an onshore delivery model it was said that good communication can overcome cultural differences (see also success factor "communication"). Hereby it has to be ensured that the language or dialect is comprehensible for the counterpart. In these cases client and vendor had a culture of one and the same country, though similar behaviour patterns regarding communication can often exist. • The success factor is relevant during the interaction between client and vendor (vendor selection phase - external execution). Existing cultural differences are to be managed during the client/vendor-interaction.	■	■		
Co-Work	Knowledge transferring and sharing	**Mutually transfer and share knowledge with the vendor**		Knowledge transferring and sharing between client and vendor is mandatory for ITO success from the start of the external production of IT goods and services as it fosters good co-working. A knowledge transfer is in particular of great importance when no staff members are transferred to the vendor and in case of cultural differences. Vendors should share the necessary knowledge for using the outsourced IT function. Clients should share their business knowledge for improving the vendor´s understanding of business requirements.				■

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Relationship Management Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Relationship building and management	• **Build and manage a relationship with the vendor with an intensity dependent on the degree of partnership.** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).** • **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence a good relationship building (Relationship).** • **Ensure the right definition of the required service levels (Contract) allowing for an early detection of critical vendor performance which helps to avoid escalation and negative consequences for the relationship (Relationship).**		• Relationship building and management between client and vendor during the duration of the cooperation (ITO process phases vendor selection - execution) is mandatory for ITO success. The more in partnership the cooperation is, the more intensely relationship management is to be pursued. • The following elements of a partnership (Relationship) influence ITO success positively: trust, communication (Co-work), cooperation, satisfaction, business understanding of client and vendor about the client's business (Client / vendor vendor capability) and commitment. With existing cultural differences the elements trust and communication (Communication) must be substituted with control (Control). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills). • Ensure the right definition of the required service levels (Contract) and the right level of detail in the ITO contract allowing an early detection of critical vendor performance during external execution which helps to avoid escalation and negative consequences for the relationship (Relationship).				
Stakeholder Management	Roles and responsibilities: Relationship managers	**Leverage active relationship managers on the client and vendor side**		One or several active relationship managers on client and vendor side with adequate interpersonal skills are mandatory as they support successful co-working and the resolution of disputes. During the client-vendor-interaction in the ITO process phases of selection, contract, transition and execution, relationship management is pursued.				
Stakeholder Management	NEW: Roles and responsibilities: Mediator	**Leverage the vendor as a mediator between you and 2 tier vendors**	**Internal ITO to a vendor using a sourcing network**	By founding of an IT spin-off (1 tier vendor) by the client which uses a sourcing network (2 tier vendors) for the performance of IT goods and services, a mediation between the client and the 2 tier vendors by the IT spin-off is success-influencing during the time of cooperation.				

Outsourcing Process Phase: Transition

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Stakeholder Management	Stakeholder involvement: IT user	**Consider the IT user's requirements for satisfaction**	• **Existing user interface and sourcing of no standard functionality** • **Existing user interface and sourcing of core/strategic IT function**	The consideration of the user requirements in the forefront of an ITO and regularly during the external execution is generally recommended to ensure the support of this stakeholder group for ITO. But this was not confirmed in any investigated ITO case without limitations. In one application outsourcing case no user interface existed, which made the success factor not relevant. In another case a standard application was sourced externally. Thereby not all wishes on the functional side could be considered. However, cost savings could be achieved by means of scale effects through standardisation. In other cases, the implementation of the desired user requirements emerged as dependent on the strategic significance of the outsourced application, e.g. with distribution relevance of an application or in case of user requirements related to legal demands, user requirements became a high priority.				■
Control Dependency between: • Environment • Contract • Control	Risk assessment and risk management	**Carry out an identification and management of ITO risks, depending on the given risk potential**		The documented identification and the management of ITO risks are compulsory for European banks regarding legal regulations. During the ITO for monitoring the risks and risk reduction measures, the extent of the risk management is to be chosen depending on the risk content of the ITO.	■			■

Outsourcing Process Phase: Execution

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Stakeholder Management	Stakeholder involvement: High level management	**Ensure the commitment of the high level management on business and IT side**		The obtaining of the commitment of the high-level management on business and IT side is necessary for success with ITO. During the contract term the management must partly carry the consequences of the ITO (e.g. software changes only within agreed release cycles). Besides customer relationship management to the vendor at management level (see success factor relationship management) and acting as an escalation way in case of performance disputes (see success factor vendor performance reporting) belong to the tasks which need to be performed by the management.				■
Strategy	Backsourcing	**Backsource if necessary**	**ITO strategy still allows for an internal IT production**	The possibility of giving notice to the vendor during the external execution of the outsourced IT function and subsequently the ability to backsource the IT function helps to avoid a dependency situation with regard to the vendor and gives an incentive to the vendor for a high-quality production of IT goods and services. But in some investigated cases the ability to backsource was not seen as relevant, as the internal production of IT goods and services for the respective IT function was not any longer part of the IT strategy of the outsourcing company.			■	
Strategy	Renegotiation and restructuring of ITO contracts / Vendor switching	• **Renegotiate and restructure ITO contract early before implementing another solution (vendor switching / backsourcing)** • **Switch to another vendor if necessary**		The possibility of giving notice to the vendor during the external execution of the outsourced IT function and the ability to further outsource the IT function to another vendor is mandatory for ITO success. On the one hand, this avoids a dependency situation from the vendor. On the other hand, this gives an incentive to the vendor to produce the outsourced IT function continuously in a high quality in order to ensure keeping the order in the long run. Before switching the vendor, existing contracts are to be renegotiated and restructured, as the change to a new vendor involves high switching costs.			■	

Outsourcing Process Phase: Execution

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Stakeholder • Co-Work • Relationship • Control	Business knowledge	• **Ensure the application of business knowledge about the business supported by the outsourced IT** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• Knowledge about the banking business supported by the IT function to be outsourced is a core competence of the outsourcing bank and, hence, must basically exist there. During the course of the ITO project the business knowledge is to be applied to the advantage of the ITO. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phase's selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.	■	■		■
Client Capability	IT knowledge outsourced IT function	**Ensure the application of IT knowledge about the outsourced IT function**	**Market comparison not possible**	Generally, the client should have mature management capacity with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings are done. If no market exists, the success factor is relevant. During the course of the ITO project the IT knowledge is to be applied, if necessary, to the advantage of the ITO.			■	

				Environment			
				External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Execution Preparation > Selection > Contract > Transition > **Execution** > Post-deal							
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**			
Client Capability	IT capability	**Ensure the application of internal capability to implement individual IT demands not covered by standard applications of vendors**	**External ITO or Joint-Venture or Internal ITO with minor influencing possibility regarding the vendor and part ITO and no innovative market strategy**	• Generally, the full conversion of necessary IT demands by the vendor should be pursued. The internal implementation of individual demands not covered by standard applications of vendors is partly necessary and depends on the market development strategy and on the kind and extent of the ITO. • If a bank wanted to operate innovatively in the market, the application of standard software was generally seen as not to be recommended, because the introduction of new products in a standard system depends often on the acceptance of the change by a bigger user group. And in case of implementation, these changes are normally available to all users. Hence, a differentiation in the market is not possible thereby. With an innovative market strategy, the individual implementation of new products is necessary. This can be done internally as well as externally. The definition of the market development strategy as a basis for the choice of a standard or individual system is to be done in the forefront of an ITO. • The success factor was relevant in case of part ITOs with the organisational forms "external ITO", "joint venture" or "internal ITO with minor influencing possibility over the vendor". Generally, if only parts of the IT are outsourced, the integration of the outsourced IT function in the application landscape of the outsourcing company is to be carried out in the transition phase, for which capacity and skill must be held available at the beginning of the ITO. In one partly ITO case the outsourcing company is a companion of the vendor (joint venture). In this case a capacity balance in terms of allocation of employees of the outsourcing company on the vendor side was agreed between the partners. This requires also the securing of IT capacity and skill on the client side. In the case of a partly internal ITO, normally enough influencing possibility exists over the vendor to make the external implementation of individual demands by the internal vendor possible. But, in one investigated partly internal ITO case the influencing possibility was limited, which made the success factor relevant again. • In case of a full ITO, the IT capacity no longer exists for internal solutions, which makes the success factor not relevant in this case. During the course of the ITO the internal implementation of individual IT demands not covered by standard applications of vendors is to be carried out, if necessary.			
Client Capability	ITO knowledge	**Ensure the application of ITO knowledge**		A mature management capacity with experience and expertise about ITO has to be applied during the course of the ITO to ensure a successful execution of ITO.			

Outsourcing Process Phase: Execution

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Client Capability Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Interpersonal skills	• **Ensure the application of interpersonal skills** • **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence good relationship building (Relationship).**		• The employees of the client concerned with ITO must apply interpersonal skills to support the interaction with the vendor from the selection phase till the external execution and to positively influence a common understanding, knowledge sharing and the establishment of inter-organisational relationships. • Partnership building (Relationship) claims time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills).				
Client Capability	Organisational learning capability	**Ensure the application of organisational learning capability**		The application of the clients' capability to learn or acquire the needed knowledge from the vendor is mandatory during the transition and execution phase of the ITO process for an effective knowledge sharing which positively influences ITO success.				
Client Capability	Acceptance	**Ensure the acceptance of the vendor**		The acceptance of the vendor on the client side during the external execution of the outsourced IT function (ITO process phases ITO transition and execution) was seen as success relevant in all investigated ITO cases. Three cases stated that this was given in a sense by conclusion of the ITO contract. The quality of the vendor performance influences directly the acceptance of the vendor. Dissatisfied employees of the vendor can report to the responsible management. There, the decisions for or against the ITO are made.				
Stakeholder Management	NEW: External recruitment of vendor employees	**Recruit the employees of the vendor from the market**	**Joint-Venture**	In the case of the organisational form of a joint venture, the recruitment of the employees for the joint venture in the transition and execution phase from the market had a positive effect on the achievement of ITO success.				
Co-Work	NEW: Neutral body	**Establish a neutral body**	**Joint Venture**	In the case of the organisational form of a joint venture, the introduction of a neutral body for the mediation and coordination of votes between the companions in the transition and execution phase had a positive effect on ITO success.				
Co-Work	NEW: Working packages and responsibility	**Build working packages and transfer the responsibility to companion banks**	**Joint Venture**	In the case of the organisational form of a joint venture, the generation of working packages and the distribution of the responsibility for it to the companions had a positive effect on ITO success. This was relevant at the beginning of the external execution in the transition phase, as well as by technical changes during the runtime of the ITO.				

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Execution Preparation > Selection > Contract > Transition > Execution > Post-deal								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Co-Work	NEW: Top balance	**Introduction of a top balance between companion banks**	**Joint Venture**	In the case of the organisational form of a joint venture, the introduction of a "top balance" between the companions had a positive effect on ITO success. To guarantee a fair prize / performance relation with different engagement of the companions in the transition and execution phase, it was documented which companion had performed how many man-days. A balance occurred by means of "additional payments" or "reimbursements" between the companions.				■
Co-Work	NEW: Regular advisory board	**Call regular advisory board meetings**	**Joint Venture**	In the case of the organisational form of a joint venture, regular advisory board meetings during implementation of the ITO in the transition phase and during external execution had a positive effect on ITO success.				■
Control Dependency between: • Environment • Contract • Control Dependency between: • Vendor selection • Contract • Control Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Monitoring and control	• **Regularly monitor and control vendor performance based on a measurement system able to track tangible and intangible expectations over a long time-scale.** • **Take the investigated (Vendor Selection) and contractual agreed SLAs, measures and reports as well as the cost and development goals (Contract) as the basis for regular vendor monitoring and control (Control).** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendor's commitment towards the ITO contract to positively influence a good partnership (Relationship). Replace trust and communication (Co-Work) with control (Control) in case of cultural differences.**		• The regular and strict control of the vendor in the transition and execution phase concerning the fulfilment of the ITO contract (SLAs, etc.) is compulsory for the achievement of ITO success. Regular vendor control is even prescribed by regulation authorities legally to ensure the orderliness of the outsourced business or service. The regular monitoring and control of the vendor's performance is to be done on the basis of a procedure to measure tangible and intangible expectations over a long time-scale. In particular with the help of the SLA reports it is recognisable if a deterioration of the vendor performance occurs. Thus the opportunity exists for taking measures early to avoid negative effects on vendor performance and on the relationship between client and vendor. • The service level requirements, measures and reports if necessary investigated in the vendor selection phase (see success factor category "vendor selection") and contractually agreed in the contracting or execution phase (see success factor category "contract") are the basis for regular vendor control (see success factor category "control") during the transition and execution phase of the ITO project. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of customer client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control").	■			■

Outsourcing Process Phase: Execution

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Stakeholder Management	NEW: Roles and responsibilities: Service level manager	**Leverage the service level manager**		The agreement of service levels, measures and reports before or after contract conclusion (see success factors "Requirements specification" and "Measurable service requirements, measures and reports") was rated as success influencing. Hence, the operational role which fills this job with life is also compulsory. From the start of the external execution in the transition phase the service level manager acts as a receiver for the agreed service level reports and exercises the regular control of the vendor performance.				■
Stakeholder Management	Stakeholder involvement: Technical client staff	**Involve technically competent staff able to control the vendor on a day-to-day basis**	**Market comparison not possible**	Generally, the client should have technically competent staff with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings were done. If no market exists, the success factor is relevant. If necessary, the existence of IT knowledge on the client side is to be ensured in the preparation phase (see success factor IT knowledge) and technically competent staff have to be involved from the vendor selection phase till the end of the ITO project.				■
Control	Vendor performance reporting	**Ensure regular management reporting of vendor performance**		Regular reporting of the vendor performance in the transition and execution phase to the management level of the outsourcing company is necessary for ITO success. This helps to recognise the appearance of imperfection in the vendor performance early and creates with it the basis for counteracting insufficient vendor performance at the suitable management level. Partially the management reporting is limited to failure situations with which the general monitoring responsibility is delegated at the employee level.				■
Control	Vendor payment	**Originate vendor payments on time if no reasons for complaint exist**		Payments settlement to the vendor on schedule is a compelling success factor during external execution of the outsourced IT function in case of satisfaction with vendor performance.				■
Client Capability	Problem management	**Solve operational problems rapidly in a multi vendor environment**		When using a sourcing network and consequently with availability of several disturbance sources a quick problem solution on the client side is compulsory in the transition and execution phase of the ITO process regardless of how it is organised (e.g. hotline on the vendor side, hotline per ITO in IT departments of the outsourcing company, central hotline for all internal and external IT interests at the outsourcing enterprise).		■	■	

Outsourcing Process Phase: Execution

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Co-Work Dependency between: • Strategy • Contract • Co-Work Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Communication	• **Communicate clearly and effectively** • **Communicate ITO objectives (Strategy) clearly and effectively (Co-Work).** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendors' commitment towards the ITO contract to positively influence a good partnership (Relationship).**		• Clear and effective communication between client and vendor on a regular basis is compulsory for the achievement of success with ITO from the vendor selection phase up to the execution phase in order to generate a common understanding about ITO objectives, performance expectations, governance structures, etc. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases of selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO.				
Stakeholder Management	Roles and responsibilities: Account manager	**Leverage the vendor's account manager**		A notably agreed account manager on the vendor side is a compulsory success factor for an ITO project. In the transition and execution phase of the ITO process the account manager practises their function as a communication channel between client and vendor which positively influences a common understanding and which prevents vendor opportunism and the negative consequences of legal loopholes.				
Stakeholder Management	Roles and responsibilities: Service manager	**Leverage the vendor's service manager**		A service manager on the vendor side is a compelling success factor for an ITO project. In the transition and execution phase of the ITO process the service manager takes care of a smooth daily operation of the outsourced IT application.				
Environment	Corporate terms	**Communicate based on common terms**		The use of uniform terms within the communication between client and vendor generates a mutual understanding about communication contents. Uniform terms can be agreed by a terminology or a service catalogue. The common terms defined in the selection/contracting phase are to be used in communication during the transition and external execution of the outsourced IT function.				

Outsourcing Process Phase: Execution

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Environment	Corporate culture	**Proactively manage cultural differences**	• **Cultural differences and joint-venture** • **Cultural differences and nearshore delivery model** • **Cultural differences and onshore delivery model where effective communication is restricted**	• The country culture and enterprise culture influence the behaviour and the communication of client and vendor and thus have an influence on the cooperation. • In investigated cases with the organisational form of a joint venture and / or with a nearshore delivery model, similar cultures and accordingly active management of cultural differences (e.g. strict controls) and are seen as mandatory for the achievement of ITO success. In the case of a joint venture, enterprise decisions must be made by the companions together which can be positively influenced by a common enterprise culture or an active management of cultural differences. The cultural differences which were based on different land cultures (nearshore) were rated as the highest risk in ITO and as barely controllable or even not controllable at all, which requires an active management of cultural differences. The meaning and extent of the management of cultural differences depend on the kind of the outsourced IT function. With a commodity IT function the need is lower, because the performance and the process of performance production are standardised. With less standardised IT functions, problem solution requires a good communication and process know how to a higher extent, for which a management of cultural differences has great importance. • On the other hand, in ITO cases with an onshore delivery model it was said that good communication can overcome cultural differences (see also success factor "communication"). Hereby it has to be ensured that the language or dialect is comprehensible for the counterpart. In these cases, client and vendor had a culture of one and the same country, though similar behaviour patterns regarding communication can often exist. • The success factor is relevant during the interaction between client and vendor (vendor selection phase - external execution). Existing cultural differences are to be managed during the client/vendor-interaction.	■	■		
Co-Work	Knowledge transferring and sharing	**Mutually transfer and share knowledge with the vendor**		Knowledge transferring and sharing between client and vendor is mandatory for ITO success from the start of the external production of IT goods and services as it fosters good co-working. A knowledge transfer is in particular of great importance when no staff members are transferred to the vendor and in case of cultural differences. Vendors should share the necessary knowledge for using the outsourced IT function. Clients should share their business knowledge for improving the vendor´s understanding of business requirements.				■

Outsourcing Process Phase: Execution

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Relationship Management Dependency between: • Client/Vendor capability • Stakeholder • Contract • Co-Work • Relationship • Control	Relationship building and management	• **Build and manage a relationship to the vendor with an intensity dependent on the degree of partnership.** • **Ensure trust building with the vendor, good communication (Co-Work), cooperation, satisfaction, business understanding of the vendor and in-house (Client/Vendor capability) and the vendor's commitment towards the ITO contract to positively influence a good partnership (Relationship).** • **Ensure that sufficient time, knowledge and dedicated resources with interpersonal skills on the client and vendor side exist already before contract conclusion (Client and Vendor Capability) to positively influence good relationship building (Relationship).** • **Ensure the right definition of the required service levels (Contract) allowing an early detection of critical vendor performance which helps to avoid escalation and negative consequences for the relationship (Relationship).**		• Relationship building and management between client and vendor during the duration of the cooperation (ITO process phases vendor selection - execution) is mandatory for ITO success. The more in partnership the cooperation is, the more intensely relationship management is to be pursued. • The following elements of a partnership (see success factor category "relationship management") influence ITO success positively: trust, communication (see success factor category "co-work"), cooperation, satisfaction, business understanding of client and vendor about the client's business (see success factor categories "client / vendor vendor capability") and commitment. With existing cultural differences the elements trust and communication (see success factor category "communication") must be substituted with control (see success factor category "control"). The business know-how of client and vendor are to be guaranteed in the early stages of the ITO. Efficient communication plays a role during the whole duration of the cooperation (ITO process phases selection, contract, transition, execution). And the factors trust, cooperation and commitment are to be developed during the external execution of the ITO. • Partnership building (Relationship) claims the time and the application of suitable people with social abilities on the client and vendor side already before contract conclusion. Interpersonal skills are relevant from the preparation phase up to the execution phase (Stakeholder/Client and vendor interpersonal skills). • Ensure the right definition of the required service levels (Contract) and the right level of detail in the ITO contract allowing an early detection of critical vendor performance during external execution which helps to avoid escalation and negative consequences for the relationship (Relationship).	■	■	■	■
Stakeholder Management	Roles and responsibilities: Relationship managers	**Leverage active relationship managers on the client and vendor side**		One or several active relationship managers on client and vendor side with adequate interpersonal skills are mandatory as they support successful co-working and the resolution of disputes. During the client-vendor-interaction in the ITO process phases of selection, contract, transition and execution relationship management is pursued.				■
Stakeholder Management	NEW: Roles and responsibilities: Mediator	**Leverage the vendor as a mediator between you and 2 tier vendors**	**Internal ITO to a vendor using a sourcing network**	By founding of an IT spin-off (1 tier vendor) by the client which uses a sourcing network (2 tier vendors) for the performance of IT goods and services, a mediation between the client and the 2 tier vendors by the IT spin-off is success-influencing during the time of cooperation.				■

Outsourcing Process Phase: Execution

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Internal Firm	Internal IT	Internal ITO Project
Client Capability	Flexibility: business changes	**Cope flexibly with business changes**		The client must cope flexibly with changes of business requirements during the execution phase of the ITO process for the benefit of permanent and adequate business support.		■	■	
Stakeholder Management	Stakeholder involvement: IT user	**Consider the IT user's requirements for satisfaction**	• **Existing user interface and sourcing of no standard functionality** • **Existing user interface and sourcing of core/strategic IT function**	The consideration of the user requirements in the forefront of an ITO and regularly during the external execution is generally recommended to ensure the support of this stakeholder group for ITO. But this was not confirmed in any investigated ITO case without limitations. In one application outsourcing case no user interface existed, which made the success factor not relevant. In another case, a standard application was sourced externally. Thereby not all wishes on functional side could be considered.However, cost savings could be achieved by means of scale effects through standardisation. In other cases, the implementation of the desired user requirements emerged as dependent on the strategic significance of the outsourced application, e.g. with distribution relevance of an application or in case of user requirements related to legal demands, user requirements became a high priority.				■
Client Capability	Flexibility: technology changes	**Cope flexibly with technology changes**	• **Technology adaptations affect the client** • **Technological governance is done by the client**	Coping flexibly with changes of technology requirements during the execution phase of the ITO process emerged as relevant, if technology adaptations affected the client (e.g. interconnections of the outsourced IT function into the application landscape of the outsourcing company) or if the technological governance was done by the client (e.g. internal ITO with technological governance by the outsourcing company).			■	
Co-Work	Change project management	**Carry out change project management supporting quality**		Change project management practices ensuring quality during the external execution of the outsourced application are compulsory for ITO success. In particular, the following abilities matter: the ability to re-plan change projects, management of project risks and construction of an efficient project organisation with a low number of people involved on the client and vendor side, change data base, tools to track changes.				■
Client Capability Vendor Capability	Partnership's potential	**Exploit the partnership's long-term potential on the client and vendor side**	• **External ITO and cost/benefit relation can be improved** **Joint-Venture** • **Internal ITO to a vendor owning** • **decision rights**	The capability to exploit the partnership`s long-term potential in terms of leveraging the capabilities of client and vendor to the advantage of each counterpart during the execution phase of the ITO process was not rated as relevant in all investigated ITO cases. In an external ITO case it was stated that the success factor was not relevant if the price/performance ratio was adequate. In an internal ITO case, the vendor had almost no scope of action for their own decisions as it is governed by the client, which made the success factor not relevant again. Generally, the exploitation of the partnership's potential can be limited in cases of external sourcing of standard applications.	■		■	

					Environment			
					External	Internal Firm	Internal IT	Internal ITO Project
Outsourcing Process Phase: Execution Preparation > Selection > Contract > Transition > Execution > Post-deal								
Success Factor Category	**Success Factor**	**Success Factor Rules**	**Success Factor Use Cases**	**Success Factor Description**				
Control	Regular check of market standards	**Regularly check the ITO market standards and, based on this, initiate contract adaptations if necessary**	**Vendor market and market comparison economically feasible**	A regular check of market standards during external execution concerning contract, processes, service metrics and price and, based on this, the initiation of contract adaptations is fundamentally important to ensure the competitive price/performance ratio of the ITO and the competitiveness of the outsourcing company. But this success factor emerged as not relevant in all investigated ITO cases. A market comparison was partly not possible, as a comparable product offer at the market did not exist or as a market comparison was economically not feasible.				
Contract	Contract renegotiation	**Conduct early contract renegotiations**	**Price renegotiation possible**	A regular comparison of the ITO relation with market standards and, based on this, a regular renegotiation of the ITO contract guarantees contract conditions in line with market requirements and is generally to be recommended. Also, in the case of ITO contracts without profit achievement intention (e.g. internal ITO, joint venture), as these vendors strive to set up buffers as well. One exception emerged within the multiple case study, an external ITO with equity holding to a vendor acting within a banking group. Here price negotiation was not possible as all mandators pay the same price.				
Control Dependency between: • Environment • Contract • Control	Risk assessment and risk management	**Carry out an identification and management of ITO risks, depending on the given risk potential**		The documented identification and the management of ITO risks are compulsory for European banks regarding legal regulations. During the ITO for monitoring the risks and risk reduction measures, the extent of the risk management is to be chosen depending on the risk content of the ITO.				

Outsourcing Process Phase: Post-deal

Success Factor Category	Success Factor	Success Factor Rules	Success Factor Use Cases	Success Factor Description	Environment: External	Environment: Internal Firm	Environment: Internal IT	Environment: Internal ITO Project
Client Capability	Business knowledge	**Ensure the application of business knowledge about the business supported by the outsourced IT**		Knowledge about the banking business supported by the IT function to be outsourced is a core competence of the outsourcing bank and, hence, must basically exist there. During the course of the ITO project the business knowledge is to be applied to the advantage of the ITO.		■		
Client Capability	ITO knowledge	**Ensure the application of ITO knowledge**		A mature management capacity with experience and expertise about ITO has to be applied during the course of the ITO to ensure a successful execution of ITO.			■	
Client Capability	IT knowledge outsourced IT function	**Ensure the application of IT knowledge about the outsourced IT function**	**Market comparison not possible**	Generally, the client should have mature management capacity with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings were done. If no market exists, the success factor is relevant. During the course of the ITO project the IT knowledge is to be applied, if necessary, to the advantage of the ITO.			■	
Stakeholder Management	Stakeholder involvement: Technical client staff	**Involve technically competent staff able to control the vendor on a day-to-day basis**	**Market comparison not possible**	Generally, the client should have technically competent staff with experience and expertise about the IT function to be outsourced to be able to evaluate the cost/benefit ratio of the ITO and thus to exercise control over the vendor. This was not seen as necessary if a market comparison in the forefront of the ITO and regular benchmarkings were done. If no market exists, the success factor is relevant. If necessary, the existence of IT knowledge on the client side is to be ensured in the preparation phase (see success factor IT knowledge) and technically competent staff should be involved from the vendor selection phase till the end of the ITO project.				■
Control Dependency between: • Environment • Contract • Control	Risk assessment and risk management	**Carry out an identification and management of ITO risks, depending on the given risk potential**		The documented identification and the management of ITO risks are compulsory for European banks regarding legal regulations. After contract expiry comes the decision whether the ITO with the current vendor is to be continued. The extent of the risk management is to be chosen depending on the risk content of the ITO.	■			■