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Sourcing Strategies in Information Systems Development

*Examining Sourcing Motives in the Financial Sector
from the Resource Based View*

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Abstract

After 20 years of accomplishment Barney discusses in the recent issue of the Journal of Management (JOM, September 2011, 37(4)) the decline or the revitalization of the resource based view (RBV). This thesis gives support for its relevance in the field of sourcing IS-development. Looking into the discipline of IS-sourcing, at first glance it might be seen as a natural part as any other of an organization. However, taking a closer inspection on sourcing in the financial sector we have found that the resources used in IS-development are an important factor for sustained competitive advantage depending on the application of different sourcing modes. Investigating several case organizations from the financial sector we have on the basis of the resource based view analyzed selected IS-sourcing projects and the motive for sourcing as well as if appropriate sourcing strategies are applied. With the starting point from Roy and Aubert's (2000) research and implications on their treatment of IS-sourcing modes, we challenge their study in a way that we are convinced that it needs to be combined with the VRIO framework. Our empirical results confirm that the VRIO framework sheds insight on the diffusion of finding the applied sourcing mode. While analyzing the empirical findings and using the well-grounded theories with the stake from the resource based view, we have theoretically derived the appropriate IS-sourcing mode for each investigated case. The empirical findings revealed that the IS-sourcing model is implicitly applied in practice. However, the extrapolation from the application of the theoretically derived sourcing mode to the success of the sourcing project needs further evidence. Our discussion of IS-sourcing in the financial sector addresses in fact the importance of seeing IS-sourcing as a resource that includes capabilities of high or low strategic value, for gaining sustained competitive advantage. Metaphorically sourcing of IS-development can be seen as a bag that holds resources which form the competitive advantage. Although IS-sourcing strategies from the RBV perspective may seem of concern to only a small group of interest, it should in fact concern any financial organization that cares about keeping competitive on the market. Regarding the empirical findings, this discovery has relevant applications in Roy and Aubert's (2000) research and contribute to the resource based view.

Key words: IS-sourcing, IS-development, Resource based view (RBV), VRIO framework, Strategy, Sustained competitive advantage, Strategic value, Sourcing modes.

To my beloved mother and father

Mirella Muhic

To my family and Anne

Christopher Schulze Wintzler

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1. Introduction

This chapter starts with an overview of our field of investigation - the strategic importance of sourcing information system development in the financial sector. It extends to a description of why this particular field is of interest, from where the research question is stated and its underlying purpose.

1.1. Background

When it comes to the topic of information systems most of us will readily agree that it is an important component of a firm. Yet some readers may challenge the view of information systems being used by organizations in the financial sector such as banks as a strategic tool for gaining competitive advantage. Indeed our own argument is that information systems have a strategic importance in the financial sector and is therefore carefully sourced using tailored strategies.

Nevertheless new research show that computerization and information system (IS) reflect the new powerful uses of computers, for the purpose of information management supporting the achievement of an organization's goals (Davis, 2011; Johansson, 2004). Yet a sober analysis of the matter reveals that the IS and the delivery of strategic systems play a meaningful role in the context of IS-strategy, which should be closely aligned with the overall organizational strategy (Roy & Aubert, 2000).

Although the strategic importance of IS in the financial sector may seem trivial, it is in fact crucial in the terms of today's concern over a rapidly changing market. The strategic importance of IS-development applies abundantly to the financial industry which is characterized by a high degree of IT-supported business processes (Ang & Straub, 1998). Accordingly, business changes always go hand in hand with changes in the information system, in a way that makes IS-development a competitive factor in order to innovate and launch new services and products. Generally speaking, organizations can follow two kinds of strategies to provide the development, maintenance and operation of information systems: internal provision or external provision through suppliers.

The financial sector belongs to the pioneers and early adapters of IS-development due to its characteristic need for automated processes handling high volume data. Therefore, the financial institutions traditionally developed information systems internally. However, due to the standardization and globalization of software development the competition between organizations increases. The internal IT-departments are nowadays facing competitors such as the emerging resources in India or standard software providers like SAP AG (SAP, 2011; Andersen, 2006).



Furthermore, the rapid and structural changes in the business environment due to the globalization of financial markets, technological innovations, and the growing importance of the Internet, likewise increase the demand for a higher degree of flexibility in the IS-development (Buhl et al., 2000).

As Buhl et al. (2000, p.789) notes with respect to the changes on the market in financial services, “innovation is not a choice, but a necessity to survive”. In making this argument flexibility is today a critical organizational competency, which McKinnon et al. (2008, p.1) describes with the following “Strategic flexibility is the firm’s deliberately crafted ability to recognize, assess and act to mitigate threats and exploit opportunities in a dynamically competitive environment”. With this said, flexibility is not seen as an effect of an organization’s activity, but rather an intentional focus of the organization which could be achieved through sourcing.

Gottschalk (2005) discusses what we consider an important point about the drive for sourcing IS-development. He concedes that for instance outsourcing is a strategic decision made by organizations in order to compensate for lost internal resources. This is viewed as a way for the strategic management within the organization to adapt, reconfiguring skills both internal and external, reconfiguring resources and functions in order to get in pace with the changing surrounding environment and the competitive market.

Ultimately, what is at stake here is the motives for sourcing IS-development in the financial sector and associated strategies.

1.2. Problem Area

“As practice has evolved from simple make-or-buy decision to complex contracts and partnerships, sourcing research has endeavoured to maintain relevance” (Balaji & Brown, 2005, p. 1).

What Balaji and Brown (2005) really mean by this is that sourcing strategies in IS-development form solutions for increased flexibility in software development for strategic projects. It follows then, that sourcing strategies are related to the efficiency of software development, which usually can be achieved gaining cost advantages through outsourcing to lower-wage countries. Although, the sourcing strategy has been carefully selected dependent on the strategic goals underlying an IS-development project, the upshot of all this is about the strategic value of the resources and capabilities possessed by the organization. To take a case in point, the organization has to consider the strategic value of its resources and capabilities, and determine at what stage respectively what disciplines of the software development process it wants to hand over the ownership to a third party, the supplier.

Our discussion extends to not only include the technical skills of the IS-development, but also a profound functional understanding of organizational and business processes, since we believe that these in combination are of high importance for the organization to gain competitive

advantage through IS-sourcing. Andersen (2006) highlights as described previously what we consider important in IS-development. He argues that successful development of tailored software solutions depends on a tight customer-supplier relationship that is commonly based on long-term contracts encompassing continuous maintenance and development activities.

Andersen (2006) puts forward how developers gain insight in customer's modus operandi through close interaction with the customers in specifying solutions. These insights into customer's modus operandi are very hard to imitate, as Andersen (2006) elaborates. Following from this, Andersen (2006) emphasizes the limited mobility of programming which he argues depends on clear cut interfaces and comprehensive specification of functionality.



Figure 1.1: The relation between motive for sourcing, sourcing strategy and sourcing mode

The chart above summarizes our research, the process of IS-development sourcing and the strategies behind it. The first box *Motive for sourcing* illustrates the different threats and opportunities that an organization might find as a motives for sourcing IS-development. This could for instance be cost reduction or the lack of skills internally. The motive for sourcing leads to the sourcing strategy, which is the goal with the action of sourcing. This goal could for instance be to gain competitive advantage through improving or reallocating the factors for the motive of sourcing. Moreover, it is accomplished by applying a sourcing strategy where the emphasis is on the resources and capabilities that are of strategic value, which leads to the action of IS-sourcing and the different ways of doing this – sourcing modes. To put it in other words: the motives behind IS-development sourcing and the mode of sourcing is linked to the strategy. The strategy is the central factor that enables a successful sourcing process. The motive for IS-development sourcing acts as a guide or trigger for choosing strategy, which's success is in turn dependent on the applied sourcing mode. In the aim of achieving competitive advantage it is in our opinion crucial to consider all three factors and to stress the strong dependency between them.

1.3. Research Question

How can the motives for sourcing and associated strategies (for IS-development in the financial sector) be explained?

In order to answer the research question we analyze the following:

- 1) Financial institutions' motive for sourcing and what strategies that are applied.
- 2) Consequently, we will investigate if the studied financial institutions have adapted the appropriate strategy for their operated IS-development sourcing according to our theoretical framework.



1.4. Purpose

Outsourcing – sourcing with the help of external resources – as a mode of sourcing has been around for decades as a strategic business tool in various forms and industries. Likewise the academic literature has generated a general understanding why, what, and how firms do sourcing (Lacity et al., 2009a). So far academic literature has focused on the drive for IS-sourcing and the appropriate sourcing mode. Thus, there has been a shortage in the analysis of sourcing and associated strategies, whether they are appropriate or not for the sourcing aim of the financial sector. This is where our study will shed a new light on IS-development sourcing and associated strategies through the resource based view (RBV), which previous studies has not fully addressed. Baaji and Brown (2005) agrees that the RBV has been successfully applied in explaining a firm's outsourcing decisions, something that has supported our use of the theory. So far, using the RBV for explaining sourcing decisions is seen as well founded in literature (Baaji & Brown, 2005). What this new research does, then, is to give a deeper insight in the RBV applied to the IS-development sourcing and associated strategies in the financial sector.

Notification; the terms firm and organization will be used interchangeably throughout the thesis.

To summarize, the purpose of our research is to investigate how IS-sourcing can be used as a strategic tool in the financial sector for gaining competitive advantage.

1.5. Delimitation

In the context of the thesis, sourcing strategies for IS-development is defined in the sense of developing software components which are integral components of the core business of the financial organization. With regards to the service portfolio, the analysis focuses only on IS-development rather than the delegation of the long-term operation of IS.

Furthermore, the research targets the traditional financial sector rather than pure Internet based financial institution or private banking etc. We have consciously chosen to only include larger banks as these are more likely to do sourcing. Lacity et al. (2009), shows evidence for this through the answer to the question of what type of firms are more likely to outsource IT. The authors found that size matters, which supports our delimitation in the choice of banks.

2. Theoretical Foundation

This chapter gives the theoretical base of the research with the resource based view and the related VRIO framework as the central point of focus. In the sourcing strategies for IS-development we shine a light on its different gestalts and dimensions. The gestalt of sourcing depends on the composition of the dimensions namely allocation of control, degree of integration and duration. More specifically the dimensions are factors that characterize the gestalt of sourcing. All together these theories debouche into our theoretical framework from which we derive the four sourcing modes: insourcing, strategic partnership, standardization of commodities, and outsourcing as a service.

2.1. Information System Development

In the thesis the concept information system (IS) development is used. Generally speaking, information systems can be considered in accordance to Davis (2011) who describes it as systems that deliver information and communication services for an organization. The broad definition of information systems does not necessarily relate to information technology (IT) as it can be both (non-) formalized and (non-) automated (Johansson, 2004).

By IS-development we mean the analysis, design, implementation, test and related management capabilities of IT-based systems that support an organization's business processes. We will analyze it from the definition that an IT-based information system is meant as a computer-based system, i.e. a formalized and automated information system. (Johansson, 2004; Nilsson, 2004).

2.2. Resource Based View

The understanding of sourcing decisions can be approached from different theoretical perspectives. Gottschalk (2005) argues that different theories provide different angles on the questions what IT-functions should be outsourced or not. Two of the theories introduced by Gottschalk (2005) are the resource based view (RBV) and the transaction cost theory (TCT) that are both considered as extremely influential in the field of outsourcing (Watjatrakul, 2005; McIvor, 2009). Past sourcing decisions were often driven by cost where the company would outsource its IT if the gained benefit exceeds the transaction cost (Gottschalk, 2005; Lacity et al., 2009a). In contrast to the TCT perspective, the RBV includes the relational view arguing that combining the organization's resources in a unique way holds a source of competitive advantage (McIvor, 2009). We are interested in approaching sourcing from the analysis of the internal resources and how sourcing strategies can be seen as an opportunity to access complementary capabilities to strengthen the internal competitiveness.



The resource based view (RBV) is widely-applied in the context of IT and has been successfully used for explaining an organization's sourcing decision (Baaji & Brown, 2005; Lacity & Willcocks, 2009). Admittedly the reason for specifically applying the RBV is the fact that in order to answer our research question we need to investigate the motives among financial institutions for sourcing and the strategies applied, which we assume is based on an organization's resources. Indeed the role of the organization's resources in the context of sourcing is central for our study in order to find out if the appropriate strategy has been adapted for an IS-sourcing project. That is why the RBV is logical for us to use, it goes into depth on how an organization's resources impact the strategies for competitive advantage.

Barney (2002) refers to the RBV as a framework for analyzing an organization's internal strengths and weaknesses in order to utilize its resources and gain competitive advantage.

The RBV regards the organization's resources as the source of competitive advantage. With this, Barney (1991) substitutes two main assumptions from Porter's five forces model. Porter assumes "that firms within an industry are identical in terms of the strategically relevant resources they control and the strategies they pursue" (Barney, 1991, p.100). Furthermore, Porter's model rests on the assumption that resource heterogeneity will be short lived as the resources are assumed to be perfectly mobile (Barney, 1991). In contrast to this, Barney (1991) expects heterogeneous and immobile organizational resources.

According to the RBV, a resource is considered to be a resource if it is valuable for increasing the efficiency and effectiveness of the organization (Johansson, 2004). In other words, a resource holds the potential to "exploit opportunities and/or neutralize threats in a firm's environment" (Barney, 1991, p.105). A valuable resource has to fulfil three further attributes in order to achieve sustained competitive advantage, namely rareness, imperfect imitability and non-substitutability (Barney, 1991).

According to Barney (1991) an organization gains a competitive advantage only if the value-creating strategy is not copied by a considerable number of competitors. Rareness however can only provide the potential for sustained competitive advantage if the resource is imperfectly imitable due to unique *historical reasons, causal ambiguity or social complexity*. Otherwise the advantage would possibly be neglected through competitive duplication. (Barney, 1991). Furthermore, an organization's resources are considered to be a source of sustained competitive advantage only if there are no "strategically equivalent valuable resources that are themselves either not rare or imitable" (Barney, 1991, p. 111). As Barney (1991) argues, in that case competitors would substitute rare and imperfect imitable resources by its equivalent. Sustained competitive advantage is according to Barney (2002) an advantage that cannot be competed out through imitation. These resources have to be rare, costly to imitate and valuable as well as used with the right strategies.



As seen from figure 2.1 on page 8 Barney (1991) describes *history dependent* as a concept that explains how a specific resource in the organization has been developed due to a certain historic condition. An organization might also gain competitive advantage today from resources developed earlier in history.

Further on, *causal ambiguity* refers to the relationship between resources and competitive advantage. Barney (2002) suggests that it might be the case that there is a lack of understanding of the resources relationship to the competitive advantage. This occurs if the organization for instance takes the resource for granted, there may be multiple thoughts about which resources and capabilities that are of strategic value. Knowledge is a resource that is costly to imitate since it is spread over the employees and at different locations as well as processes of the organization, and is therefore seen as a source of sustained competitive advantage. (Barney, 2002).

Social complexity is the third reason that organizations' resources might be costly to imitate. It concedes that resources and capabilities can be socially complex in a way that is very difficult to duplicate or imitate by other organizations. Such resources of high social complexity could be culture for instance. To take a more illustrative example, the purchase of a new system does not itself provide sustained competitive advantage. Merely, it is the socially complex link between the system and the other parts of the organization that stands for the source of advantage. (Barney, 2002).

In addition, Roy and Aubert (2000) describe how unevenly distributed resources as well as resources hard to substitute or imitate can provide an organization with strategies that are impossible for other organizations to implement or conceive. Basically Roy and Aubert (2000) are saying that effectively used resources help organizations to follow through strategic goals and to reach higher competitiveness. In other words, Roy and Aubert (2000) believe that internal resources are extremely important for consideration before the organizations look outside of the walls for new resources. The essence of the argument is that the already existing resources that an organization owns are a great foundation for future growth and higher competitiveness. The key is to use the internal resources more efficiently which depends on the management of the resources.

However, to fully embrace this potential, the organization has to be organized in terms of organizational culture, teamwork, employee empowerment etc. in order to utilize its resources and capabilities (Barney, 2002). This is where the complementary resources and capabilities are relevant. These components can in combination with other resources and capabilities enable the organization to achieve competitive advantage. But in isolation complementary resources have a very limited ability to achieve the same. (Barney, 2002).

The terminology as Barney (2002) suggests might be a bit confusing due to the fact that in recent work these resources are also called core competencies, a term more used in the implementation of the diversification strategies. Other terms applied are capabilities, which is used

interchangeably with resources even though they are seen as the internal organizational attributes that enable the organization to utilize its resources. In this study we are going to use the terms interchangeably.

As the organization's resources are the source of competitive advantage, it can be concluded that those should be kept or gained internally. The central issue of the RBV is accordingly the identification of such resources. (Johansson, 2004). In general, Barney (1991, p. 101) defines that "firm resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge etc." controlled by the firm which can be classified into three categories: physical capital resources, human capital resources and organizational capital resources. With respect to the concept of RBV, physical capital, human capital and organizational capital is of course regarded only if it is strategically relevant. (Barney, 1991).



Figure 2.1: The relationship between resource heterogeneity and immobility, value, rareness, imperfect imitability, and substitutability, and sustained competitive advantage (Barney, 1991, p. 112)

The resource based view can be applied to the analysis of the relationship between IT and sustained competitive advantage. "The concept of a firm's resources and abilities are defined broadly, and could certainly include the ability of an organization to conceive, implement, and exploit valuable IT applications" (Mata et al., 1995). Here, IT is seen as a leverage for an organization's resources and therefore becomes a potential source of sustained competitive advantage (Mata et al., 1995).

In the context of information systems, Barney (1991) argues that whether or not an IS holds the potential for a sustained competitive advantage depends on the type of IS. He concludes that an IS that is deeply embedded in the organization's decision-making processes is potentially rare, socially complex and therefore imperfectly imitable. However, among the resources and attributes of IS; capital requirements, proprietary technology, technical IT-skills, and managerial IT-skills, it is the management capability that decides whether an IS enables the organization to gain sustained competitive advantage (Johansson, 2004; Mata et al., 1995).

As Barney (2002) puts it, the resources possessed by an organization are only valuable if they increase its revenue compared to if the resources did not exist. Moreover if an organization's resources have been valuable in the past it does not grant that they will always be. Changes in the

business environment and technology for instance can make an organization's resources lose its value. Also, if resources are used as a strategic tool but they do not exploit opportunities or eliminate threats, then these resources are seen as weaknesses. An organization facing this situation could either develop new resources and capabilities, or apply traditional strengths in new ways. Another hard situation for the organization is when the strategies are difficult to implement which Barney (2002) highlights "As long as the cost of strategy implementation is less than the value of strategy implementation, the relative cost of implementing a strategy is more important for competitive advantage than the absolute cost of implementing a strategy." Barney (2002, p. 179). This is where the organization can make two big mistakes when trying to understand the relative costs of implementing a strategy. The first error Barney (2002) presents is the error of overestimating the organization's resources and their uniqueness, which can lead to an overestimation in its potential to achieve competitive advantage. The second big mistake of the organization is to underestimate the uniqueness of its controlled resources, and as an effect of this the organization will underestimate the extent to which its strategies are sources of the competitive advantage.

The resource based view is according to Barney (2002) a great tool for managers of an organization to choose strategies for gaining sustained competitive advantage. Nevertheless, this is only applicable as long as the rules of the market in an industry remain fairly fixed and is displaced in revolutionary environmental changes. (Barney, 2002). Further, it should not be neglected that the RBV is subject of discussion as it is assessed by the article from Kraaijenbrink, Spender, and Groen (Kraaijenbrink et al., 2010).

2.3. VRIO Framework

The RBV gives our research a clear perspective approaching the broad and complex field of IS-sourcing. The RBV is a conceptual theory which is supplemented with a more practical tool for analysis, namely the VRIO framework. More specific, the VRIO framework has evolved from the RBV and is thus a practical framework which is closely linked to its mother theory.

Considering the RBV, the decision of sourcing is driven by the strategic value of the IS and the presence of appropriate resources for the development. Strategic value is here interpreted in terms of a source of (sustained) competitive advantage.

The VRIO framework is used to investigate the strategic value (rare, non-imitable, valuable and organization/non-substitutable) through four leading questions. The application of the VRIO framework will not directly answer whether an organization should insource or outsource. But, it will help us to identify the sources that are of competitive advantage, as well as the sources that are not of competitive advantage of our case organizations, and so the strategic value. Hence, the VRIO framework will indirectly by emphasizing the resources that are of strategic value help us to determine what kind of strategy that is appropriate for the organization's operated IS-development sourcing.

The VRIO framework is derived from the RBV and is applied to analyze the resources and capabilities used for the IS-sourcing project in order to investigate the applied sourcing mode. Barney (2002) demonstrates that by applying the VRIO framework an organization's capabilities and resources as well as resource heterogeneity and resource immobility appear more understandable, in the return of potential with utilizing any of the firm's resources or capabilities. These are the questions from the VRIO framework that the organization has to be asked (Barney, 2002, p. 160):

- 1) **The question of value:** Do an organization's resources and capabilities enable the firm to respond to environmental threats or opportunities?
- 2) **The question of rarity:** Is a resource currently controlled by only a small number of competing firms?
- 3) **The question of inimitability:** Do organizations without a resource face a cost disadvantage in obtaining or developing it?
- 4) **The question of organization:** Are an organization's other policies and procedures organized to support the exploitation of its valuable, rare and costly to imitate resources?

According to Barney (2002), the answers to these questions determine whether a resource or capability of the organization is a strength or weakness. Despite there are limitations of the framework, which refers to its in-elasticity to environmental changes, such as external threats and opportunities.

The VRIO framework is a well-founded framework, which is widely used in combination with the RBV (Barney, 2002). We have used the VRIO framework as a tool for analysis especially in our interview guide. Here in the making of questions we have used the four questions of the VRIO framework as a guide. Our questions are more specific sub questions to the guideline questions of VRIO.

2.4. Sourcing Strategies for IS-Development

In the context of IS-development the literature reveals a multitude of forms of IS-sourcing strategies from different foci, targeting practitioners or the academic discussion. In order to step in the discussion, we give an overview of terms which are often mentioned in the same breath with strategy. Further, our aim is to structurize the different characteristics of outsourcing strategies and then to finally use the dimensions of sourcing by Lee et al. (2004). Following on a brief literature review on sourcing modes, we derive four modes that build the foundation for our research.



2.4.1. Strategy, Goals and Success

Before we can deepen the discussion on strategy options in IS-development, first the relationship between sourcing strategy, organizational goals and the success of the IS-development has to be clarified. In general terms, “strategy guides organizations in their achievement of objectives” (Lee et al., 2004, 111). The assessment whether a strategy is successful or not depends on the extent to which it satisfies the initial goals. With this in mind, Lee et al. (2004) examines how sourcing strategies fit to address dimensions of success. With respect to IS-sourcing Lee et al. (2004) specify that success can be gained in terms of strategic competence, cost efficiency, technology catalysis, business transition, business innovation, and new markets (Lee et al., 2004). The strategic objectives may compete, i.e. focus on one goal likewise defocus another one. Accordingly, different strategies for sourcing address different goals of the organizational success. Thus, choosing a sourcing strategy inherently means a decision for targeting certain strategic goals.

2.4.2. Dimensions of Sourcing

Information system sourcing strategies “consist of the delegation of all or any part of the technical resources, the human resources and the management capabilities associated with providing IT-services to the external vendor” (Balaji & Brown, 2005, p.1). Generally speaking, the provision and use of IT-based products and services underlies general economic principles. First of all, organizations – facing the need for a product or service – have two distinct options, to make it on their own or to buy it in. This fundamental economic concept – known as make or buy (MoB) decision – is associated with the transaction cost theory (TCT), that sees the cost of establishing relationships and the governance associated with sourcing as the driver of the MoB decision. (Johansson 2004; Watjatrakul, 2005).

According to the TCT, by choosing a governance mode organizations seek to minimize transaction costs. In general, TCT distinguishes between external (market) governance and internal governance (Watjatrakul, 2005). Transferred to IS-development, external governance means that the IS-service or product is bought and not fully controlled by the organization, i.e. the organization is dependent on the supplier for development, customization and maintenance. The opposite option is the internal governance where the organization is in the position to develop, customize and maintain the IS independently. In case of buying an IS-service or product the IS-development is externally governed. If the organization decides to make the IS, both external and internal governance is possible. The make-decision furthermore provides the option to use external or internal resources for the IS-development. The usage of external resources is again a buy-in-decision but keeping the governance of the IS-development and the resulting IS. (Johansson, 2004). Here, a further possibility arises, the usage of external resources from a single provider or from multiple providers. The latter option reduces risks embedded in the dependence on one supplier (Baldwin et al., 2001). Furthermore, the usage of external resources can also be distinguished by the location namely off-shore, near-shore and on-side.

In conclusion, figure 2.2 visualizes the relationship between make or buy options with related actions. The original figure of Johansson (2004) has been modified to fit our study.

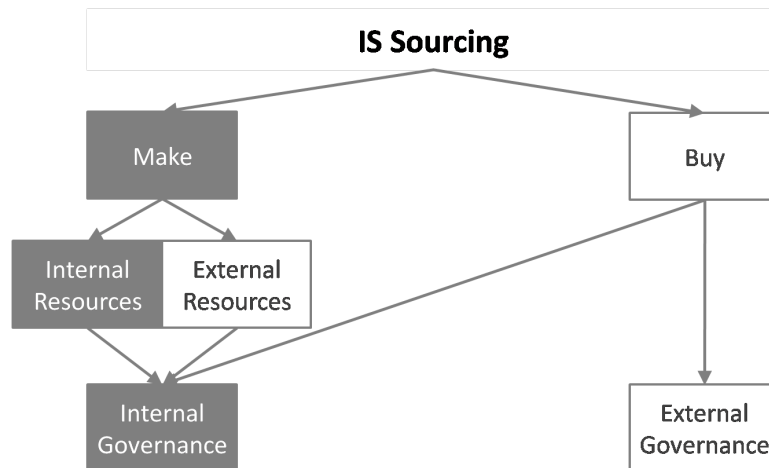


Figure 2.2: IS-sourcing options (Johansson, 2004, p. 42, modified)

Figure 2.2 illustrates how the IS-sourcing strategies can be broken down according to the production level, decision level and control level (Johansson, 2004). However, the practice in IS-development goes beyond simple make-or-buy decision (Balaji & Brown, 2005; Lacity et al., 2009b). For a further categorization IS-sourcing strategies can be classified in strategies with complete internal production, control, and in strategies with some degree of external involvement. Depending on the definition of the term, the latter category can be denoted as outsourcing (King, 2001). Here, the definition of outsourcing follows the perception from Loeff (1998, p. 251) who defines IS-outsourcing as “the situation in which part or all of the IS-activities an organization needs are performed by one or more external suppliers”. Outsourcing could also be understood as the reallocation of already present IS-assets and the associated resources to an external supplier. Here, the transfer of activities that are related to new IS-assets are not implied by the term outsourcing (Lacity et al., 2009a). We follow the perception of Loeff (1998) and define IS-outsourcing as follows:

Outsourcing in the context of IS-development is defined as the act of shifting some or all of the IS-activities to be performed externally by contractual agreement.

After clarifying the terminology, it is fruitful to carry forward the definition of outsourcing in order to deepen the understanding of its varieties. Among the different IS-outsourcing strategies, Lee et al. (2004) identified three dimensions of classification that helps to structure the different characteristics of outsourcing strategies: degree of integration, allocation of control and duration. Even though our modes are merely focused on degree of integration and allocation of control, the three dimensions explored below provide a rich description of the IS-project, which we think is necessary to understand in order to overview the main characteristics of IS-sourcing.

Degree of Integration

Initially, outsourcing can be analysed according to the degree to which outsourcing is used in the organization. Ang and Koh (2011) distinguish outsourcing in the first instance between total outsourcing and selective outsourcing. The concept of total IS-outsourcing refers to the relocation of “the entire IT human resources to the provider in the process” (Ang & Koh, 2011, p. 1) that uses the economies of scale and scope addressing cost advantages. However, the more dominating approach is the concept of selective IS-outsourcing that regards outsourcing as a strategic decision (Ang & Koh, 2011). Here, only IS-activities are considered to be outsourced for which the organization neither assigns a strategic value nor has specific capabilities (Ang & Koh, 2011). In short, in this variant IS-outsourcing is seen as a strategy to access complementary resources and capabilities to inhouse competences while retaining the ownership and control over IS-activities bounded to the organization’s key competences and strategic needs. (Ang & Koh, 2011).

Transferred to the development of IS, this can mean that certain or all disciplines in the software development process are performed by a supplier. The fundamental development activities are requirement analysis and definition, system and software design, implementation and unit test, integration and system test followed by the long-term activities operation and maintenance (Sommerville, 2001). Furthermore, there are supporting disciplines such as configuration and change management and project management. Considering outsourcing for certain disciplines the question arise, at what point in the software development process the ownership and control is handed over to the supplier.

Allocation of Control

In line with the governance criteria of the make-or-buy decision, the allocation of control in outsourcing refers to the control structure in the relationship between the organization and its supplier. Here, Lee et al. (2004) make a distinction between residual rights and specific rights of control. Specific rights are specifically defined in the relationship contract. Residual rights in contrast can not be specified in advance. Consequently, the allocation of control refers to residual rights that can only be exercised by the owner of the IS-asset (Lee et al., 2004).

Lee et al. (2004) introduce three kinds of control structures: buy-in contract, fee-for-service contract and partnerships. The buy-in contract is the hiring of external resources on hourly basis while the organization keeps the residual rights. The fee-for-service contract implies that the residual rights are owned by the supplier as it owns the required resources for the IS-development. The third control structure relies on a partnership between the organization and its supplier where the residual rights are equally shared. The idea behind the concept is the efficient utilization of complementary resources. However, a partnership inherently holds potential difficulties due to competing goals of the organization and the supplier. (Lee et al., 2004).

Duration

The duration refers to the performance period of the IS-development that is basically divided in long term and short-term contracts. Generally speaking, long-term contracts provide the advantage that the initial set up costs are spread over a long period of time. The advantages and disadvantages of long-term contracts for outsourcing can be exemplified by business process outsourcing (BPO) which implies by its nature a long term perspective.

Lacity et al. (2009a) defines BPO as the delegation of executing a client's business processes to a supplier within functions such as human resource management, finance, and accounting. Summarizing from a literature review, Lacity et al. (2009a, p.141) denotes BPO as a potential alternative for "well defined, self-contained, modular, IT-enabled and easily measurable processes". In accordance to this, the recognized, growing standardization of business processes confirms the expected, increasing importance of BPO (Lacity et al., 2009a). However, Lacity et al. (2009a) likewise points out the difficulties with processes that are tightly coupled with IT. Moreover, she (Lacity et al., 2009a) reveals that the success of a BPO not only encompasses cost reduction and quality improvements, but focuses merely on core competences and conclusively the realization of strategic advantages.

2.4.3. Gestalt of Sourcing Strategies

Based on the analysis above it reveals that IS-sourcing can be considered from different dimensions that give specific characteristics to a sourcing strategy. With this in mind, different compositions of IS-sourcing strategies are discussed which are the so called gestalts or as we denote it modes of sourcing.

Considering again all forms of sourcing modes – including the inhouse development – the literature discusses different categorizations of sourcing strategies with confusion about terms that may lead to difficulties for the comparability of research results (Johansson, 2004; Lacity et al., 2009a). Johansson (2004) concludes by referring to Kern et al. (2002) that there are at least four general sourcing strategies; traditional outsourcing, insourcing, buy-in and netsourcing. Advocately, Lacity et al. (2009b) developed for practitioners five sourcing modes namely buy-in, contract out, preferred supplier, preferred contractor, and inhouse. Besides insourcing, Lee et al. (2004) identified three congruent patterns among outsourcing strategies which are termed independent, arm's length and embedded strategies.

Looking deeper into the articles of attention for this study, by Lee et al. (2004), Lacity et al. (2009b), and Kern et al. (2002) we have found the following: Lee et al. (2004) focus only on outsourcing, Kern et al. (2002) includes netsourcing which describes the channel of service provision that is not our field of interest, and Lacity et al. (2009b) has a more practical approach rather than concentrating on the theoretical lens of RBV, which has lead us to mainly consider and apply Roy and Aubert's (2000) article since its point of convergence is pure RBV as a theoretical perspective.



Roy and Aubert (2000) likewise derive four categories with different labels namely partnership, conservation, outsourcing and recuperation. Here, even though there is confusion about both terms in the literature (Lacity et al., 2009b), Roy and Aubert (2000) do not further specify inhouse development, which they denote as conservation and outsourcing. Roy and Aubert (2000) define the sourcing mode recuperation as the strategy to collaborate with potential competitors in order to share the development cost for the IS. That is, the cost sharing can be carried out in two distinct forms; first, the foundation of a separate joint venture, and second, the internal development and later selling of the IS to the competitors. The forth strategy is the partnership with an external supplier. In this variant the strategy seeks to access complementary resources and capabilities to inhouse competences while retaining the ownership and control over IT-activities.

The definition of those terms is vague and needs further explanation. Deploring the tendency that the terms conservation and recuperation themselves are lacking sufficient support in current literature, we have chosen to use the terms *insourcing* instead of conservation and *standardization of commodities* instead of recuperation. The term *standardization of commodities* has been developed on the basis of the discussion in current literature described later in the same titled paragraph. The term *insourcing* has been chosen on the same basis, as it is a more self describing word of what is actually meant by conservation. In addition, we added the word *strategic* to the mode *partnership* in order to emphasize the strategic intention underlying partnership and prevent confusion with the same term used earlier in the thesis. Besides, with respect to the definition of the category outsourcing by Roy and Aubert (2000), the term clashes with the definition applied in our thesis. Accordingly, a joint venture with competitors (recuperation) or a partnership with an external supplier could be understood as an outsourcing strategy. Imploring from this, the label *outsourcing* is in this context not precise enough and misleading.

With regards to the critique mentioned above, the categories from Roy and Aubert (2000) are adjusted to the four alternatives of sourcing strategies; *insourcing*, *standardization of commodities*, *strategic partnership* and *outsourcing as a service*. The driving dimension of sourcing is the degree of control and integration the organization possess for the development of the IS. The duration of the sourcing can be a further attribute within the categories. We will now go into a more detailed definition of the four categories of sourcing strategies that are the foundation for our study:

Insourcing

Basically *insourcing* is the opposite of outsourcing. For the definition of the term, however, there is some confusion in the literature. First, the term could simply mean that the organization performs an activity internally, thereby using internal resources and governance. Alternatively, *insourcing* could mean that external resources are involved but the governance is kept internally. As a third option, *insourcing* is also understood as a strategy that brings back activities in the organization that were previously outsourced. (Lacity et al., 2009b). For the thesis, our perception

of *insourcing* follows the first understanding of the term. As the basic orientation, this understanding stresses the characteristic of inhouse development that the delivery responsibility is claimed internally. As a consequence strategic IS-functionality and its related skills are kept internally as a source of a competitive advantage. Accordingly, we define *insourcing* as the following:

Insourcing is the opposite of outsourcing, i.e. the activity is governed and performed by internal resources. Here, staff augmentation through external resources is only implied in *insourcing* as long as it is driven by the need to increase staff capacity, rather than to replace lack of knowledge.

Table 2.1: *Insourcing in accordance to the dimensions of sourcing*

Dimension	Description
Degree of Integration	Only internal resources except staff augmentation driven by the need to increase staff capacity
Duration	Short-term, long-term
Allocation of Control	Full governance by the organization, residual rights are owned by the organization

Standardization of commodities

Taking the model of Roy and Aubert (2000) as a starting point, this sourcing mode was denoted as recuperation. With this, Roy and Aubert (2000) mean the strategy to collaborate with potential competitors in order to share the development cost for the IS. As Roy and Aubert (2000) elaborate, cost sharing can be carried out in the form of a joint venture or the internal development and later selling of the IS-module to the competitors. Hence, the focus of the sourcing mode lies on the minimization of costs.

The general idea behind the approach is the low strategic value of the specific IS and the internal presence of appropriate resources for the development. Thus, the IS is not seen as a source of a sustained competitive advantage. As a consequence, the IS can be freely shared with competitors without facing a competitive disadvantage or losing a competitive advantage. Actually, quite the opposite is expected by Roy and Aubert (2000) who suggest to use the economies of scale in order to gain a competitive advantage through cost reduction. Once again, adding value to the organization in terms of cost reduction does not necessarily mean being a source of sustained competitive advantage (Mata et al., 1995).

The approach suggested by Roy and Aubert (2000) is supported by Carr (2005) who sees software innovations in general not as a source of sustained competitive advantage as he believes, the trends in the software industry do ensure the commodization and likewise the fast duplication by competitors. In his article *Does Software Matter?* Carr (2005) sees software production as a



subject to extremely strong economies of scale due to the absence of constraints in reproducing and distributing the software once it is written. However, in order to use the resulting cost advantages, economies of scale is inevitably related to standardization as the IS has to fit to all organizations that are supposed to use it.

In this context, standardization is broadly seen in terms of technology, development processes and business processes. Concerning technology standards, Taubner (2005) found a higher concentration on core platforms such as SAP/NetWeaver, IBM/WebSphere, Microsoft/.Net or the Internet as an open network. Furthermore, the progress in the standardization of the software production processes is accelerated by industry standards such as CMMI and ITIL (Taubner, 2005). With respect to the business processes Carr (2005) identified a growing modularisation and standardization of software requirements. This view is partly supported by Jochum (2005) who describes the commoditization of IT as more differentiated regarding the financial industry. Nevertheless, Jochum (2005) confirmed a growing commoditization of financial processes and innovations. One effect of this trend that he describes is the growing importance of self-service terminals and the Internet banking without interaction of bank personnel.

Mainly, the possibility to standardize the requirements for an IS leads to the commoditization of IS and IS-functionality. In this context, recent literature relates to standardization of the term industrialisation of the IS-development. According to Taubner (2005), software industrialization is defined as the development and distribution of software with the help of industrial tools. In an analogy to the automotive industry, Taubner (2005) explains the classic principle of the industrialization as the reduction of the vertical range of manufacturing, i.e. the purchase from specialized supplier rather than proprietary development. To sum up, standardization can be seen as part of the progress in the direction of the industrialization of the IS-development, which comes along with a growing specialization.

In the context of the discussion above, the aspects standardization and specialisations could reveal another option for this sourcing mode. As mentioned before, the major target of the sourcing mode is cost reduction. Furthermore, it can be noted that the internal resources are in competition with external suppliers of the IS-commodity. Consequently, another possibility to share the development cost is the IS-provision of a specialized supplier. As only the cost matter, this supplier may use the economies of scale equally efficient as the two options that Roy and Aubert (2000) described. One example of such a supplier is SAP that is specialized in the development of packaged software modules. If the standard software supplier can provide the same functionality but more cost efficient than the internal production, the organization would decide to purchase from the external supplier rather than use internal resources. In that case, the standardization would lead to the next sourcing mode, *outsourcing as a service*, as no internal resources are involved in the IS-development.

When we say *standardization of commodities*, we include the development process of an IS with focus on the resources that are present internally at an appropriate level.

The *standardization of commodities* means, IS-functionality regarded as commodities are standardized to maximize the effect of the economies of scale respectively minimize the organization's transferred cost for the IS-development. Here, the IS-development is carried out with internal resources whereas the governance may be shared.

Table 2.2: Standardization of commodities in accordance to the dimensions of sourcing

Dimension	Description
Degree of Integration	Internal resources are involved to some extent respectively through a jointed venture
Duration	Short-term, long-term
Allocation of Control	Internal, maybe shared (joint venture)

Strategic partnerships

Is the activity strategic but not a competence of the resources the company has in its possession, then a partnership with an external supplier is an appropriate sourcing strategy (Roy & Aubert, 2000). In line with Roy and Aubert (2000), the main goal of the sourcing mode is to access complementary resources and capabilities to inhouse competences while retaining the ownership and control over IS-activities. The potential dependency on the supplier knowledge is addressed through mixed teams where the internal personnel gradually gains knowledge and takes over responsibility (Roy & Aubert, 2000). This sourcing mode is in accordance to Roy and Aubert (2000), nevertheless, we added the word *strategic* in order to stress the strategic intention underlying the partnership. In line with Roy and Aubert (2000) we define the sourcing mode as follows:

A *strategic partnership* aims to gain access to complementary resources and capabilities that are not present internally. Herewith, the organization retains the ownership and control over the IS-project that is linked to the organization's strategic needs. (Roy & Aubert, 2000).

Table 2.3: Strategic partnership in accordance to the dimensions of sourcing

Dimension	Description
Degree of Integration	Internal and external resources
Duration	Short-term, long-term
Allocation of Control	Full governance by the organization, residual rights are owned by the organization

Outsourcing as a service

Roy and Aubert (2000) labelled this sourcing mode as outsourcing. Due to different definitions of the term outsourcing underlying this study, the sourcing mode was renamed to *outsourcing as a service* in order to stress the form of outsourcing which is meant here.

The Chambers Encyclopaedia English Dictionary (Allen, 1994, p. 1142) defines the general term service as “work performed for or on behalf of others”. Comparing a service to a product, there is no clear cut distinction in the literature (Lewis, 2011b). Although, with regards to IS-development, service implies the development process of an IS independently by an external supplier. Whereas, the delivery of the service finally results in a product, it does not necessarily mean that service provision inhibits the outcome of the development process which can be denoted a product. Furthermore, as the supplier owns the required resources for the IS-development the residual rights are also controlled on the supplier side till the service delivery (Lee et al., 2004). It has to be noted the maintenance of the IS is likely carried out by the external supplier as the organization minimize the control and involved resources.

The customer is involved in the service delivery process in terms of the requirement specification which allows some control on the customer side (Lewis, 2011a). However, in this mode the customer has the least control among the sourcing modes. In return, the client does use a minimum of its own resources and pays only a fee for the service that was actually used. Conclusively, the client neither own appropriate resources nor wants to develop competences related to the development of the IS. In the long run, the organization does not assign a strategic value to the IS.

Outsourcing as a service implies that the residual rights are owned by the supplier during the delivery process as it own the required resources for the IS-development. The responsibility for delivery is exclusively on the part of the external supplier, i.e. no governance on the client side during the delivery process but at the acceptance test.

Table 2.4: *Outsourcing as a service in accordance to the dimensions of sourcing*

Dimension	Description
Degree of Integration	External resources
Duration	Long-term
Allocation of Control	Full governance by the supplier, residual rights are owned by the supplier during the delivery process

2.5. Application of the Theoretical Frameworks

Embraced as the foundation of our study, the categories from Roy and Aubert (2000) are adjusted to the four alternatives of sourcing; *insourcing*, *strategic partnership*, *standardization of commodities*, and *outsourcing as a service*. In the upcoming chapter, we introduce the IS-sourcing model from Roy and Aubert (2000) and link it to the four modes as our theoretical framework. Using the four sourcing modes derived, we state the implicit propositions from Roy and Aubert (2000) explicitly.

2.5.1. Summary of the Applied Theoretical Frameworks

To this day, the RBV matured to a widely-applied theory in the context of IT (Lacity & Willcocks, 2009). Using the RBV as a framework, Roy and Aubert (2000) extended the model from Barney (1991) to explain organization's sourcing decisions for IS-development. What Roy and Aubert (2000) really did was that they developed a model to gain a better understanding of the factors that determines whether to keep the IS-development inside the organization or outsource to a third party. Beyond the simple question regarding the usage of internal and external resources, Roy and Aubert (2000) developed a further distinction between four modes of sourcing namely conservation, recuperation, partnership, and outsourcing.

Using the RBV, Roy and Aubert (2000) derived two main factors that drive the sourcing decisions in relation to the firm's resources; the presence of appropriate resources and the strategic value of those resources. The RBV postulates the effective usage of the internal resources for the strategic objectives of the firm. In the context of IS-development, Roy and Aubert (2000) identified that these two factors are driving the effective usage of resources and consequently the strategic decision of the organization.

The strategic value of the firm's resources is represented by the relation between the value of the IS and the resources' contribution to its development. Thus, the resources the firm has in its possession can only be measured indirectly by the value of the IS. (Roy & Aubert, 2000).

Referring to the basic concept of this model we have derived our model with some variations in emphasis and formulations which is discussed in the following section.

2.5.2. Our Theoretical Framework

Applying the RBV to the IS-development, the dependent variable in the analysis is the mode of sourcing IS-development whereas the explanatory, independent variables are the resources the organization has in its possession. Accordingly, the selection of a sourcing mode is associated with the strategic value and availability of appropriate resources. Initially, the terms appropriate resources and strategic value are defined in the context of information systems development since these concepts built the foundation of the theoretical framework.



Strategic value

With regards to a development project of an IS, the decision whether the development activities respectively the needed resources hold a strategic value depends on the strategic value of the resulting IS. Thus, the organization's resources can only be measured indirectly. As Roy and Aubert (2000) argue, the contribution of an employee can only be measured in relation to the value of the IS, i.e. the activity that is performed becomes tangible when the outcome of it is measured. Roy and Aubert (2000) describe this with the example of a singer's talent which can not be measured directly but through the resulting artistic act: "This value becomes tangible (and measurable) when the fans agree to pay for a copy of the songs or to attend a show" (2000, p. 3). The lower the strategic value of the certain activity and the related expertise of the IS-development, the more the company is willing to outsource this activity. Conversely, the higher the strategic value of the certain activity, the more the organization is willing to preserve or acquire the expertise internally. (Roy & Aubert, 2000).

However, a resource may contribute to a strategic goal and organizational success – such as cost reduction – without being a source of sustained competitive advantage: "IT adding value to a firm – by reducing cost and/or increasing revenue – is not the same as IT being a source of sustained competitive advantage for a firm" (Mata, 1995, p.488). In comparison to Roy and Aubert (2000) we want to specify the quantification of the strategic value in accordance to the VRIO framework developed by Barney (2002). Following from our perception of this, a resource holds a high strategic value only if it is potentially a source of temporary or sustained competitive advantage. On the contrary a resource holds a low strategic value if it is potentially a source of competitive parity. Further, it is expected that the IS-development project is only carried out, if it is to some extent valuable, i.e. sources of competitive disadvantage are not considered.

Organization's resources

Subsequent to the evaluation of the strategic value of the IS, the question of whether appropriate resources are available internally is examined. According to the RBV, organizations are seen as the sum of its resources (Johansson, 2004). In general, Barney (1991) defines that organizational resources are categorized in human capital, organizational capital and physical capital that is controlled by the firm and allows the firm to use strategically for increasing its efficiency and effectiveness. Applied to the attributes of IT and its ability to generate sustained competitive advantage, resources can be narrowed down to financial capital, proprietary technology, and managerial IT-skills together with technical IT-skills of the human capital (Mata et al., 1995). In the context of IS-development, the term appropriate resources refers to availability of financial capital, technology and especially the competence of the employees. Indeed the competence of the employees is knowledge, which is a significant driving factor in IS-development. The less the company's resources own appropriate expertise, the more the company will seek to overcome the knowledge gap by accessing external, complementary resources and capabilities. Conversely, the more the company's resources possess appropriate expertise, the more the company will seek to max out this competence (Roy & Aubert, 2000).

According to the discussion above, the two main questions that drive the sourcing decisions for IS-development in relation to the organization's resources are the following (Roy & Aubert, 2000):

- *Do the resources used in the IS-development activities hold a strategic value for the organization?*
- *Are the resources needed for the IS-development activities present at a sufficient level internally?*

In line with Roy and Aubert (2000) these two forces are expected to compete against each other and are therefore subject of negotiation. In a general way, a model with four main areas results from the combination of the factors availability of appropriate resources and the strategic value of those resources. Depending on the constellation, it is believed that one of the sourcing mode defined earlier – *insourcing*, *strategic partnership*, *standardization of commodities*, and *outsourcing as a service* – is appropriate. From this perspective the following propositions can be derived which are stated in the article of Roy and Aubert (2000) implicitly and outlined here in our own words explicitly:

Strategic Value	High	Strategic partnership <i>(proposition 2)</i>	Insourcing <i>(proposition 1)</i>
	Low	Outsourcing as a service <i>(proposition 4)</i>	Standardization of commodities <i>(proposition 3)</i>
		Low	High
		Presence of appropriate resources	

Figure 2.3: Modified IS-sourcing model from Roy and Aubert (2000, p. 3, modified)

Proposition 1: Insourcing

If the resources used in IS-development activities hold a high strategic value and appropriate resources are available internally, then the IS-development is done inhouse

Is the IS-development of high strategic value and a competence of the resources the firm has in its possession, then a sourcing strategy is appropriate that keeps the IS-development and the related resources inhouse (Roy & Aubert, 2000). The overall focus of the sourcing strategy is to gain a sustained competitive advantage by internal resources.

Proposition 2: Strategic Partnership

If the resources used in IS-development activities hold a high strategic value and appropriate resources are not available internally, then the IS-development is done in a partnership

Is the IS-development activity of a high strategic value but not a competence of the resources the company has in its possession then a partnership with an external supplier is an appropriate sourcing strategy (Roy & Aubert, 2000). The main goal of the sourcing strategy is to gain knowledge through the partnership and keep tight control due to the potential dependency on the supplier. The overall focus of the sourcing strategy is to gain a sustained competitive advantage by complementary, external resources.

Proposition 3: Standardization of Commodities

If the resources used in IS-development activities hold a low strategic value and appropriate resources are available internally, then the IS-development conducts the standardization of commodities

Is the IS-development of low strategic value but a competence of the resources the company has in its possession, then a sourcing strategy is appropriate that is based on standardization and sharing the cost for the IS with competitors or other interested parties (Roy & Aubert, 2000). The internal resources could be utilized in a jointed venture or the activity is produced internally and sold to interested parties. The main goal of the sourcing strategy is to recuperate some of the investments that are made for the activity (Roy & Aubert, 2000). The overall focus of the sourcing strategy is cost reduction through standardization and the utilization of the economies of scale.

Proposition 4: Outsourcing as a Service

If the resources used in IS-development activities hold a low strategic value and appropriate resources are not available internally, then the IS-development is acquired as a service

Is the IS-development of low strategic value and not a competence of the resources the company has in its possession, then a sourcing strategy is appropriate that is based on the provision of IS-development as a service by an external provider. The overall focus of the sourcing strategy is cost reduction and cutting management overhead.

3. Research Methods

In the following chapter we will describe the methodology of conducting our research starting from the data collection via interviews, to the analysis taking into consideration quality aspects namely ethical issues, reliability, validity and generalization of the conducted empirical data.

3.1. Method Choice

The starting point for differentiating among research methods is the identification of the type of research question that is investigated. Hereby the question types what, who and where are predictive in nature whereas how and why have an explanatory character. (Yin, 2003).

When arguing we have chosen to use four propositions derived from the RBV and our theoretical framework. However, the research likewise gives the space to reveal new aspects of IS-development sourcing decisions next to RBV.

The data collection has been done using semi-structured interviews. We have chosen to investigate sourcing projects in the banking sectors since they are appropriate for our research. The investigation of each case gives evidence about the applicability of the model developed in our theoretical framework and its predictive power. The cases are real cases from financial organizations which is the industry that we are interested in. Here, we are focusing on banks in the Swedish and German markets as these are the most accessible ones for us. The factor where the bank is located in Europe is not specifically subject to our analysis. In total four banks, three from Sweden and one from Germany were investigated.

3.2. Data Collection

In this study, the academic foundation is built mainly on interviews with persons in the upper management in charge of a certain outsourcing projects or responsible for the strategic sourcing decisions in the organization. In addition, publicly available sources such as annual reports, interviews with the organization's CEOs in journals, and project documentation are considered in order to provide a rich description of the case setting. A general issue arises from the strategic level of the information the study is investigating. The access to this information as well as the allowance to use, cite and consequently publish the information involves a risk for the collaborating companies that may overbalance the benefits gained from the investigation.

In order to address potential reservations on the part of participating companies, we provided the opportunity to anonymize the interviewees and organizational names, as this information does not add additional value to the study.



The reason behind using semi-structured interviews, is because it is more open and gives the interviewee space to answer, as well as a chance for the interviewer to ask follow up questions or jump between the questions in pace with the interview process. In our opinion, this is the most appropriate way of interviewing for our study due to the fact that semi-structured interviews open up for more or deeper discussions and hopefully as much relevant information as possible. (Kvale & Brinkmann, 2009). Another argument for using semi-structured interviews is that our study strives for answers regarding specific organizations' strategy which might be sensitive to reveal too much about, and therefore the flexibility and openness of a semi-structured interview is fitting.

Summarizing, compared to other sources of evidence (documentation, archival records etc.) the interviews focused directly on the subject we are focusing on and provide insightful and comprehensive information. However, as Yin (2003) stresses, potential bias and inaccuracies may arise due to poorly constructed questions. Furthermore, Yin (2003) suggests using multiple sources in order to achieve stronger evidence through triangulation. In our case, the necessary information is of strategic value so that it limits the access to supporting documents.

However, from our point of view, the insightful source for investigating sourcing strategies in IS-development is the person in charge of the organization's IT respectively sourcing strategy. According to this, we have chosen interviewees who are in charge of the sourcing strategies within the organization.

3.2.1. Thematizing

The aim of our research is to analyze financial institutions' motive for sourcing and what strategies that are applied. Consequently, we will investigate if the studied financial institutions have adopted an appropriate strategy for their operating IS-development sourcing. This will be done through the application of the RBV including the VRIO framework and the model of IS-sourcing derived in sub-chapter 2.5.

Sourcing alone is not interesting without the associated strategies. Sourcing and the associated strategies are in our view dependent on each other – a specific type of strategy (goals) has a related appropriate sourcing mode. We want to know what kind of sourcing that the organizations apply and the underlying strategies. The questions concerning the applied sourcing strategy try to give a rich picture of its characteristics in terms of degree of integration, the allocation of control and the duration of the IS-project. Secondly, the interview tries to investigate the underlying strategy, i.e. why a certain sourcing mode is applied. Based on this, we will then compare our observations to the recommendations derived from the theories. The applied sourcing mode and the strategy can be evaluated whether it is in line with the IS sourcing model derived from the RBV. Here, the leading questions regard the strategic value of the IS-development, and if the resources and capabilities that the organization possesses are appropriate according to the RBV.

Whether a resource or capability is a strength or a weakness the tool used to analyze this is the VRIO framework developed by Barney (2002). Moreover the VRIO framework is composed from the resource characteristics: value, rarity, imperfect imitability and organization. Organization alludes to non-substitutability, organizational specificities that cannot be substituted; internal policies, values, knowledge. This characteristic of a strategic resource refers to complementary capabilities, which in isolation have a very limited ability to achieve competitive advantage, but is crucial for the exploitation of a rare, valuable, and imperfect imitable resource. Notice that the term resource and capability are used interchangeably in line with what Barney (2002) the founder of the RBV does.

3.2.2. Design of the Interview Guide

Kvale and Brinkmann (2009) claim that good interview questions should address both, knowledge production and provide a good interview interaction. Having this in mind, we developed an interview guide that led us through the interview, knowing that fact that the interview researcher is his or her own research tool (Kvale & Brinkmann, 2009). The questions of our interview guide are structured in four parts; the general perception of IS-sourcing in the financial sector, the characteristics of the IS-sourcing projects, the underlying motives for sourcing, and questions concerning the presence of appropriate resources used for the development and its strategic value. The introduction question seeks to investigate the perception of the interview in order to test the assumptions underlying implicitly this study. The second part is organized in accordance with the dimensions of sourcing; degree of integration, duration and allocation of control that characterize the sourcing project. The following part gives the opportunity to the interviewee to argue the motives underlying the sourcing project independently to the RBV. The last part follows the four leading questions of the VRIO framework that guide through the questions in order to investigate the value, rareness, non-imitability and organisation's exploration. The complete structure of the interview guide is as follows (see appendix 7.1):

- IS-development in the financial sector
- Characteristics of the IS-sourcing project
 - Degree of integration
 - Duration
 - Allocation of control
- The strategic value of the IS-sourcing project/ presence of appropriate resources
 - Motives for sourcing
 - Question of value
 - Question of rarity
 - Question of inimitability
 - Question of organization

We believe that by applying these frameworks or tools to our interview guide we will have a more organized interview targeting specific questions that are crucial for answering our hypothesis. Each and every question written was thoroughly discussed to fit both the empiric and to be in line with the RBV and the related VRIO framework.

3.2.3. Interviewing

In the process of finding the interviewees that are in the right position for our empiric study, we listed all larger banks in Denmark, Germany and Sweden, and made calls to them. On the phone we were patched through many instances, asking for the professional heading the organization's IS-sourcing strategies respectively decisions.

As preparation for the interviews we conducted pre-interviews with two of the banks that we are investigating. Permission was given for recording and transcribing only one of the pre-interviews (see appendix 7.7). In that way these interviewees helped us to find potential cases we could investigate. Likewise we got the first impression from the organizations and their overall IT-strategy. Consequently, the two interviewees became informants who helped us to grasp the subject. The actual data collection has been done with four interviewees all in leading positions concerning IS-sourcing decisions. A brief overview of the interviews is presented in the table below:

Table 3.1: Overview of Interviews

Bank	Position	Interview		
		Duration	Date	Type
NEBank	Manager of strategic partnership (IT-solutions)	45 min	May 9 th , 2011	Skype
V&R Bank/GAD	Head of the development infrastructure	2 h	May 3 rd , 2011	Face-to-face
TKBank	Head of sourcing and vendor management	46 min	May 10 th , 2011	Skype
SHBank	Head of sourcing IT-development	1 h	May 16 th , 2011	Skype

The process of interviewing commenced by informing the selected interviewees about the interview, and sending them the interview questions well in advance so that they could prepare. If the interviewees had any questions about the interview process they were more than welcome to contact us. Some of the interviews were conducted on a physical meeting at the company offices, in particular the meetings with the financial sector in Germany. The interviews in Germany were done in German through translation of questions during the interview. The interviews with the Swedish banking sector were all conducted via a telephone conference using Skype. The reason for this is that the Swedish financial sectors all have their headquarters in Stockholm and it was therefore more convenient to arrange and when necessary more flexible to reschedule the meetings.

Even though we had the interview guide in front of us during the interviews, we did not strictly hold the questions in a chronological manner. We tried rather to adapt to the interviewee and ask follow up questions on their answers to get as much information as possible, while simultaneously directing the interview in the right direction so that we could tick off all our questions in the interview guide. The categorization of themes in the interview guide gave us an overview and helped us to quickly grasp the matters that we had or had not covered during the interview process. In this way we did not have to worry about missing to ask a particular question, as we could tick off the questions along the process and still maintain a flowing interview with the character of a discussion.

3.3. Data Analysis

Kvale and Brinkmann (2009, p. 191) remarks, that you should not “pose the question of ‘how’ to analyze interviews before the answers to the ‘what’ and the ‘why’ of an investigation have been given”. In the chronological order we want to answer the following questions which are mirrored in the interview structure:

- What is the interviewee’s general perception of IS-sourcing in the financial industry?
- What sourcing mode is applied for the investigated IS-sourcing project?
- What are the motives for sourcing underlying the investigated IS-sourcing project?
- What sourcing mode should have been applied in accordance to the RBV based on the organizations’ own valuation of resources?

Following the wheel of science (Babbie, 2010), we want to test the predictive power of the propositions derived from the theoretical framework. In addition, the empirical findings either support the generalization of the applied theoretical framework or reveal argumentative gaps explaining the sourcing practice in the financial sector that may be the foundation for further studies enriching the attempt to explain IS-development sourcing strategies.

During the data analysis we considered the six steps of analysis that Kvale and Brinkmann (2009, p.195) introduce whereby the following sub-chapter focus on the fourth and fifth step, i.e. the analysis of the recording by transcription and the review of the transcript by the interviewee. The sixth step, the reaction of the interviewee on the insights revealed by the research could be a follow up step after handing out the thesis to the interviewees. However, this is not covered in this thesis.

3.3.1. Transcription of Interviews

The interviews were partly conducted in a face-to-face conversation as well as telephone conference via voice over IP (Skype). The recording was done with the help of a freeware recording tool (No23 Recorder) and a dictaphone as a backup at the same time. The transcription of the interviews leads to the abstraction from tone and body language. Transcribing means

transforming the interviews, which is in itself already the initial step of the analytic process. (Kvale & Brinkmann, 2009). The transcribing process was carried out by both of us so that we could learn from each interview from the reflection of our interviewing style. In general, the recordings were transcribed word by word to the extent that the transcription is readable. As Kvale and Brinkmann (2009) suggest, for sending back the transcription to the interviewee it should be considered to render the text in a slightly more fluent way. Regarding the intended use of the transcription, this is a reasonable approach as there is any linguistic analysis conducted.

Further, ethical issues, reliability and validity aspects related to the transcription of interviews are discussed in the same-titled sub-chapters.

3.3.2. Coding of the Transcription

The coding system applied to our transcripts was developed before the interview was conducted in accordance to Kvale and Brinkmann (2009, p.190) who comment, “Never pose the question of how to analyze transcripts after the interviews have been conducted”. In fact the way of coding is already leading the construction of the interview guide. Starting with investigating characteristics of the IS-sourcing project the guide uses the dimensions of sourcing to structure the description of the case. Subsequently, the interview guide goes over to exploit the organization’s resources which are guided by the VRIO framework. Derived from this, we used the pattern (see table 6) that is developed by Barney (2002) to conclude the competitive and economic implications following from the resources involved in the IS-development. Consequently, the applied coding is concept driven and breaks down the large interview text to the key statements. First, the key statements in the transcripts were marked in green. Then, they were categorized and condensed in the tables 6 and table 17 in chapter 7.2. With this, we have improved the approach that was applied by Roy and Aubert (2000) with a clearly structured method of investigating the strategic value of the resources used in the IS-development.

Table 3.2: The VRIO framework (Barney, 2002, p. 173)

Is a resource or capability ...		Costly to imitate?	Exploited by organization?	Competitive Implication	Economic performance
Valuable?	Rare?				
No	----	----	No	Competitive disadvantage	Below normal
Yes	No	----	↑ ↓	Competitive parity	Normal
Yes	Yes	No		Temporary competitive advantage	Above normal
Yes	Yes	Yes	Yes	Sustained competitive advantage	Above normal

First, it has to be noted that the quantification of the strategic value is based on the interviewees' evaluation of the resources. It is not our goal to investigate objectively the organization's resources rather than to test whether the theoretical model explains the sourcing motives underlying the IS-sourcing project. Following from that, the interview provides insights in the internal resources or capabilities before entering the IS-development project with regards to its value, rareness, inimitability and the organization's exploitation. The value of the resources are measured indirectly by the value of the IS itself.

3.4. Ethical Issues

Ethical issues can arise on each research stage during thematizing, designing, interviewing, transcription, analysis, verification as well as reporting (Kvale & Brinkmann, 2009). Kvale and Brinkmann (2009) stress the role of the researcher and his relation to the participant of the research as critical for understanding "powers and vulnerabilities that are in play in particular situations" in order to deal with potentially resulting ethical problems. Accordingly, becoming an ethical responsible researcher is not done by learning rules rather than "learning to see and judge" and "knowing the good practices of the trade" (Kvale & Brinkmann, 2009, p. 79).

Being concerned with the ethical issues arising from interviewing we attempt to develop and improve our skills while conducting the research.

In particular ethical issues can arise due to recording what the interviewee says and the later usage of the recording. In order to address these issues, first of all, the interview guide was sent to the interviewee in advance in order to provide the possibility to prepare for the interview. Secondly, we ensured that the interviewees were asked beforehand whether they do agree that we record the interview. Thirdly, the interviewee was asked which names and information has to be anonymized in the transcript. Finally, for all interviews it was agreed that the transcript is sent to the interviewee for a review. The review gives the interviewee the possibility to check one more time the correct transcription of the content and search for confidential information that may have to be anonymized. Furthermore, the interviewee was particularly encouraged to add further explanation. As it is not the goal to record a certain snapshot it is in our very best interest to get an as rich answer as possible to the questions. The feedback from our interviewees included however only minor corrections due to technically caused misunderstandings, which were accordingly corrected.

3.5. Research Validity and Reliability

When it comes to the quality of qualitative research mostly validity, reliability, and repeatability are mentioned. However, there is no clear definition how to measure quality of qualitative research which conversely does not imply that quality and quality insurance does not matter (Seale, 1999). Regarding our scientific investigation we attempted to achieve high reliability through a clearly structured approach in defining our research question and the following interview questions. Indeed, the definiteness of the interpretations is supported by a rich



description of the underlying terminology in the thesis and the investigated cases so that the reliability of the empirical findings is sufficiently supported.

The validity of the research can be broken down to *internal, external and measurement validity*. The research is driven by the two main questions concerning the inhouse competences of the resources the organization has in its possession and the strategic value of those resources.

The measuring of the investigated variables (operationalization) was carried out according to the VRIO framework which breaks the RBV down to the indicators of the strategic value. Furthermore, the characteristics of a sourcing mode are classified according to the dimensions defined by Lee et al. (2004). Structured as this, the operationalization of the indicators for the applied theoretical framework follows a clear approach in order to test the stated propositions.

Factors that may compromise the *internal validity* could be found in the setting of the organization or sourcing project that is investigated. In order to reduce the complexity of the case setting we have decided to investigate only the financial industry and in particular banks operating in Europe. However, investigating sourcing strategies in practice inevitable comes along with undesired stimulus which can affect the dependent variable, the sourcing mode. Certainly, the only way to get the influencing factors under control is the rich description of the case setting that helps to identify and explain certain influences.

External validity is about the generalizability of the causal propositions that are derived from the scientific investigation (Seale, 1999). In line with Kvale and Brinkmann (2009) it can be stated that the specific number of interviews that has to be conducted in order to achieve a sufficient level of validity can not be defined without considering the context of the research. In consideration of the answers' detail level, we decided that four interviews were appropriate to gain sufficient support to answer the research question. As Kvale and Brinkmann (2009) argue, here the researcher is facing the conflict between penetrating analyses of the interview and increasing the number of subjects to be investigated. Furthermore, our investigation can be seen in the context of other research based on RBV in the field of IS-sourcing. However, regarding the given time frame, further research is needed to achieve external reliability.

Moreover, we sent back the transcripts of each interview to the respective interviewee in order to give a chance to review what was said. Here, the interviewees are asked to check the content of what is said, eventual confidential information as well as add information that may be missing. The review of the transcription addresses the member validation to establish credibility of the research account (Seale, 1999). As mentioned before, a weakness of the research is the missing triangulation in terms of Seale's (1999) dimension of triangulation (data, investigator, theory and methodology) that could have enriched the understanding of the research settings. As mentioned above, confidential supporting documents were available but not allowed to be considered in this thesis.

4. Empirical Findings

This chapter examines the empirical findings of the conducted study and presents them in detail. Firstly the case organizations are introduced from where we give a detailed description of the interview results, and then an overview of the same in a summarizing table.

4.1. Case Organizations

The conducted empirical study is based on the analysis of four cases in the financial sector that are introduced here in depth in order to achieve a rich description of the case organizations. As desired from the interviewees three out of four case organizations are anonymized.

4.1.1. North European Bank

The Northern European Bank (NEBank) is one of the largest financial concerns in Europe. NEBank has the largest Internet bank in the world with ca. 6 million users, and 260 million transactions each year. The business has about 12 million bank clients and about 30 000 employees. In 2010 closing of the books NEBank had a turnover of ca. 9 billion Euro, a profit of approx. 3 billion Euro and assets of ca. 600 billion Euro. (NEBank, 2011). The market value of NEBank is ca. 40 billion Euro (NEBank, 2011).

NEBank is present in 19 countries all over the world providing full service to their clients as well as representative offices. (NEBank, 2011).

NEBank consists of a number of divisions in which one of these provides the IT-services and is further divided into systems that support the bank. For instance the application development services and application maintenance services and operation services that are connected to the finance systems. (Transcript pre-interview NEBank, Appendix 7.7).

When sourcing NEBank mainly uses external vendors that have resources, both locally on shore and offshore. The internal resources are linked to the software architecture and the design which require a profound understanding of these elements, while the production, testing and developing is linked to the external resources offshore. Usually the global vendor is from India or Nordic resources. The inhouse software development expertise in NEBank consists of 60 persons and 12 project managers that manage the complex outsourcing set up. The internal competencies are software architecture, solution ownership, and responsibility for the different applications in NEBank. The maintenance services are sourced to the global vendor. There are two outsourcing vendors; one that is responsible for the overall infrastructure in the bank and another that is responsible for the application maintenance and development. (Transcript pre-interview NEBank,



Appendix 7.7). NEBank's vision is to create high customer and shareholder value on the European market (NEBank, 2011).

The informants/interviewees

The interviewee of the pre-interview (see Appendix 7.7) is head of the IT-finance at NEBank. He has lead many software development outsourcing projects and has expertise knowledge within the field. His area is related to application development services, application maintenance services and operation services connected to the finance systems. The interviewee for the specific case is Mr. Norman, manager of strategic partnerships in NEBank's IT-solutions department.

4.1.2. Volks & Raiffeisenbanken/GAD

Besides the private banks and savings banks governed by public law, the cooperative banks represent on of the three pillars in the sector for the universal banks in Germany. The IT infrastructure within the union of cooperative banks (Genossenschaftsbanken) is outsourced to two main IT companies GAD eG and Fiducia AG. Integrated in the cooperative union, the IT-companies' purpose is the provision of full range services to over 1000 Volks & Raiffeisenbanken (V&R Bank), and the central banks DZ Bank AG and WGZ Bank AG. With ca. 30 million clients, together the cooperative union achieved total assets of 995 billion Euro in 2007 (wikipedia, 2011; Rösler, 2008). The GAD provides a core-banking solution that covers all processes in the field of traditional banking business. With its 1600 employees, the GAD defines its key competence in the development and operation of high quality core-banking solutions (ca. 900 employees) as well as the provision of outsourcing services. The GAD, however, is only allowed to enter engagements with members of the cooperative union. According to the annual report of 2009, the GAD achieved total revenue of 382 million Euro. According to an interview with the CEO, the GAD expect a decreasing trend regarding the medium-term IT-budgets in the banking sector so that one of the defined strategic goals of the GAD is to enable their clients to consolidate their total IT-cost. (GAD eG, 2009; Hackmann & Prehl, 2008).

GAD vision can be translated as follows:

“Through a continuous exchange of views with the banks we identify their needs and provide appropriate IT solutions. These are led by innovative thinking, future-oriented and of the highest quality”. (translated by google.translator from GAD, 2011).

Note for enhanced readability we will from now on refer to the Volks & Raiffeisenbanken/GAD as GAD.

Interview partner

The interview partner, Mr. Berger, is head of the development infrastructure at the GAD eG and responsible for the strategic decisions regarding IS-development sourcing in the GAD. He looks back on over 35 years of work experience in the industry of financial services.

4.1.3. Stockholm Bank

Stockholm Bank (SHBank) is a leading financial institution in Scandinavia with an international presence offering full banking service. It has over 17 000 employees, 5 million private customers and 2500 large companies as well as financial institution customers, and 400 000 small to middle size enterprises as customers. (Stockholm Bank, 2011). In 2011 March 31st SH's Bank total assets were worth ca. SEK 2 billion, the total equity was ca. SEK 100 million and its operating profit was ca. SEK 11 million. (Stockholm Bank, 2011). SHBank stands for rewarding long-term customer relationships through innovative approaches. (Stockholm Bank, 2011). SH's Bank vision is to earn the trust as a partner of its customers to achieve their goals and ambitions (Stockholm Bank, 2011).

Interview partner

Mr. Svensson is head of sourcing IT-development within SHBank meaning that he holds the responsibility for outsourcing services regarding development and maintenance whereas the IT-operation is handled in a separate organization.

4.1.4. TreKronor Bank

TreKronor Bank (TKBank) is a full service bank that is active in Sweden, Lithuania, Estonia and Latvia with many offices around the world, providing service to both private customers as well as corporations. The core business is to meet the needs of their customers rather than providing products, this is where the importance of building close relationships with customers and advisory becomes central. TKBank has approximately 9 million private customers and 700 000 corporate customers. The balance sheet amounted to SEK 1 700 billion in March 2011 and the number of employees are about 17 000. The operating profit was SEK 5 billion (TreKronor Bank, 2011a), (TreKronor Bank, 2011b). The operative goal is to help people and businesses to achieve a solid financial sustainability. (TreKronor Bank, 2011c). TKBank's vision is to enable people, businesses and society to grow – TKBank beyond financial growth (TreKronor Bank, 2011c).

Interview partner

The interview partner is Mr. Krona who is head of sourcing and vendor management at TreKronor Bank. Mr. Krona is responsible for strategy and contracts of IS-sourcing projects.

4.2. Results of the Interviews

Each of the introduced organizations represents in our research an independent case.

The empirical findings concerning a case are structured in accordance with the interview guide.

Starting with the interviewee's general perception of IS-sourcing, the characteristics of the investigated project is outlined. Further, the interviewees stated motives underlying the sourcing engagement is recited. The presentation of the empirical finding closes with the question of value, rarity, inimitability and organization's exploration of the resources involved in the IS-

development and finally with a summary that brings together the observed and theoretically derived IS-sourcing mode.

4.2.1. NEBank

IS-development in the financial sector

As an introduction, the interview started with questions about the interviewee's and organization's general perception of IS-sourcing which helps to test the validity of the assumptions underlying this research. With regards to the interviewee's experience, Mr. Norman stated that the financial institutions have to comply with specific European legislations and regulations which does not pertain other industries. However, the regulations such as Basel 2 do not have direct influence on sourcing whereas data protection agreements do have. Consequently, the interviewee does not see a difference in IS-sourcing as such between the financial sector to other industries. (Transcript NEBank, Appendix 7.3). Further, the interviewee denoted that IS-development competences in terms of vendor management and IT strategy is a core competence that a bank need to retain internally: "But actually to understand the competitive marketplace as a bank and translating that into what do we need to do within IT, I think, is a core competence that you as a bank need to retain internally" (Transcript NEBank, Appendix 7.3).

Characteristics of the IS-sourcing project

The sourcing project is an outsourcing of the maintenance, operation and further development of the SAP financial and reporting systems with a total number of 300 applications. For the purpose of this outsourcing, the internal employees were transferred over night from the NEBank to the outsourcing supplier. The number of ca. hundred former bank employees gradually decreased from the beginning of the sourcing project in 2006 so that nowadays the majority is located in India. However, there are still 50 internal employees in the value chain process of this sourcing project involved. Summarizing, the continuing outsourcing project can be declared as a business outsourcing project (BPO), i.e. a modular IS-system that is relocated in the consequence of focusing on core competencies. Considering the software development process, the internal employees are exclusively involved in the analysis and the supporting management disciplines of the sourcing project. The outsourcing engagement is governed by joint forums embedded in detailed service descriptions and service level agreements (SLA). The joint management forums are structured in three layers; the daily operations, technical aspects and strategic decisions. Certain delivery projects are guided through templates for project delivery agreements which are covered by the overall contract with the supplier. Potential dependencies to the supplier are captured on two levels; documentation of the software through an application repository and setting up a knowledge database for the service desk and second-level support. Both systems ensure relatively low switching cost to another supplier, as Mr. Norman denoted. (Transcript NEBank, Appendix 7.3).

Table 4.1: Case NEBank in accordance to the dimensions of sourcing

Dimension	Description
Degree of Integration	<ul style="list-style-type: none">• Internal: Analysis, Management• External: Analysis to Rollout, maintenance, operation
Duration	Continuing, long-term
Allocation of Control	<ul style="list-style-type: none">• Joint management forum embedded in detailed service descriptions and SLAs• Residual rights are owned by the organization

The motives for sourcing

The interviewee summarized the motives underlying the sourcing project in terms of access to talent, cost reduction, increasing flexibility, improving efficiency and focusing core competencies. The IS-sourcing project is internally assessed as a success, achieving all strategic goals, as the interviewee said. (Transcript NEBank, Appendix 7.3).

The question of value

In line with the motives given by the interviewee, the sourcing-project is addressing the threat in the financial market arising from new regulatory standards on bank capital and liquidity, Basel 3. As a consequence of the financial crisis in 2007, financial institutions operating in the European market will be bounded to the new capital standards from 2013 on that require banks to hold more and higher quality of capital than before (Basel Committee on Banking Supervision, 2010). The interviewee described the chain of events as follows: “increased financial burden on financial institutions, translated to the increased need of cost efficiency and then of course, this forces us to ask us, where we can get that and we started in the non-core areas such as finance and accounting.” (Transcript NEBank, Appendix 7.3). The role this sourcing project plays in addressing the current threats is valued relatively high by the interviewee. As he reports, this engagement is one of the first outsourcing projects and enables the organization to rump up further projects. (Transcript NEBank, Appendix 7.3).

The question of rarity

The sourcing project exploits the environmental threats through cost efficiency. According to the interviewee, a crucial capability to obtain the strategic goal is the vendor management. As Mr. Norman elaborates, vendor management capabilities are particular rare in Europe whereas in the US the larger banks started to gain experiences in outsourcing in the beginning of this decade. (Transcript NEBank, Appendix 7.3).

The question of imitability

Further, the interviewee sees the capability of vendor management as something you can not acquire but learn by doing, becoming experienced, he said, takes at least five to ten years of engaging in such activities. (Transcript NEBank, Appendix 7.3).

The question of organization

The interviewee is convinced that the organization is aware of the need and presence of this capability so that it facilitates the exploitation through setting up structured systems to transfer knowledge from one division to another one on all levels. (Transcript NEBank, Appendix 7.3).

Table 4.2: VRIO framework applied to the case NEBank (Barney, 2002, p. 173, modified)

Is a resource or capability in NEBank ...						
Resource	Valuable?	Rare?	Costly to imitate?	Exploited by organization?	Competitive Implication	Economic performance
IS project	Yes (cost reduction)					
Vendor management						
• Selecting vendor						
• Setting governance structure	Yes (cost reduction)	Yes	Yes	Yes	Sustained competitive advantage	Above normal
• Running value chain						
Executing IS-Development	No (cost reduction)					

Summary

Considering the RBV and our theoretical framework it can be concluded that before the engagement started, appropriate resources used for the IS-development were present at a sufficient level. Furthermore, the interview reveals that the capabilities needed for the execution of the IS-development does not hold a strategic value for the organization as it is seen as commodity: “the translation of the IT-needs to the project and into IT-deliveries is something that IS-vendors can do” (Transcript NEBank, Appendix 7.3). Instead the strategic value of the IS is seen as a source of cost reduction. Outsourcing to a low-cost country, however, does not imply a capability of strategic value per se, with this said being cheaper labor is not a capability. Concluding from this, the model for IS-sourcing would suggest *standardization of commodities* as the sourcing mode.

The IS-sourcing is an ongoing project where all development and maintenance tasks are on the supplier’s side as it owns the required resources for the IS-development. The residual rights of the IS, however, are still under control of NEBank. Clearly, the mode of sourcing that can be

excluded is *insourcing*. Likewise *strategic partnership* is not appropriate due to the fact that there is no intended knowledge transfer between both parties. Following from this, the applied sourcing mode corresponds partly to the *outsourcing as a service* mode. Differences arise from the facts that residual rights are not owned by the supplier during the delivery process and also the governance is carried out to some extent jointly. Having this said, the project shares characteristics of the sourcing mode *standardization of commodities*. The supplier benefits from a continuous income stream whereas the NEBank can focus on core competencies so that the cooperation leads to cost advantages for both. However, with this NEBank does not share the IS-development cost with competitors. Nevertheless, the outsourcing project concerns the maintenance and customization of a standard software that in itself already uses the principals underlying this sourcing mode. Here, SAP provides an IS that is standardized so that it can share the IS-development costs over all its clients. The necessary customization suits the IS to the specific needs of the client. Accordingly, there is no clear allocation of a sourcing mode for this case.

Regarding cost reduction as the strategic goal underlying this project, NEBank distinguishes between the governance and the execution of the IS-development. Arising from the applied sourcing mode a new capability – vendor management – is needed that is valued as a source of sustained competitive advantage.

4.2.2. GAD

IS-development in the financial sector

As an introduction, the interview starts with questions regarding the interviewee's and organization's general perception of IS-sourcing. In line with the interviewee from the NEBank, Mr. Berger does not see any specificities in sourcing as such for the financial industry. Regulations do concern functional requirements but not the way of sourcing IS-development, as he noted. As Mr. Berger elaborates, data privacy aspects in contrast have an influence on sourcing strategies but this applies abundantly to other industries. Outsourcing engagements, in the context of the terminology of the thesis, are currently only entered for certain modular projects in a certain time frame or in form of staff augmentation in order to increase the flexibility in software development for focusing strategic projects. According to the given examples from Mr. Berger, the access to external expertise mainly concerns technical skills rather than knowledge of the core banking business. The interviewee states, that the GAD sees itself as the experts in terms of understanding the demand side in the banking business. (Transcript GAD, Appendix 7.4).

Characteristics of the IS-sourcing project

The information system concerns risk management for the creditworthiness of wealthy clients. It is demanded by the ABCBank that became recently a new client of the GAD and therefore switched to the core-banking system of the GAD, the sourcing provider of the cooperative union. The ABCBank's requirements towards risk management cannot be fully satisfied with the current

core-banking system so that it was identified as a gap and formalized in a needed IS-delivery. In this sense, this is already a form of outsourcing as the ABCBank hand over the full IT-responsibility to the GAD. This though is not part of the analysis. Regarding the underlying purpose of GAD, it is treated as if it is an internal IT-department.

The sourcing project is denoted as outtasking meaning outsourcing the development of a modular software component that is developed under the supplier's governance. From the legal perspective it is treated as a "Gewerk", i.e. it is acquired as a finalized product. As a consequence from the purchase contract the cost for the IS-development can be amortized in the profit and loss statement. Overall the sourcing project is scheduled over 9 month with a workload of 2000 person days whereby ca. 6 internal employees (45 percent) and ca. 7 external (55 percent) are involved. The employees of the external supplier are located in Germany and responsible for the analysis (60 percent), design, development, unit test and integration test. The internal employees are from the juridical point of view sub-supplier and are concerned with the analysis (40 percent), system test, acceptance test, rollout, and documentation. The property rights of the IS is taken over by the GAD after the purchase is completed so that the subsequent maintenance and further development can be carried out by the GAD. In order to ensure a smooth transition, the supplier develops the IS within the GAD software environment including software development tool, technical and functional architecture. Furthermore, the knowledge transfer is ensured with initial trainings that are also part of the purchase contract. (Transcript GAD, Appendix 7.4).

Table 4.3: Case GAD in accordance to the dimensions of sourcing

Dimension	Description
Degree of Integration	<ul style="list-style-type: none">• The delivery responsibility is on the suppliers side• workload is shared 7 to 6
Duration	short-term, 9 month
Allocation of Control	The residual rights is taken over by the GAD after the purchase is completed

The motives for sourcing

According to Mr. Berger, the necessary expertise for the IS-development is internally present but fully occupied. On the other hand risk management is not seen as a specific core competence of the GAD. The shortage of staff member is temporary and is balanced by external support rather than hiring new employees. The reason behind is that the GAD can not hire and fire employees in accordance to their temporary needs due to employment laws and the labor union. In order to overcome the bottleneck of staff and avoid governance overhead the project is outsourced to an external supplier. The characteristics of the purchase contract leads to financial advantages as the IS becomes an amortizable property. (Transcript GAD, Appendix 7.4).

The question of value

The IS system connect all necessary information, evaluate and combine these so that it supports the decision on the creditworthiness of the bank’s credit applicants. As Mr. Berger describes, the IS is a distinctive feature for the calculation of the client’s creditworthiness which allows the ABCBank to work better than its competitors: “Mit dieser Funktionalität kann sie besser arbeiten als die sonst üblichen Marktbanken.” (Transcript GAD, Appendix 7.4). However, likewise it does not hold a high strategic value, it is one of many information systems, and otherwise the ABCbank had not agreed to outsource this project: “Es ist jetzt nicht so ein strategisch wichtiges Thema, das keine Bank hat. Das wäre auch übertrieben” (Transcript GAD, Appendix 7.4). According to Mr Berger, it is about the cost efficient provision of an IS that fulfills the requirements. Further, he denoted that there is no IS available on the market that addresses all requirements. For the GAD the sourcing project is valuable as it can carry out this project without hiring new employees, which are likely not fully occupied after finishing the project, as Mr. Berger stated. Consequently, the project provides the GAD flexible access to staff for a certain period of time in order to concentrate on more strategic projects internally. (Transcript GAD, Appendix 7.4).

The question of rarity

In this case risk management is knowledge that is present in the GAD but the resources holding that capability are fully occupied. Following from what Mr. Berger stated, this capability is not a core competence of the GAD and also not a rare competence meaning that it can be acquired cost efficient.

The question of imitability

As the resources involved in the IS-development are not rare the question of the imitability of these resources is not applicable.

The question of organization

As the resources involved in the IS-development are not rare the question of the exploitation of the organization’s resource is either not applicable.

Table 4.4: VRIO framework applied to the case GAD (Barney, 2002, p. 173, modified)

Resource	Valuable?	Rare?	Costly to imitate?	Exploited by organization?	Competitive Implication	Economic performance
IS project	Yes (functionality, cost reduction)					
IS-development capabilities for risk management		No	---	---	Competitive parity	Normal

Summary

Regarding the interviewee's statement it can be concluded that appropriate resources used for the IS-development are present at a sufficient level but fully occupied. As said before, the shortage of staff member is temporary and is balanced by external support rather than hiring new employees. Considering the employees as a resource the conclusion is that appropriate resources are not available temporary. The question of the strategic value of those resources is not be clearly answered. On the one hand the IS provides a distinctive feature which allows the ABCBank to work better then its competitors. On other hand, the resourced used for the IS-development are not seen as a rare so that it is handed over to an external supplier. (Transcript GAD, Appendix 7.4). Arguing from the RBV, the strategic value of the IS and the involved resources are inevitable connected. Further, a valuable IS but not rare resources used for the IS-development does not lead to an IS that is a source of competitive advantage. Using the VRIO framework for the further conclusion, the IS is assessed as a source of competitive parity meaning it hold a low strategic value. Conclusively, the model for IS-sourcing would suggest *outsourcing as a service* as the IS-sourcing mode.

Looking at the applied sourcing mode it can be assessed that the governance and residual rights are hold by the external supplier during the delivery process which goes hand in hand with the responsibility for delivery. The client is involved in the requirement specification and buys the IS-development as a finalized product. These attributes suit abundantly to the *outsourcing as a service* mode. However, there are some specialities regarding the project settings. First, the client is likewise sub-supplier and in that way involved to an extent of 45 percent. Furthermore, the maintenance and further development is taken over by the client. As a consequence, the project moves in the direction towards *standardization of commodities*.

4.2.3. SHBank

IS-development in the financial sector

Regarding the IS-development in the financial sector the interviewee sees a difference to other industries in terms of the little bit more cautious attitude of banks and business requirements due to legislations, rules and regulations that the banks have to comply with. Further Mr. Svensson elaborated that IS-development as a competence is needed within a bank, leaving the question unanswered whether own employees or external employees should hold that competence. As he explains later, "all banking today is based on IT, we have no processes at all within the bank that can work without IT support" (Transcript SHBank, Appendix 7.5). The only competence that a bank absolutely needs to possess by its own employees is the governance, steering and prioritization of the IT-investments, as Mr. Svensson denoted. In line with this, Mr. Svensson pictured the overall IT-strategy of SHBank including a roadmap that plans to outsource functionality step by step in order to find the cost efficient solution for providing IS without increasing risk or decreasing its quality. (Transcript SHBank, Appendix 7.5).

Characteristics of the IS-sourcing project

The IS-sourcing project that is subject to our investigation concerns the maintenance and further development respectively customization of the human resource (HR)-system for SHBank. After a ramp up time of 18 month, the full responsibility for the handling of the standard software from PeopleSoft was taken over by IBM in 2010. The outsourcing is a long-term engagement whereas the contract between both parties is set for three years. The maintenance is carried out remotely from India from ca. 5 employees and double that size in case of customizations, supported by one contact person in the premises of SHBank. According to Mr. Svensson, the supplier is fully responsible to maintain the system and install all necessary upgrades and releases. For every kind of further customization or new functionality in the system, the SHBank can demand such services from IBM which is however not included in the price. The employees of SHBank are exclusively involved with the demand side, as the interviewee states, meaning that they are responsible for the requirements specification and governance, the so called vendor management. The vendor management is supported by internal legal and procurement specialists for the initial negotiation with the supplier. (Transcript SHBank, Appendix 7.5). The software itself is licensed from Oracle so that only the customizations are property of the SHBank.

Table 4.5: Case SHBank in accordance to the dimensions of sourcing

Dimension	Description
Degree of Integration	The resourced needed for the IS-development are owned by the supplier
Duration	long-term
Allocation of Control	The residual rights for the customizations are owned by SHBank

The motives for sourcing

Regarding the underlying motives for this project, Mr. Svensson first introduced five sourcing drivers that are identified by the SHBank; need for good skills, cost, flexibility regarding both buying resources and cost, risk, and focus in terms of focus own employees on strategic matters. In this specific case, Mr. Svensson identified cost as the main driver. Further he stated, that the SHBank achieved a significant reduce of cost by entering the outsourcing engagement. In comparison to the situation before, the lack of internal competences does not have to be compensated anymore through a couple of expensive consultants. As he elaborates, the securing of available competences is put on the supplier's side who can provide a wider base and share employees with the right knowledge over several clients. The risks related to the knowledge held externally are addressed with the contract which says that in case, IBM is forced to provide a knowledge transfer to SHBank or a new partner. However, Mr. Svensson does not see in any time soon that SHBank wants to bring back the maintenance inhouse. Overall, the project is valued as success as it reached the cost efficiency goal, eliminated the dependence on external consultants and is governed well.



The question of value

The interviewee puts the value of this IS-sourcing project in more general context. This project has its value in showing that the IT is capable to reduce cost but keeping high quality. It is the pilot project within a roadmap that targets the cost efficient provision of the IT in SHBank. The project itself is a rather small one but it serves as a role model on which further outsourcing engagements will be based on. As Mr. Svensson states, the HR-system was excellent candidate because SHBank was in the situation that only a few employees hold the right skills that had to be solved. With entering the engagement, the HRBank was able to mitigate the dependency on the few internal employees and gain access to complementary competences. (Transcript SHBank, Appendix 7.5).

The question of rarity

Competences needed for carrying out the outsourcing of the HR-system are vendor management as well as legal and procurement expertise. The functional competence concerning the HR-system is valued as not relevant to keep inhouse. According to Mr. Svensson, both of the former mentioned competencies are hold or are built up internally. The temporarily shortage of procurement expertise occurs due to the amount of current initiatives that need support of those strategic buyers. As a consequence, the interviewee does not believe that these competences are rare, neither within SHBank nor on the job market. External expertise is used for selecting vendors and the appropriate scope that is requested on the market. (Transcript SHBank, Appendix 7.5).

The question of imitability

As the resources involved in the IS-development are not rare the question of imitability is not applicable.

The question of organization

Following from the question of rarity, the question of the organization's exploration of these resources is not applicable.

Table 4.6: VRIO framework applied to the case SHBank (Barney, 2002, p. 173, modified)

Is a resource or capability in SHBank ...						
Resource	Valuable?	Rare?	Costly to imitate?	Exploited by organization?	Competitive Implication	Economic performance
IS project	Yes (cost reduction)					
Vendor management						
• Selecting vendor	Yes					
• Setting governance structure	(cost reduction)	No	---	---	competitive parity	normal
• Running value chain						
Strategic buyer	Yes					
Legal and procurement	(cost reduction)	No				
Executing IS-Development	No (cost reduction)					

Summary

Under consideration of the information given from the interview with Mr. Svensson, it can be derived that appropriate resources are not present at a sufficient level internally for the customization and maintenance of the HR-system. Furthermore, Mr. Svensson on behalf of the SHBank does value the IS as a commodity that every company need to have but not as highly strategic: “An HR system is something you need to have, every company need to have but it is not differentiating us from other banks or other companies.” (Transcript SHBank, Appendix 7.5). Instead the strategic value of the IS is seen in terms of cost reduction. Outsourcing to a low-cost country does not imply a capability of strategic value per se, with this said being cheaper labor is not a capability. Consequently, the model for IS-sourcing would suggest the sourcing mode *outsourcing as a service*.

In comparison, we analyse the sourcing mode that is applied by SHBank for this project. The IS-sourcing is an ongoing project that is outsourced due to a lack of competence and the focus on core competencies. Further, the governance for the execution of the IS-development is on the supplier’s side as it owns the necessary resources. The residual rights for the customizations are owned by the SHBank. Following from this, the applied sourcing mode corresponds most likely to the *outsourcing as a service* mode. Differences arise from the facts that residual rights are not owned by the supplier during the delivery process.

Concerning cost reduction as the underlying motives of the sourcing project, the SHBank need to have new capabilities namely vendor management and legal and procurement expertise. In the context of this case, these capabilities are valued as a source of competitive parity implying a normal economic performance.

4.2.4. TKBank

IS-development in the financial sector

Mr. Krona distinguishes the financial sector from other industries in terms of IS-development especially in regards to sourcing or outsourcing. He argues that Banks are much more risk averse than other industries when it comes to sourcing. Moreover, Mr. Krona explains how there is a lack of competitiveness in the Swedish market which makes IS-sourcing a tool for mitigating risks and competitiveness. When it comes to the important skills Mr. Krona highlights the value chain and how the end parts of the value chain need to be controlled by the part that sets the requirements for the business. Also, the architectural description is seen as something that should be kept in the bank as well as deployment, which comes in the latter part of the value chain. Everything that is in the middle of the value chain can according to Mr. Krona be outsourced. (Transcript TKBank, Appendix 7.6).

Characteristics of the IS-sourcing project

The particular project of interest in the interview is about application development. Mr. Krona explains it as being “bank specific application that we are asking a partner to do a part of the development for us”. (Transcript TKBank, Appendix 7.6). The project is part of the TreKronor Bank framework towards the Internet Bank, especially the retail side of the bank. The amount of external employees involved in the project is between 30-50 and varies over time. The external employees are from India, while the number of internal employees working on the project is 10-20, and the duration of the project is approximately three to five years. This is a long term contract with the vendor which is a frame agreement. The project is now finalized and has been delivered. (Transcript TKBank, Appendix 7.6).

Table 4.7: Case TKBank in accordance to the dimensions of sourcing

Dimension	Description
Degree of Integration	The resourced needed for the IS-development are owned by the supplier.
Duration	Short-term with a long-term frame agreement
Allocation of Control	Analysis and architectural part is internal responsibility as well as the top level management of the project. External responsibilities include design phase (not overall design), development and test up to unit test. Project management is partly.



The motives for sourcing

When it comes to the underlying motives for the outsourcing of the IS-project Mr. Krona identifies three drivers. The first driver is the cost benefit from lower salaries in India than a Swedish employee would have. Secondly, it is about the availability which implies that TreKronor did not have the required competence at that time internally. They did have the capability but not the specific competence or resources. The third and last driver is the time, the time to market factor and to be able to scale up on a very short period of time. The main challenge of the project was to deliver it in time, since there were time constrictions. The solution here was to use agile methods. As Mr. Krona acknowledges, TreKronor Bank managed to live up to the harsh time constraints and delivered the project in time, as well as saving costs. Explaining the success of the project Mr. Krona describes how it is all about being in the game or out of it. The point here is to take the challenge from the market and try to stay competitive through meeting the demands of the market. This is where the financial sector is special since it is much more risk averse in sourcing. The cost benefit was ensured by putting up a budget and keeping it in line with the time plan. Looking into the fact that control is given up to the suppliers when outsourcing, Mr. Krona highlights the importance of trust and the assurance that everything is documented. (Transcript TKBank, Appendix 7.6).

The question of value

Valuing the project it can be said that the valuable factor is the customer usability, the accessibility of functionalities within the retail bank. The main purpose of the project is in fact to retain customers and to live up to the expectations that the customers have on the system, by improving its quality. In other words the project is as Mr. Krona puts it “one of many actions that you have to do in order to stay on the top of the Internet bank business” (Transcript TKBank, Appendix 7.6). The underlying threat is that customers abandon TreKronor Bank for another bank. Therefore improving the customer usability is of high importance. The project is essential in addressing threats and opportunities. Taking into account the resources that are needed to carry out this project Mr. Krona acknowledges the experience from setups in the project management and to have people that can run agile methods as key capabilities. The key capabilities that are in house is project management and stake holder management. Business knowledge is required from the vendor in order to meet the time limits. (Transcript TKBank, Appendix 7.6).

The question of rarity

Mr. Krona argues that none of the resources or capabilities from the uniqueness point of view are rare, since they all can be acquired from the market – a lot of people can do it. But in contrast he says that the demand for these resources is very high which contributes to a shortage of these resources and capabilities and therefore they become rare. (Transcript TKBank, Appendix 7.6).

The question of imitability

Here the interviewee puts forward that it is hard to imitate the resources and capabilities if the values (implementation of processes) are not put in place internally. The values are hard to copy, and therefore it does not matter what is put on paper as long as the knowledge, experience,

culture etc. is not there. In other words, a paper is easy to copy, but if you do not have the values then it will never work. (Transcript TKBank, Appendix 7.6).

The question of organization

Regarding the question of organization it is from the interviewee's answers obvious that the experience from IS-sourcing projects gives a better understanding of its value. That is why the upper management are the ones that are aware of these values, and try to spread the knowledge to the operational part of the organization as well. (Transcript TKBank, Appendix 7.6).

Table 4.8: VRIO framework applied to the case TKBank (Barney, 2002, p. 173, modified)

Is a resource or capability in TreKronor Bank ...						
Resource	Valuable?	Rare?	Costly to imitate?	Exploited by organization?	Competitive Implication	Economic performance
IS project	Yes (cost reduction, improve quality)					
<ul style="list-style-type: none"> • Stake holder management • Project management 	Yes (cost reduction)	Yes	Yes	Yes	Sustained competitive advantage	Above normal

Summary

To sum up the interview with application of the theoretical framework it can be said that TreKronor Bank did not have the resources internally at the beginning of the project and therefore had to outsource to a vendor. The project is thus seen as of high strategic value regarding the quality respectively ease of use for the customers. Therefore it is a necessity for the bank to maintain its competitiveness. Another aspect of the project's strategic value is its contribution to cost reduction. As perceived from the interview, cost reduction is seen as a result of using a certain approach such as agile methods, then it is seen as a capability of strategic value. According to our model the fitting IS-sourcing mode is here *strategic partnership*. In line with the RBV strategic capabilities with a high strategic value should be kept or developed internally. Therefore the theory suggests that the bank should gain those complementary resources through a partnership in exchanging and keeping knowledge.

In comparison we investigate what sourcing mode that TreKronor Bank actually applies for this particular project. It is a short term project within a long-term frame agreement. The resources are owned by the supplier whereas the residual rights belong to TreKronor Bank. Further, the project management is split between the parties whereas the top level management is exclusively kept internally. Clearly, *insourcing* as the mode of sourcing can be excluded. Since *standardization of commodities* always includes internal resources, it is not the applied mode. Looking at the similarities with the IS-sourcing mode *outsourcing as a service* it is clear that this project partly meets the characteristics of this mode. What makes this project not an *outsourcing as a service* is the split of the control in the project management. In addition, the residual rights are not owned



by the vendor during the delivery process. Analysing the mode of sourcing further, it can be stated that there is no intended knowledge transfer between TreKronor Bank and the vendor. This contradicts the base of *strategic partnership* in exchange of knowledge.

5. Discussion

In this chapter the empirical findings are discussed in the context of the underlying research question.

In answering our research question we will apply a step by step approach were we answer the aims of the research question in step 1 and step 2. Combining these two steps we will come to the answer of the main research question which is: *How can the motives for sourcing and associated strategies (for IS-development in the financial sector) be explained?*

1) **Financial institutions motive for sourcing and what strategies that are applied.**

Looking at the motives for sourcing we have identified that these overlap across our different empirical studies. The investigation conducted reveals the following main key motives for IS-sourcing in the financial sector that are in common for all four cases; flexibility, access to talent and cost benefit. When analyzing our empirical data we have found many key drivers that are similar and have therefore decided to categorize them into the main resembling clusters outlined below. The motives are taken literally from the interviews.

- **Flexibility:** Scale up the resources bound to the project in a very short period of time, flexibility in terms of cost meaning transform fixed cost for internal employers to variable cost of external one, balance temporary shortage of staff, time to market.
- **Cost benefit:** Cost reduction, avoid governance overhead.
- **Access to talent:** Lack of competence internally, availability, improving efficiency, skills, focusing core competencies, focus in terms of focus own employees on strategic matters, the value of an IS is assessed if the IS mitigates threats and exploits opportunities in the competitive environment that financial institutions face to today.

Taking a closer look at each of the four cases the following motives for sourcing can be found:

- **NEBank:** cost benefit (increased need of cost efficiency, pilot project)
- **GAD:** flexibility

- **SHBank:** access to talent, cost benefit (pilot project)
- **TreKronor Bank:** access to talent (retaining customers through improved usability)

From this we can conclude that the majority of the motives for IS-sourcing of the four big financial institutions studied is access to talent and cost benefit. After that comes flexibility as the main driver for IS-sourcing. Access to talent would according to the RBV be knowledge and experiences that are not easy to copy. Here the talent itself is seen as a resource and can be alluded to vendor management (since access to talent depends on the talent that a specific vendor holds). This resource is one of the valuable for our case organizations since it has a high strategic value in terms of gaining sustained competitive advantage due to its connection to organizational values and the core competencies. The second motive for sourcing IS is cost benefit, which is not directly seen as a resource of strategic value from the RBV. It is rather indirectly a resource of strategic value, since a cost benefit implies that the organization has some kind of financial benefit, which gives it more money left to invest in something else such as access to talent for instance. The least occurring motive among our studied organizations IS-sourcing projects is flexibility. Flexibility is here seen as the ability of the organization to live up to the time constraints that have been put on the project, and to balance the shortage of staff, in other words it is the organization's ability to mitigate threats and find new opportunities under pressure.

2) Comparison of the applied sourcing mode to the derived mode from the theoretical framework

Based on the empirical findings of this research, the applied sourcing mode and the mode suggested by the theoretical framework were independently conducted for each case. The results from the investigation are presented in table 15:

Table 5.1: Comparison of the applied and derived mode from the theoretical framework

Case	Theoretically derived sourcing mode	applied sourcing mode	Success
NEBank	standardization of commodities	outsourcing as a service mode/ standardization of commodities	Yes
GAD	outsourcing as a service	outsourcing as a service (GAD involved as sub-supplier)	Yes
SHBank	outsourcing as a service	outsourcing as a service (residual rights are owned by SHBank)	Yes
TKBank	strategic partnership	outsourcing as a service/ strategic partnership	Yes

Divided in four modes, the definition of the applicable sourcing mode was derived from the presence of appropriate resources and its strategic value. The propositions 1 to 4 from chapter 2.5.2 are summarized below in table 16. The propositions describe how the high or low valuation of both factors lead to a certain sourcing mode:

Table 5.2: Overview of propositions

Proposition 1:

high strategic value + high presence of appropriate resources internally → insourcing

Proposition 2:

high strategic value + low presence of appropriate resources internally → strategic partnership

Proposition 3:

low strategic value + high presence of appropriate resources internally → standardization of commodities

Proposition 4:

low strategic value + low presence of appropriate resources internally → outsourcing as a service

The investigation of the latter factor was conducted in accordance to the VRIO framework which provides a clear structure to quantify the level of strategic value owned by the resources. In order to investigate the applied sourcing mode for the sourcing project a rich description of the project setting was necessary which was structured with the use of the dimensions of sourcing. The practice of sourcing, however, provides a wide range of manners of how IS-projects can be carried out. This variety of projects challenges the attempt to assign a certain sourcing mode. Likewise, the four sourcing modes are open fields in that a project's mode of sourcing can be located. Considering both, the IS-projects do not satisfy to full extent all characteristics of the assigned sourcing mode. The question of success – whether the sourcing engagement achieved to satisfy the strategic goals underlying the sourcing project – is assessed from all interviewees as fulfilled. However, the evaluation of success can be biased as all of the interviewees have the ownership of the sourcing respectively outsourcing decisions so that a further investigation of the cases is needed to make a clear conclusion. Moreover, based on the conducted empirical study, there is further evidence needed to extrapolate from the compliance of the theoretically derived sourcing mode to the success of the sourcing project.

Starting from a broader scope and narrowing down, it can be concluded that the empirical findings do support the general assumption that the internal resources and their strategic importance for gaining a competitive advantage are considered for IS-sourcing strategies. Further, the empirical findings reveal that the modified model from Roy and Aubert (2000) does explain the applied outsourcing mode to a certain extent. Even though the applied sourcing modes vary in its characteristics from the defined sourcing modes, the applied and theoretically derived modes are for all cases comparable. To put it in other words, in all cases there are no opposing sourcing modes derived. Considering the variety of possible modes of sourcing in

practice and the limitation of a model that by its nature tries to simplify the observed real world, this outcome can be interpreted as a support for the RBV and the modified model of IS-sourcing.

Research question: How can the motives for sourcing and associated strategies (for IS-development in the financial sector) be explained?

The RBV gave us the explanation behind the motives for sourcing and the importance of resources in doing so. The VRIO framework helped us to find the resources or capabilities that are of strategic value and sustained competitive advantage. Analyzing this, the selection of sourcing strategy and mode of sourcing becomes more comprehensible in terms of understanding and comparing the applied mode of sourcing with the suggested mode of sourcing by the RBV and the modified framework from Roy and Aubert (2000).

Looking at the motives for sourcing we have identified flexibility, access to talent and cost benefit across our different empirical studies. The RBV approaches IS-sourcing from the internal analysis of its resources and the questions whether those resources mitigate threats and address opportunities. In order to achieve those strategic goals, resources are needed that enables the organization to carry out its strategy. For the investigation of the four cases, the RBV and the associated VRIO framework helped to identify these resources and its strategic value. For the access to talent it was identified that the needed competences is not hold by its internal resources. The organization's need for flexibility was caused by labor regulations, however, the underlying basic thought is the competence of internal resources that is maybe present but not at a sufficient level. When it comes to cost benefits the analysis of the organization's internal resources has to be seen in two steps. The first step is the relocation of IS-development to a low-cost country, maybe even though this capability is present internally. As argued before, the relocation of the IS-development to a low-cost country can not in itself imply a capability of strategic value. Further, it has to be noted that the salary more or less can be seen as a measure of the resources productivity and efficiency. Following from this, this thought contradict the RBV and the theoretical framework that always involves internal resources if they are appropriate and present at a sufficient level. Nevertheless, subsequently to the attempt – save cost through outsourcing – new capabilities are needed that enable the organization to manage this engagement. This capability – vendor management – is crucial to be kept internally and is assessed as a potential source of sustained competitive advantage, as the interviewee Mr. Norman from the NEBank stressed. With this said gaining cost benefits is linked inevitably to the analysis of the organizations internal resources and associated capabilities. In a nutshell, the motives for IS-sourcing are driven by the analysis of the internal resources and its potential being a source of competitive advantage.

6. Conclusion

The following chapter concludes from the empirical results and its discussion in order to outline the central findings of this study.

6.1. Theoretical Key Findings

The model of sourcing by Roy and Aubert (2000) has limitations that we have revealed during the analysis of our results. Something that at a first glance did not seem to be crucial has during analysis of the results become a point of critique directed towards Roy and Aubert's (2000) model of sourcing. Problems arising when using Roy and Aubert's (2000) model is the fact that it is too simple in categorizing all modes into four different clusters of modes, and therefore gives certain impreciseness to the conclusion of analysis. In contrast we perceive this model as an open field were all the modes of sourcing overlap in a way that a certain IS-sourcing project can be assigned a combination of several modes. Basically, it does not take into consideration the different combinations of sourcing modes, which we have revealed exist through our research. We believe that models are used as simplifications of the world, in order to give a better grasp of complex artefacts.

Furthermore, the definition of strategic value given by Roy and Aubert (2000) is misleading and too general in order to be useful. Here we are assured that by applying the VRIO framework we have a more structured approach to the identification of resources that are of high or low strategic value. This means that the VRIO framework is a great tool for identifying and analysing resources in a more precise way than Roy and Aubert (2000) definitions. Accordingly it is found that the VRIO framework improves the quantification of the strategic value of Roy and Aubert (2000).

6.2. Empirical Key Findings

The investigation of the four cases in the financial sector give further evidence for the predictive power of the modified model, originating from Roy and Aubert (2000), that was advanced by our clearly structured approach. Limitation of the model arises from the simplification of the sourcing in practice to four modes that implies certain impreciseness. This extends to the fact that the applied sourcing modes could not be linked to only one mode of sourcing due to the overlapping characteristics.

The research conducted identified the financial industry as different to other industries in terms of legislations, rules, regulations and certain cautiousness within IS-sourcing. However, the interviewees likewise state that these requirements the banks have to comply with do not

influence the way of sourcing itself. With respect to the generalization of the empirical findings to other industries, the assessment of the four experts does not give objections. Nevertheless, as this research only encompasses financial institutions further research in other industries are needed to acknowledge its generalizability.

Our research has in addition led us to find a capability that is of high strategic value, namely vendor management. When we say vendor management we actually mean the knowledge that the organization possesses internally to be able to find the best vendor for its project. For this purpose the internal knowledge refers to negotiation skills, as well as analytical skills in scanning the surrounding environment to find the vendor that owns the best fitting knowledge for the organizations' strategic goal of attaining these. By way of explanation it is the internal knowledge used to find and gain external knowledge.

6.3. Summary

The conducted study contributes to the research on the motives of IS-sourcing whether to keep the IS-development inhouse or outsource it to an external supplier. The resource based view appeared to us as the natural starting point to approach this question as it takes the organization's internal resources as its basis. Our theoretical framework assumes that the organization's analysis of its internal resources leads to four different modes of sourcing IS-development depending on the presence of appropriate resources and its strategic value of those; *insourcing*, *strategic partnership* and *outsourcing as a service*. The conducted research on four cases in the financial sector classifies the applied sourcing mode of the sourcing project in accordance to these modes, and compare it to the sourcing mode that is suggested by the theoretical framework.

In the context of other research, our investigation in the financial industry provides further evidence for the predictive power of the theoretical framework that is based on the modified IS-sourcing model of Roy and Aubert (2000). Clearly, narrowing down the variety in practice of sourcing to four modes contains certain impreciseness.

Further, the research revealed that the argumentation underlying the sourcing is driven by the internal analysis of the organization's resources. The empirical findings reveal three main motives for sourcing; access to talent, cost benefits and flexibility. The research identified the underlying resources for all motives which are the enabler of achieving its related strategic goal. Here, also cost benefits from the relocation to low-cost countries are recognized to be associated to internal capabilities namely vendor management. As a practical remark of this study, vendor management was valued as a source of sustained competitive advantage from the NEBank. If the organization's management of the NEBank is in the position to estimate the future value of a resource better than its competitors, this early recognition of the needed capability may provide a sustained competitive advantage.



Our study addresses the research question in a clearly structured approach. The findings have relevant consequences for the broader domain of the RBV. The contributions stretch to supporting the validity of the RBV, through the discovery of the importance of the resources for the motives of sourcing IS-development in the financial sector. Based on the relevance of the RBV, we have challenged Roy and Aubert's (2000) approach of defining sourcing modes and improved it by the application of the VRIO framework. To sum up, the empirical findings revealed that the IS-sourcing model is implicitly applied in practice. Since the interviewees are the responsible partners for the IS-sourcing decisions of each project, the question of whether the project is seen as a success becomes biased. Therefore there is a need of further investigation to the relationship between success and the application of the model. This finding goes beyond the scope of our research and may provide a starting point for further studies.

7. Appendix

7.1. Interview Guide

The interview guide outlined below was used during the interviews and send in advance to the interviewees. The red marked questions (questions 3, 4, 16, 19) were added after the first interview with Mr. Berger from the GAD as we were convinced that the answers would help to gain a deeper understanding of the cases. The numbering of the questions was added afterwards for the purpose of indentifying the questions in the overview table of the transcripts.

INTERVIEW GUIDE

According to the RBV the decision of insource respectively outsource is driven by the strategic value of the IS and the presence of appropriate resources for the development. Strategic value is here interpreted in terms of a source of sustained competitive advantage in line with the RBV. Sustained competitive advantage is according to Barney (2002) an advantage that cannot be competed out through imitation. These resources have to be rare, costly to imitate and valuable as well as used with the right strategies. The VRIO model is used to investigate the strategic value through four leading questions.

IS-DEVELOPMENT IN THE FINANCIAL SECTOR

1. Do you think that the financial sector is different from other industries in regards to IS-sourcing projects?
2. If there is a difference- in what way is the IS-sourcing different in the financial sector in comparison to other industries?
3. Is IS-development a competence that a bank should have in its possession? What is your opinion, can you please develop your answer?
4. Regarding the IS-development process, what skills (*analysis, design, development, test, build*) are of the highest value for the bank?

CHARACTERISTICS OF THE IS-SOURCING PROJECT

Degree of Integration

5. What is your IS-sourcing project about? (*Outsourcing/Service, Insourcing/Inhouse, Partnership, Standardization*).
6. How many external (*suppliers*) people are involved?
 - From which country?
7. How many internal people are involved? (*Internal expertise/competencies*).

Duration

8. What is the duration of the project? (*Is it a long term or short-term project?*)
9. How far have you come with the project? To what phase? (*Analysis, design, development, test (system test, unit test), deployment*).



Allocation of control

10. What are the responsibilities of the internal employees? (*Analysis, design, development, test (system test, unit test), deployment, maintenance, operation (running the system), project management*).
11. What are the responsibilities of the external employees? (*Analysis, design, development, test (system test, unit test), deployment, maintenance, operation (running the system), project management*).
12. Who owns the software after the project finalization?

THE STRATEGIC VALUE OF THE IS-SOURCING PROJECT/ PRESENCE OF APPROPRIATE RESOURCES

The motives for sourcing

These questions give the opportunity to the interviewee to argue the motives underlying the sourcing project independently to the RBV.

13. What was the motives for sourcing this project in general? (*Is it based on your internal competences?*)
14. Why have you divided your responsibilities like this?
15. What does sourcing of this IS-project mean to your organization/company?
16. **Would you describe the IS-project as a success in terms of achieving the strategic goals underlying the sourcing decision? - Why?**
17. How do you ensure that you (*...achieve reduced cost*) through sourcing?
18. How do you deal with the knowledge held externally by the suppliers?
(*Do you ask for documentation of this external knowledge? -for future use*).
19. **Do you see it as important to attain that knowledge for the future?**

1) The question of value: Do a firm's resources and capabilities enable the firm to respond to environmental threats or opportunities?

20. What are the current opportunities in the financial sector that is related to the IS-project?
21. What are the current threats in the financial sector that is related to the IS-project?
22. What role does this project have in addressing threats (*external challenges*) that the company is facing?
23. What role does this project have in addressing opportunities?
24. Would it be possible to address these opportunities without having the IS?
25. Would it be possible to address these threats without having the IS?
26. What kind of capabilities or resources do you think are needed for carrying out this project?



27. What of these resources and capabilities do you have inhouse?

28. What of these resources and capabilities need external support?

2) The question of rarity: Is a resource currently controlled by only a small number of competing firms?

29. Which of these resources and capabilities are rare in financial organizations such as yours?

30. Is there a high demand for these resources and capabilities?

31. In what way is there a high demand?

3) The question of inimitability: Do firms without a resource face a cost disadvantage in obtaining or developing it?

32. Do you think that the internal capabilities needed for the project are hard or costly to imitate by your competitors?

33. Why do you think so?

4) The question of organization: Are a firm's other policies and procedures organized to support the utilization of its valuable, rare and costly to imitate resources?

34. Do you think that the organization (*work procedures, knowledge, values, management, firm competences or skills the firm employs to transfer inputs to outputs*) of the project supports the use of its values, uniqueness and cost to imitate resources and capabilities?

35. Why do you think so?

7.2. Overview Table of Transcripts

The table below gives an overview of the interviews of all investigated cases. During the process of transcribing this table was used to summarize the key statements of the interviewees for the questions of the interview guide and provided herewith the base for further analysis.

Table 7.1: Overview table of transcripts

Questions	NEBank	GAD	TKBank	SHBank
Q1 & Q2	The sourcing as such is likely not different. Effect through regulations, legislation	No, for instance regulations do concern functional requirements but not the way of sourcing IS-development. data privacy may	Yes it is different especially from the sourcing perspective. Banks are more risk averse when it comes to outsourcing	Little bit more cautious, more legislation, rules, regulation we have to comply with
Q3	Yes, in terms of Vendor management	/	It is a questions of mitigating risks and competitiveness, were IS-sourcing is seen as a tool	We need to have that competence within the bank with more or less own employees
Q4	Core competences / are: formulate your business/ IT needs, understand your competitive marketplace	/	End parts of the value chain need to be controlled by the part that sets the requirements for the business and the architectural description of the IT should be kept in the bank. The later part of the value chain; deployment is important to keep in the bank. But everything that is in between in the value chain can be outsourced	The only competence we need to have is the governance, prioritization or steering of the IT, as every other competencies is possible to hire from other companies
Q5	Outsourcing SAP financial and reporting systems, total 300 applications	Risk management software for the creditworthiness of wealthy clients. Gap in the current core-banking system. After the development the maintenance and further development is carried out by the GAD	Application development. Its bank specific application that we are asking a partner to do a part of the development for us. It is part of our framework that is targeted towards for instance the Internet Bank that we are using. It is towards the retail side of the bank	Outsource the maintenance and further development of our HR-system from peoplesoft/oracle to IBM
Q6	banks employees became over night employees of the outsourcing company, 100, gradually increasing	55% external resources, ca. 7 employees (1100 person day) located in Germany	Between 30-50. It varies over time From India	Remotely in India between 5-10, 4-5 in daily Maintenance and about double that size in case of further development, 1 person from IBM in Stockholm as contact



	employees in India (currently minority in India)			person
Q7	50	Ca. 6 employees (900 person day)	About 10-20	/
Q8	Continuing, long term project, since 2006.	9 month	Between three months and one year	18 month ramp up time, since one year, 3 years contract
Q9	The outsourcing as a big bang, over night in 2006. In total 300 applications	Close to completion	It is finalized, it has been delivered	Finalized
Q10	Primarily analysis. The management is carried out in a jointed forum. Responsibilities are specified in contract, service description. Service means development services	40% of analysis, system test, acceptance test, rollout, documentation and the latter maintenance	The analysis phase, and also part of the design. The project management is split. Top level management and project management was the responsibility of the bank internally	Only with demand side, setting requirements, governance we could call vendor management
Q11	Everything else, development, maintenance and operation of the IS. Only one supplier.	Analysis 60%, design, development, Unit test, integration test	The design phase, and not the overall design. Development of the test all up to unit test. System test, deployment and maintenance. Project management is partly. Maintenance in the future will be	Fully responsible to maintain the system, install all necessary upgrade/ releases, for every kind of further customization or new functionality in the system we can demand such services from IBM but not included in the price, it's based on trust but of course we have also hard agreements such as SLAs or penalties
Q12	The bank only.	The property rights are owned by the GAD	We do!	the software is licensed, the ownership of the customizations are property of the SHBank
Q13	access to talent, to reduce cost, Flexibility, improving efficiency, focus core competence	Bottleneck of staff, gain flexibility, avoid governance overhead	Cost benefit (lower salaries in India), availability (lack of competence internally), competence, timing (time to market) and scalability (scale up on a very short period of time)	Our sourcing strategy have identified sourcing driver; skills, cost, flexibility regarding buying resources and cost, risk, focus own employees on strategic matters. In this specific case the main Driver was cost. We used a couple of expensive consultants early, so we have significant reduce of cost by the end
Q14	Best way, not	Flexible access to	Timing-wise it was a	We don't need to know or



	involved in e.g. allocating staff member for project	staff, expertise is present internally but fully occupied, however not a core competence of the GAD	challenge to deliver this in time. Therefore agile methods were applied. Time to market	have the competencies with our own employees, lack of competencies
Q15	if we succeed, we can achieve goals of the overall IT-strategy	The sourcing project is conceived as purchase contract from which it can be amortized in the profit and loss statement. The possibility to react flexible on bottlenecks	Cost savings, and also being able to meet the time constrictions	Have reduced the cost for this HR system and we have no need to secure competence regarding this software anymore, because that competence is provided by our supplier
Q16	Yes, we have achieved the four goals	The project is going well as we expected	Yes it is definitely a success. Either you are in the game or you are out. Either you take on the challenges from the market or you decide to do something differently. It is the only way to meet the market demands	We are satisfied with what we have achieved so far. Of course, there are always problems with an outsourcing, especially when you haven't done much outsourcing before. reached the cost efficiency part, are not dependent on external consultant, well working governance
Q17	Internal follow up procedures, reporting requirements	Contract specification ensure that the resulting software module is recognized as product so that it can be amortized. Ensuring the maintenance through usage of GAD software development environment, tools, and architecture	Putting up a budget, keeping the budget and time plan. Also, keep functional points in the development process to compare to what we do internally	We know exactly what cost we have for maintaining the system earlier and we can see that we have a – compared to before – we have reduced cost. how easy or difficult it is to make enhancement to the system and develop and implement new functions - that is more a subjective
Q18	Captured in two levels. Application repository, knowledge DB of service desk	As it is maintained by the GAD knowledge transfer is necessary. The contract encompasses an initial training. The usage of the GAD software environment it is attempt to enable an easy transfer	We have internal capability in terms of this. But it is a question of trust when you give up control. The supplier uses different methods to document what they do	IBM is forced to make a knowledge transfer to us or the partner we point out
Q19	Probably the important aspect. Independence from vendor and keep switching cost low	The maintenance is taken over again by GAD		, it's not that important but of course you can't but yourself in a seat where you are, when you have no option to continuing with the current supplier. I don't think that we ever maintain such a system on our own, we will use



				an external supplier but not necessarily IBM
Q20	/	Distinctive feature for calculating creditworthiness. Likewise not a high strategic value, as it the ABCbank agreed to the outsourcing. Focus on cost efficient provision	Customer usability. To retain customers and live up to their expectations. Improving the quality	Not just specific to this project but more in general, we need to have a competitive cost-level for the IT produced since it's the major part of the banks cost, reduce the cost but keeping the high quality
Q21	Indirectly, chain of events: increased need to be cost efficient due to Basel 3, increase cost efficiency, outsource non-core areas	/	That customers eventually try to abandon TreKronor bank and tries to go to some other bank	It can be an increased risk when we let a partner do this work for us but it could also be a reduced risk, ... let say we have just a few keeper with a competence on a system. Then it can be a good thing to do. The supplier perhaps share competences between several customers so they can have a bigger base, perhaps 10 or 15 persons having the right competences or knowledge about the system
Q22	relative big, first engagement but especially to ramp up other engagements	/	The project is one of many actions that you have to do in order to stay on the top of the Internet bank business	It is the cost factor that we are facing here. Its a rather small project, this project has a more symbolic value, showing that we really can reduce cost without increasing risk and if we can do this in a small scale for a small system we can also do it ... in a bigger system
Q23	/	An IT system address the requirements is not available on the market as such	It is just one of those actions that you do in order to improve the usability from a customer view	Part of the overall strategy to step by step outsource functionality. We should always try finding the cost efficient solution for everything we do for the bank. Since it is a small project that there is not much money involved, I would say, it has only a minor impact. But it's a role model
Q24	/	Considering all factors for the risk analysis can only be done by an IT-System	No. It is the basis for us	No, we could have chosen absolutely another project but here we have a situation that



				was not very good since we had so few internal employees with the right skills. So it was a good project in that way that we had to solve
Q25	Yes, but this is probably the fastest and easiest way addressing cost efficiencies	/	No. it is the basis for us	No
Q26	capability in selecting a supplier, setting up a good governance structure, running the value chain jointly	Risk management know how	Project management with experience from similar set ups, And people that are able to run agile methods. These are some of the key resources	Vendor management: to have good support for ...how to evaluate and buy this kind of services from the market. legal and procurement specialists for the negotiation
Q27	Crucial capabilities are created over time	Risk management is not a core competence of the GAD but for this project appropriate resources are present but fully occupied	The project management and the stake-holder management. Business knowledge is required from the vendor	I think we have or building up this competence. Procurement specialist respectively strategic buyers are busy but present at SHBank
Q28	/	It can be a criteria to outsource due to a gap of expertise but this is not the underlying motives for this project	Business knowledge	Using advisory firms for selecting vendors and selecting appropriate scope for our request to the market
Q29	Yes, European banks have not that many experiences in that area	In this case risk management is knowledge that is present in the GAD, it is not a core competence but it is also not a rare competence. It can be acquired cost efficient that's the reason why it is outsourced	None are really rare in terms of pure existing	Strategic buyers that we have a little bit too few for the moment in the bank. However, not very rare but we have a lot of initiatives that need support from these strategic buyers
Q30 & Q31	Yes , in particular in Europe in comparison to the US who started in the mid 99 th or early 2000 th	/	Because a lot of people can do it. But the demand for these resources are high. There is a shortage in supply	
Q32 & Q33	Yes, you cannot acquire this capabilities, develop over time (5-10 Years)	/	It is hard if you do not have the values in place internally, then it does not matter what you put down on paper you will never be able to make it work. A paper is easy to copy, but not the knowledge, experience,	I think, these are more generic competence and I think... of course it is a competitive advantage we have that we have very good people working with procurement and vendor management but it's nothing different what we



			culture and environment. It is difficult to copy the soft spots because they sit in the values	need compared to what other banks need
Q34	Set up different systems, transferring knowledge from one division to another on different level, in a rather structured way!	/	I think that more experience you get of such projects the more you understand its value. The upper management is aware of these values which spills over to the operational part of the organization as well	/



7.3. Transcript NEBank

M = Mirella

C = Christopher

N = Mr. Norman

INTERVIEW GUIDE- TRANSCRIPT NORTH EUROPEAN BANK, 09. May 2011, 15:00h – 16:00h

Organization

M: Do you think that the financial sector is different from other industries in regards to IS-sourcing projects? If there is a difference- in what way is the IS-sourcing different in the financial sector in comparison to other industries?

N: Yes, primarily, because of the **legislation** in this area with which we have to comply with, particularly with some EU laws in this area, which I don't think pertain to other industries. I think that is the important aspect. **The sourcing as such is likely not different.**

C: So, we were wondering are there also special needs for the financial sectors due to regulatory requirements such as Basel 2?

N: Basel 2 does not have a direct influence, but on the other hand some data protection agreements do have. It is very important to protect the privacy of the customers both retail and corporate customers. That's a kind of **regulation** that affects us.

M: Is IS-development a competence that a bank should have in its possession? What is your opinion, can you please develop your answer?

N: Oh yes, **very much**. So, if you buy IS-sourcing competence it **means how you set up partnerships with external vendors** that's a very important competence, yes.

M: Regarding the IS-development process, what skills (*analysis, design, development, test, build*) are of the highest value for the bank?

N: I would say. I think the important thing is to be able to **formulate your business/ IT needs**. Because the rest, the translation of the IT-needs to the project and into IT deliveries that is something that IS vendors can do. But actually to **understand your competitive marketplace** as a bank and translating that into what do we need to do within IT, I think, that is a **core competence** that you as bank need to retain internally.

C: So somehow the question about sourcing and IS-strategy. If I understand you correctly.

N: Yes.

CHARACTERISTICS OF THE IS-SOURCING PROJECT

C: We would like to talk to you about one specific project to investigate this further. We continue now with more specific questions to this.

Degree of Integration

C: What is your IS-sourcing project about? (*Outsourcing/Service, Insourcing/Inhouse, Partnership, Standardization*).



N: I can take one in the Finance and Accounting area. It is related to the **financial and reporting systems** that we have as a bank. The reason is, this is a strategic decision of the bank to start, when we started this journey, I would say 5 years ago, we wanted start with the non-core activities which is the strategy here to buy a lot of companies. And of course core banking processes are the transactional systems related to corporate and retail customers whereas the financial management of these transaction – so to speak - is not considered core.

C: How many external (*suppliers*) people are involved?

N: First of all we have to define project. When I say project I put that label on the overall engagement with the vendor in particular. As supposed to, and that project is a long-term project. We are now in the fifth year now. Project could also be understood as a well defined project, where I basically say: Develop a new application for our Internet bank. That's not what I am talking about. Here I am talking about project as the outsourcing as such.

C: the Finance and account software is then the subject of that engagement.

N: Yes, correct.

C: When this is a long-term project, the share between the external and internal project changed over the years, I suppose?

N: No, not that much. Well this was an outsourcing where we basically shifter the banks employees, so to speak, were transferred to the vendor. So it didn't change so much. It was a big bang approach rather than anything else.

C: Is this than a joint venture company?

N: No, it's a pure outsourcing. We basically a group of people who were **formerly the banks employees became over night employees** of the outsourcing company and continue to do the same activities that they were used to do but new employer.

C: So we restate our question, how many former internal employees became external employees?

N: 60 people. Now I would say **100 external are** working for us in this area and I would say we have around **50 people** working internally for us.

Duration

C: What is the duration of the project? (*Is it a long term or short-term project?*)

C: You said it's a long term project, it's the fifth year now, is there a final deadline, or is it a continuing project.

N: It's a **continuing project**.

M: How far have you come with the project? To what phase? (*Analysis, design, development, test (system test, unit test), deployment*).

N: It is basically. All the corporate accounts and the corporate reports you can read in the papers, all that processes are done by in a combination of the internal external employees. The core part is a SAP system. The total number of the **applications is 300**. You can imagine how many applications are required to do all the management reporting internally and the summary reports you get in the papers.



Allocation of control

M: What are the responsibilities of the internal employees? (*Analysis, design, development, test (system test, unit test), deployment, maintenance, operation (running the system), project management*).

N: It's primarily in the **analysis**. The whole engagement is governed by different joined forums with... the vendor has a mirror organization to our organization. We have a contract with the responsibilities on both sides and also the obligations but I would say that this **joint management forums** we have there to the bottom – who manage the daily operations – and we have a middle layer to technical aspects and of course we have the strategic level where our strategies are discussed. But there are no negotiations...are done so to speak, we have the prices, the service level agreements and all the things agreed. And also the governance **structure is part of the contract**.

C: If there are new developments needed, is that already covered by the contract?

N: Well I would say the number of application?(00:21.05) of framework is **covered by a service description**. **Services in this case are development services**. And I mean that is defined in the contract. I mean, the specifics related to a project are written down according to a certain template in project delivery agreement. And the project delivery template is part of the contract but not the content of each delivery project.

M: Who owns the software after the project finalization?

N: It is **owned by the bank**.

M: Ok let's move on to the next category of question regarding the motives of sourcing.

THE STRATEGIC VALUE OF THE IS-SOURCING PROJECT/ PRESENCE OF APPROPRIATE RESOURCES

The motives for sourcing

M: We wonder, what was the motives for sourcing this project in general? (*Is it based on your internal competences?*)

N: there were several reasons. One was **to reduce cost**. Another one **was access to talent**. **Flexibility** and I would say improving efficiency. I think that are the four main ones.

M: Regarding these overall goals, why have you divided your responsibilities like this?

N: Well, I think we divided it as this was the **best way** to achieving the goals of the outsourcing. I mean, for instance, the responsibility of allocating each individual staff member to any engagement is something that is the whole responsibility of the supplier in this case. Because they have the best understanding of what resources are available and what skills mix is required to do the work. So I would say the responsibilities were divided as the best possible job, so to speak.

M: What does sourcing of this IS-project mean to your organization/company?

N: Well, it means that, **if we succeed**, and I think we have actually obtained lower cost, increased flexibility and **all the things that were out to achieve**.

M: So, would you describe the IS-project as a success in terms of achieving the strategic goals underlying the sourcing decision? - Why?



N: Yes, we have achieved the four goals.

M: How do you ensure that you (...achieve reduced cost) through sourcing?

N: Well we **have internally elaborate follow up procedures** here, with **reporting requirements**. Yes this is the only way how we can do it.

M: How do you deal with the knowledge held externally by the suppliers?
(Do you ask for documentation of this external knowledge? -for future use).

N: That is **captured on two levels**. The core knowledge is captured as - anything related to the application as such – in a **application repository** where we have all the necessary information of the application as such and of course the vendors over time builds up **knowledge database that they use when they get questions of our users**. So I think, one is the practical part of it and then I would say the objective functional description of the application which is contained in the application repository.

M: Do you see it as important to attain that knowledge for the future?

N: oh yes, this is probably the important aspect. That is the only way which makes us at least **independent to our vendor** – if we are not happy with the performance of this supplier we can **change relatively easy** to another one. So, we have all information available so that they can start from day one.

1) The question of value: Do a firm's resources and capabilities enable the firm to respond to environmental threats or opportunities?

C: We know that the certain project is not about a core banking system, however, What are the current threats or opportunities in the financial sector that is related to the IS-project?

N: Could you please rephrase the question?

C: Is this outsourcing project related to opportunities or threats in this market?

N: I would say **indirectly**. It is related to the **increased need to be cost efficient** which stands from the new regulation in the banking market, **Basel 3**, where we need to use our capital even better than in the past. The chain of event is described the best: **increased financial burden** on financial institutions, translated to the **increased need of cost efficiency** and then of course, this forces us to ask us, where we can get that and we started in the **non-core areas** such as finance and accounting.

C: What role does this project have in addressing threats (*external challenges*) that the company is facing?

N: Well, **relative big** because that was the **first big engagement** that we had that **enabled us to ramp up others**. As a stand-alone activity not that important it would enable us to increase cost efficiency in other areas by doing similar outsourcing.

C: Would it be possible to address these threats/opportunities without having the IS?

N: **Yes**, we could address the cost efficiencies in another way **but this is probably the fastest and easiest way** at the moment.

C: What kind of capabilities or resources do you think are needed for carrying out this project?



N: It is very important to have some **capability in selecting a supplier** and also **setting up a good governance structure** and actually **running the whole value chain jointly**. I think that's key here.

C: If we look at these capabilities we were talking about, did you and have you these resources inhouse beforehand and now?

N: We have **created over time**. That's why it is **valuable**. Since now, we have the capability that we can ramp up in other areas. Creating these capabilities takes some time.

2) The question of rarity: Is a resource currently controlled by only a small number of competing firms?

C: Let's say, the vendor-management capabilities, is this rare in financial organizations such as yours?

N: **Yes**, it is rare, I **mean banks have not that many experiences in that area**.

C: So, somehow, there is a high demand for these capabilities?

N: Yes, I assume so. In **particular here in Europe** where we have not common source as the **bank in the US** have.

3) The question of inimitability: Do firms without a resource face a cost disadvantage in obtaining or developing it?

C: Do you think that the internal capabilities needed for the project are hard or costly to imitate by your competitors? Why do you think so?

N: I would say yes. It is not something that you can acquire. The **only way to acquire this is actually by engaging in these activities by yourself** - by learning by doing.

C: Since when are you practice outsourcing in your bank?

N: We are doing this **since 2006**.

C: So you have to invest in this capability over time then?

N: Yes. I would say it probably takes at least 5-10 year to be good at this. I mean, some of the **big US banks are good at this. They've started in the mid 99th or early 2000th**.

4) The question of organization: Are a firm's other policies and procedures organized to support the utilization of its valuable, rare and costly to imitate resources?

M: Do you think that the organization is aware of this unique capability and supports to develop it internally? (work procedures, knowledge, values, management, firm competences or skills the firm employs to transfer inputs to outputs) Why do you think so?

N: Yes I would say we are.

C: Could you give some examples of this is supported?



N: Yes, I mean, for instance for areas that start out doing similar activities we **have set up different systems** of actually **transferring knowledge from one division to another on different level**. So that we can re-elaborate experiences made in one unit and transfer experiences from this unit to another. Then its done in a **rather structure way**.

C: So far we through our questions, do you have any questions or want to add something we already asked?

N: No, not really. I think, the really important thing is to, ... The key lesson learned is to make sure that the entire value-chain work efficiently. Because, if you start with people in the bank who - I would say -has a general perspective. We have people who have a true customer facing role on the business side and then either way through, we have people in different units that work to support them. The customer facing area, in different varies shapes or forms. And then we have the vendors. So, you can say that we have three parties here, two internal parties and then the vendor. And the art of all of this is to make the value -chain work, meaning that everyone understands the rule of the game and the key success factors. As an example people on the business side or the customer facing area, they need to be very clear on what they want and why. So, that can be translated to an IT-Strategy and in individual project which then can be executed by the supplier. The business side does not understand their role then all falls apart. Then the vendors would start doing things that is not adding value the bank its customers. And of course there is no,... I mean who is benefiting on this activities loss. This sounds simple in the theory but it is very difficult in reality.

C: I have a question to the supplier with former employees of the bank. Is this development located in Sweden?

N: No, actually the essence of outsourcing is that from one state to the other and gradually they start to work in other engagements. Now I would say that, of the people left, there is only and hand full of worker that do the work I Sweden. The **majority of work and knowledge has been transferred to India**.

C: Related to this, are there any language issues?

N: Everyone in the value chain is speaking English. Of course it is a different kind of English, it is Indian English and Nordic English, of course we have to give the best that we can.

C: From another interview we learned that the cultural differences are addressed with exchanging people...

N: Of course the collaboration on the value chain is the key of success. I mean you have to arrange those activities which involves employees from the bank are going to India and the other way around to see how we work, how we work we our customer. Everyone needs to understand the rest of the value chain, how they act and work.

C: But there is no system installed for this?

N: No, I think that needs to be handles case by case. There many factors determining how much interaction is required.

C: What is handed over to the supplier? Is it the **development, the maintenance and also the operation** of the system.

N: **Everything**.

C: Everything is delivered by this one supplier.

N: At least this area, yes.



7.4. Transcript GAD

C= Christopher

B = Mr. Berger

INTERVIEW GUIDE- TRANSCRIPT GAD, 03 May 2011, 14:00h – 16:00h

C: Bestehen im Finanzsektor spezifische Bedingungen hinsichtlich des IS-sourcing? Wenn ja, welche Bedingungen sind das?

B: Nein. Ich überlege gerade, es ist kein klares nein, ein fast 90% nein. Es gibt Ausnahmen wenn bestimmte sensible – aber das ist nicht nur auf Bankwesen beschränkt – Unterscheidungsmerkmale die man in einer Firma hat und nicht in ein Outsourcing geben möchte, weil man das Wissen nicht aus dem Haus geben will. Das ist aber nicht bankentypisch, das kommt in jeder Branche vor, und insofern nein. **Es gibt natürlich Verhinderungspunkte aber nicht speziell bei Banken.**

C: Wie sieht dies bezüglich der regulatorischen Anforderungen aus...

B: Ja, die verhindern allerdings kein Outtasking. Es gibt regulatorische Anforderungen im Versicherungswesen. Diese sind nur Vorgaben für die Anwendung selbst, **nicht für die Art und Weise wie die Anwendung entsteht.** Das was **einschränken könnte sind Datenschutzrechtliche Aspekte** - das ist ganz normales Outtaskinggeschäft - das ist völlig unabhängig von der Branche. Das man natürlich in einem solchen Umfeld nicht an sensitive Daten kommen könnte, das muss entsprechende Vertraglich abgesichert werden und dass Geheimniswerte, das die nicht outgesourced werden, gilt auch für jedes Unternehmen.

Dies waren zunächst einleitende Fragen. Wir haben ca. 25 Fragen die sich auf ein spezifisches Projekt beziehen:

B: Wir haben als neuen Kunden die ABCbank. Das haben Sie wahrscheinlich auch mitbekommen. Die haben sich **dafür entschieden unser Verfahren, Bank21,** zu nehmen, haben aber die Anforderung, weil sie eine besondere deutsche Bank sind - die Bank vorwiegend wohlhabende Kunden betreuen und es sich um eine besonders große Bank handelt - Konsequenz daraus, sie haben zusätzliche Anforderungen an Bank21. Diese sind als Gaps identifiziert, die wir zu erstellen und zu entwickeln haben und eines dieser Gaps heißt **Risikovorsorge.** Diese Anwendung oder dieses Stückchen, für die Bank 21 speziell gemacht und für die ABCbank, dann aber auch genutzt wird von anderen Banken, ist im Moment ein Outtaskingprojekt, das **kurz vor der Fertigstellung** ist. Da kann man dann über Erfahrungen und was ist da passiert, berichten.

C: Wenn wir jetzt über dieses Projekt sprechen, dann ist die Frage, wie ist das aufgeteilt nach externen Ressourcen und internen Ressourcen.

B: Rein volumenmäßig sind **das 55%, externe Ressourcen und 45%** interne Ressourcen, was das gesamte Projekt angeht. Ich weiß nicht, wie weit ich **ausholen** soll. Wir haben ja so einen Entwicklungsprozess und bei dieser Form von Outtasking haben wir die Verpflichtung, dass die Outlasting-Partner, nicht nur das Ergebnis nach unseren Vorgabenstellungen zu liefern haben sondern auch das Ergebnis mit unseren Prozessen zu erstellen haben. Das ist sicherlich erwähnungswert, das ist untypisch, das macht man meisten bei Outtasking nicht. Hier möchten wir das, weil die Art und Weise, wie ein Ergebnis aussieht, weitgehend von den Erstellungswerkzeugen geprägt wird.

C: Dass das Modul auch in das gesamt Konzept und auch zur Architektur passt...

B: dass die Architektur passt und auch von unseren eigenen Mitarbeitern nahtlos weiter entwickelt werden kann als wäre es von einem GAD-Mitarbeiter entwickelt worden. Deshalb verlangen wir, dass die nach unserem



Vorgehensmodell arbeiten und dann geht es los mit der sog. Leistungsdefinition, dann kommt Modellierung, dann kommt Implementierung, dann kommt Dokumentation, dann kommt Test, dann kommt Integration und dann kommt Rollout. Das sind die Phasen, die nach einander passieren in diesem Projekt. Und die Phasen von Beginn an, von Leistungsdefinition bis zum Integrationstest - also von der Mitte des Testes - wird im Wesentlichen vom Outtasker durchgeführt, auch unter der Verantwortung des Outlasters. Und der Rest, Abnahmetest, Systemtest, Rollout und Betriebsdokumentation und solche Sachen werden dann von GAD-Mitarbeitern gemacht. Sozusagen das Ende der Entwicklungslinie. Das fängt an bei Leistungsdefinition, die wird zwar auch von der GAD gemacht, sogar noch mit 40% GAD-Beteiligung, 60% Outtasker-Beteiligung, die wird dann stark abnehmend, und ab dem Integrationstest, also wenn der Outtasker fertig ist, das kommt dann dazu, dass wir auf das Gesamtbildvolumen bezogen auf diese Aufteilung kommen: 55% werden vom Outlaster gemacht, 45% von der GAD

C: Kann man was zur der Personenzahl sagen, die eingebunden ist.

B: Von den Personentagen sind das 1950 Personentage, ca. 2.000 Personentage sprich 10 Personenjahre. Für ein Outtasking tendenziell etwas kleineres, eigentlich wollen wir ab 10 Personenjahre aufwärts. ...Dies bezieht sich auf die Menge der einbezogenen Mitarbeiter nicht die Laufzeit. Die Laufzeit eines solchen Projektes ist etwa 9 Monate und wenn man 10 Personenjahre auf 9 Monate verteilt, dann hat man ein Gesamtvolumen von gerade mal 15 Leuten, wenn dann die Hälfte vom Outtasker kommt, dann sind das in der Spitze gerade mal 7 Leute, die man da beschäftigt. Ein Outtaskingprojekt lebt davon, dass man mehr bewegliche Masse hat. Deshalb ist das eher so ein kleineres.

C: Warum ist es eher kleiner, einfach weil das Projekt kleiner ist...

B: Das ist auch ein Erfahrungswert, in dieser Konstellation, wie wir das betreiben, ist es eigentlich ideal mit 15-20 Personenjahren.

C: Ist denn in diesen 9 Monaten ist Rollout inklusive.

B: Die Nettoentwicklungszeit liegt um 4-5 Monate.

C: Ich hatte noch eine Frage zu den internen und externen Mitarbeitern. Das hatten wir soweit besprochen.

B: Vielleicht gehen wir noch zu den Verantwortlichkeiten. Ich weiß nicht, wieviel Sie über den ganzen Juristenkram wissen, wie so ein Vertrag aussieht,

C: Je reicher das beschrieben ist, umso besser ist das für uns.

B: Outtasking erstellen zu lassen von einem Outtaskingpartner macht man üblicherweise, weil man die Software bilanztechnisch aktivieren will. Das, was ein Unternehmen bilanztechnisch ausweisen muss in der Gewinn- u. Verlustrechnung ist, wenn man etwas kauft –genau wie im Privatleben- kann man etwas abschreiben, das eine gewisse Größe hat oder wenn man einen Hausmeister beschäftigt, dann kann man das nicht abschreiben. Dann werden die Kosten des Hausmeisters im Moment des Entstehens wirksam und wir tun dies in die GuV rein. Und wenn man in der GuV Kosten über mehrere Jahre verteilen will, dann muss man diese aktivieren. Und aktivieren kann man das nur, wenn das ein in sich geschlossenes Gewerk ist. Es muss also etwas sein, was man fertig kaufen kann aus dem Regal oder was einer so baut, als ob es fertig gewesen wäre. Das ist der Charakter von Outtasking. Deshalb wird Outlasting erst kaufmännisch interessant. Der tatsächliche Entwicklungsaufwand ist manchmal höher als wenn man es selber entwickeln würde. Da wir das dann wie ein gekauftes Produkt in unserer Bilanz zu dem Zeitpunkt übernehmen müssen, wenn der Outtasker damit fertig ist und über 3 oder 4 Jahre abschreiben können, ist das kaufmännisch von Vorteil. Damit man sowas aktivieren kann, muss sicher gestellt werden über Verträge, das es ein wirklich in sich geschlossenes Gewerk ist und nicht ein gemeinsames Projekt. Ganz wichtig, das würde unsere Arbeit herunterbringen. Es gibt andere Modelle von Outsourcing, dieses Outtasking mit dem Ziel, ein aktivierbares Produkt zu haben, lebt davon, dass man üblicherweise Rahmenverträge hat und dann Einzelverträge, die letztlich wie



ein von einem Bauträger fertig gestelltes Haus darstellen. Das ist eigentlich das. D.H. **dann sind wir wieder rechtlich Subunternehmer von dem Outtasker.** Wir sind kein gemeinsames Projekt. Der outtasker baut uns etwas, und sie brauchen unsere Mithilfe. Das heißt Beistelleistungen der GAD in dem Outtaskingprojekt.

C: Heißt das, juristisch gibt es einen Kaufvertrag, die Software gehört einem danach, der Outtasker verliert sein Recht an dem Produkt.

B: Üblicherweise macht man das so. Es gibt auch andere. Ganz viele Outtaskingpartner wollen gerne, dass sie die Rechte daran behalten. Die schreiben beispielsweise eine Risikoversorge, wo sie andere Teile wiederverwerten können.

Sie schreiben beispielsweise in den Vertrag mit rein, die Eigentumsrechte und Nutzungsrechte. **Eigentumsrechte gehen normalerweise an den Auftraggeber über, an die GAD. Das was die da erstellen gehört uns,** aber ganz oft möchten Outtasker gerne, dass die Nutzungsrechte Verwendungsrechte daran kriegen. Was wir daran gemacht haben, möchten wir auch in andere Projekte wieder bauen. Für diesen Fall haben wir das natürlich wie in den meisten anderen Fällen verboten. Sie haben das alleine Nutzungs-und Eigentumsrecht daran.

C: Warum wurden die Verantwortlichkeiten so aufgeteilt. Hatte es bilanztechnische Gründe, dass man in dem Sinne Kosten spart, dadurch dass man es abschreiben kann. Warum hat man es jetzt outgesourct. Weil man die Kapazitäten nicht hatte?

B: Warum macht man Outsourcing? Man macht es, wenn man nicht genügend Leute an Bord hat, die man nicht ständig braucht. Ein Unternehmen wie die GAD könnte bestimmt 20,30,40,50 Leute mehr brauchen, und damit auch mehr Anforderungen entwickeln. Die würden aber vielleicht in einem Folgejahr nicht mehr ausgelastet sein, also wollen wir das Atmen, dass wir die neuen ganz großen Kunden wie die ABCbank dazu kriegen, **nicht nur mit neuen Mitarbeitern machen sondern wollen diese Spitzen abfedern.** Und beim Abfedern der Spitzen gibt es verschiedene Sourcing-Strategien. Eine ist, dass wir uns neue Mitarbeiter ins Haus holen, mit der man aber auch nicht mehr zurande kommt, da wir beispielsweise den Platz herstellen muss, wo die alle sitzen, weil man die inhaltlich steuern muss, weil man nicht die Verantwortung bei sich behält, das ist juristisch ein ganz anderes Konstrukt, das ist für mich kein Werkvertrag, sondern ein Dienstleistungsvertrag. Da sagt man, Du wirst stundenweise bezahlt. Man hat die **gesamte Steuerungsverantwortung,** deshalb ist das auch irgendwo begrenzt, das ist immer so die erste Maßnahme, bevor wir feststellen, wir holen uns Mitarbeiter ins Haus. Wenn dann das Volumen noch größer wird, dann sagen wir, wir **schneiden uns Gewerke raus und die vergeben wir als Outtaskingprojekte.** Das haben wir in diesem Jahr mit insgesamt 3 Stück gemacht.

C: Wie ist es mit Know-how bezüglich Risikomanagement, wäre das da gewesen oder ist es auch ein Aspekt, dass man Experten mit reingeholt hat?

B: In diesem Fall war es so, dass es keinerlei Ausschlag gegeben hat, Expertenwissen reinzuholen. Das war einfach wirklich ein Sourcing-Engpass. **Es kann ein Kriterium sein, dass wir sagen, wir haben auf dem Gebiet keinerlei Expertise und lassen es aus dem Grunde von einem anderen Partner machen. Das ist jedoch für dieses Projekt nicht zutreffend.**

C: Was bedeutet Sourcing für die GAD. Welche verschiedenen Aspekte gibt es?

B: Sollen wir das noch ein wenig vervollständigen?

C: Gerne

B: Das was am nächsten an der eigenen Entwicklung ist, heißt, dass wir externe Mitarbeiter ins Haus holen. Das nennen wir: Dienstleistung über externe Mitarbeiter. Charakter vom Vertrag ist der Dienstleistungsvertrag, man wird



als nach der Arbeitszeit bezahlt und nicht nach dem Ergebnis. Problem ist, dass dabei entsteht, ist, dass man die Verträge juristisch sehr sauber machen muss. Wer dreimal im Auftrag hintereinander eine bestimmte Tätigkeit durchgeführt hat, hat ein Anrecht auf Anstellung zu klagen. Deshalb muss man fein darauf aufpassen, wie diese Verträge gestaltet sind. Dass der zwar in unserem Projekt mitarbeitet aber dass er nicht disziplinarisch mit Urlaubsabstimmung wie eigener Mitarbeiter behandelt wird.

Die sind den eigenen Mitarbeitern am ähnlichsten. Die sitzen hier, arbeiten hier. Da kann man das gleiche tun, dass die nicht hier sitzen sondern woanders sitzen, wird relativ wenig gemacht, weil man keine Kontrollmöglichkeit hat und trotzdem diese Arbeitszeiten bezahlt. Deshalb wird dieses Modell – Dienstleistungsbasis nicht vor Ort- so gut wie gar nicht praktiziert.

Das nächste ist, dass man auf Gewerkbasis geht, das Outtasking. Das ist das Projekt. Wir lassen eine in sich geschlossene Aufgabe an einem anderen Ort durchführen, **in diesem Fall ist es ausschließlich Deutschland.**

C: Dieses konkrete Projekt Risikomanagement ist outgesourct innerhalb von Deutschland.

B: und dass was man doch weitergeben könnte ist eine gesamte Verantwortung nach draußen gibt. Nicht für ein Gewerk sondern für einen gewissen Anwendungsteil.

Beispielsweise Risikovergabe. Die Risikovorsorge wird erstellt, wird eingeführt und jegliche Weiterentwicklung und Wartung macht dann der Outsourcing-Partner. Das nennt man dann eigentlich Outsourcing. Das andere differenzieren wir in Outsourcing und Outtasking.

Die 3 Outsourcing-Strategien sind: **Das 1. ist Dienstleistungsbasis als Vertrag, üblicherweise im eigenen Haus, Verantwortung beim Auftraggeber. Das 2. Ist Outtasking; das geschlossene projekthafte Abwicklung einer Tätigkeit, Verantwortung für das Gewerk beim Auftragnehmer, Aktivierbarkeit in der Bilanz, das hat unternehmerische Vorteile. Outsourcing als 3. Gruppe, Komplettverantwortungstätigkeit wird auf Dauer für ein Themengebiet auf einen Partner vergeben, das heißt Verzicht auf unternehmerische Vorteile daraus. Das macht man üblicherweise mit ungeliebten Aufgaben wie Wartung von Altsystemen. Das haben wir bisher noch nirgendwo gemacht.** Rechtlich bleibt der Besitz der Software beim Auftraggeber. Alles was an Anforderungen kommt, wir würden dann wie ein Generalunternehmer auftreten und Subunternehmer würden für uns die Arbeit machen, die uns nicht so gefällt. Dafür gibt es aber bei der GAD kein Beispiel.

C: Das wäre dann so ein typischer Servicecharakter

B: Ja, sowas wie eine Wartungsgesellschaft. Wir haben das mal analysiert, wie das funktioniert, sind jedoch aus verschiedenen Gründen dazu gekommen, dass wir das nicht machen. Die ersten beiden Modelle werden in der GAD angewandt.

C: Welches Wissen tragen die externen Mitarbeiter in sich, die sich bei der Wartung ergeben. Wie wird damit umgegangen?

B: Das ist ja genau spezifisch wie bei diesem Outtasking. Da hat man das Problem, dass **relativ viel Wissen in der Projektlaufzeit entsteht** bei dem Outtaskingpartner und nicht bei der GAD, **am Ende wird es übergeben und wir in der GAD wollen es dann auch weiter warten, d.h. der Wissenstransfer muss erfolgen.** D.H., dass man dann auch bei einem Outtasking-Projekt vertraglich Abnahme und Einarbeitung vorsehen muss. Einer der **Gründe warum wir das mit unserem eigenen Vorgehensmodell machen ist, dass wir die Ergebnisse, die im Lauf des Projektes entstehen, jederzeit währenddessen hier schon sehen können.** Wir wollen keinen Einfluss nehmen aber wir wollen sehen, wie sieht das aus, was da kommt. Das ist so, wenn man sich eine Metapher aufbaut, wenn man sich bei einem Bauträger ein Haus kauft und immer mal guckt. Man hat zwar nicht die Verantwortung, wenn man die Tür falsch einbaut, aber man kann sagen, o.k. die Tür hätte ich doch gern woanders, sieht doch nicht so schön aus, oder der baut sie wirklich falsch ein, ich geb Dir mal nen Typ, sonst kann ich die Abnahme verweigern, wär ja schön, wenn die Tür von vornherein richtig sitzt.



C: Es gibt auch in diesem Projekt noch GAD-Mitarbeiter, die kontinuierlich den Prozess überwachen?

B: Nein, das wäre genau falsch, sie dürfen ja nicht überwachen sondern die können die Ergebnisse die entstehen einsehen zum Zwecke der Vorbereitung auf die spätere Übergabe.

Wir können es immer wieder übertragen auf die Metapher Bauträger. Es gibt verschiedene Abnahmen, das ist von Vertrag zu Vertrag verschieden. Wir machen es üblicher Weise so und das ist auch in diesem Projekt so, dass wir eine Abnahme der Leistungsdefinition haben. Das ist die erste Phase, wo der Outlaster sagt, so wollen wir jetzt bauen. Das wären dann letztlich so die detaillierten Bauzeichnungen. Die werden explizit abgenommen, dann gibt es eine Abnahme des fachlichen Modells, das ist die tatsächliche Ausmodellierung im Klassenmodell. Wir nehmen die Analysephase ab, wir nehmen die Designphase ab, wir nehmen die Codierungsphase ab. Dann wird ein Abnahmetest gemacht, den wir auch gegenüber unserem Auftraggeber einfordern, in diesem Fall ABCbank hat uns beauftragt diese Risikovorsorge zu machen. Die ABCbank nimmt ab: jo, super. Wir sind im Moment gerade in der Abnahmephase ABCbank und die stellt jede Minge Fehler fest, wobei die meisten Fehler von der ABCbank kommen, weil sie sagt, die Tür hab ich zwar da bestellt aber sie soll doch lieber dahin. Die Abnahme, die uns die ABCbank erteilt, geben wir dann 1:1 weiter an die, unser Auftraggeber hat uns die Abnahme erteilt, dann erteilen wir Euch auch die Abnahme. Mit der Abnahmeerteilung ist das Gewerk als geliefert bezeichnet, damit geht auch das Geld einher.

C: In wieweit steht die Entwicklung der Risikomanagementsoftware im Bezug zu Chancen und Herausforderungen im Finanzsektor?

B: Es ist eine Spezialfunktion, die eine Bank für ihren Bankbetrieb braucht. Für die ist das natürlich ein **Unterscheidungsmerkmal** und eine Herausforderung. **Mit dieser Funktionalität kann sie besser arbeiten als die sonst üblichen Marktbanken.** Deshalb bauen wir sie ja genau für die. Es ist jetzt **nicht so ein strategisch wichtiges Thema, das keine Bank hat.** Das wäre auch übertrieben. Nur dass die ABCbank sehr groß ist, dass sie sehr viele Anlagerisiken zu verwalten hat, hat diese höhere Anforderungen als die anderen. Wir hatten vor Jahren schon mal so eine Schmalspurrisikovorsorge-Anlageberatung. Das gilt im Kreditumfeld: Was kann ich mir leisten damit nicht ein zu hohes Risiko besteht, für die Zukunft meines Lebens. Das steht dahinter.

C: also aus Kundensicht

B: Das geht darum: Da kommt ein Kunde, üblicherweise ein Arzt, will einen Kredit aufnehmen, um eine neue Praxis aufzumachen. Wie sichert sich die Bank ab, damit dieser Kredit nicht ein fauler Kredit wird. Das ist das, was hinter der Risikovorsorge steckt. Gegenfinanzierung muss man haben, was haben wir für Alternativen, was haben wir an Sicherheiten von anderen Sachen, ich hab schon ein Einfamilienhaus, es gehört mir privat, das geb ich als Sicherheit. Oder ein Schiff?

C: In wieweit ist das IT-System entscheidend für die Risikoeinschätzung?

B: **Das ist es auf jeden Fall.** Das ist ja genau der Zweck dieses IT-Systems. Das gilt jetzt nicht nur für dieses Outlasting, das gilt für viele andere Anwendungen. Die Steuerung einer Bank ist heute nicht mehr von irgendwelchen Menschen machbar **sondern nur die Verknüpfung von einer Unmenge von Informationen, die nur durch ein IT-System möglich ist, setzt die Bank in die Lage, risikoarm arbeiten zu können.**

C: Ohne diese Risikovorsorge wäre die ABCbank nicht in der Lage, das Risiko adäquat einzuschätzen.

B: **Klar. Und zwar so kostengünstig wie möglich einzusetzen,** das ist es ja, was wir adäquat sagen. Es geht immer darum: Lieber Arzt, du kannst Deinen Kredit über 1 Mill. bekommen, wenn du mir komplett für die 1. Hypothek das Haus in Höhe von 1 Million überlässt. Das kann jeder! Da kann man aber sagen; die Wahrscheinlichkeit ist so, da kann man lieber das, und da haben wir den Ausfall, der kompensiert das, und wir haben noch die Konten und wir



haben ein gemeinsames Engagement mit Frau, mit der war keine Gütertrennung vereinbart. Diese ganze Analyse dieser wirtschaftlichen Situation, das ist genau diese Anwendung der Risikovorsorge. Wie kann ich diese Vorsorge so treffen, dass die Bank dem einen tollen Kredit geben kann, den er bei einer anderen Bank nicht kriegen könnte, weil die deutlich mehr Sicherheiten von ihm abverlangen würde.

C: Im Prinzip ist das ja ein sehr essentielles System für die ABCbank.

B: Das ist eines von ungefähr 200 Stück, die wir bauen.

C: ich stell mir das vor als Kreditvergabe

B: Es ist auch ganz wichtig. Aber viel größere Herausforderungen haben wir in ganz anderen Feldern, Handelssysteme. Denn die normale Volksbank handelt sehr wenig mit Wertpapieren. Eine so große Bank wie die ABCbank macht das ganz intensiv. Die braucht erheblich mehr Mechanismen zur Abwicklung ihrer Handelsprozesse. Handel heißt mit Derivaten Wertpapieren und mit denen man an der Börse spekuliert, alles was Lehmann Brothers nicht so gut hingekommen haben.

C: Ich vermute, dass die ABCbank ja auch wusste, das outgetaskt wurde, daraus kann man schließen, dass es ein gewichtiges System ist.

B: Ganz im Gegenteil. Wenn es aus Sicht der ABCbank ein **essentiell wichtiges System wäre, hätte sie nie einem Outtasking zugestimmt**. Die ABCbank hat mit uns einen Vertrag, wir haben wieder einen weiteren Vertrag. Jede Vertragsunternehmung mit Subnehmerschaft in bei Problemfällen hinderlich, deshalb sollte man Outtasking nicht in hochriskanten Territorien betreiben.

C: Sicher geschieht ein Wissenstransfer. Ein Wissenstransfer ist jedoch nicht so, als hätte man es selber gemacht. Dadurch hat es schon den Charakter, dass es nicht so essentiell ist wie z.B. andere Projekte, die intern in der GAD gemacht werden.

B: Beim Wissenstransfer hat es sicherlich die allererste Einwendungsfrage gegeben. Auch die Beschränkung, dass man sagt, dieses Wissen will ich gar nicht. Ich will keinen Auftraggeber. Diese **Risikovorsorge ist jetzt nicht so als wäre die GAD der Konkurrenz um Längen voraus**. Auch wenn es vertraglich abgesichert ist, kann es sein dass der Outtaskingpartner es weitertragen an andere Kunden. Wobei man keinen Beweis hat, dass das trotzdem irgendwann passiert. Wenn es etwas wäre, wo wir den Stein der Weisen gefunden haben und wir kurz vor der Patentierung stehen, würden wir sowas natürlich nicht tun. Von dieser Kategorie ist das durchaus gewichtig, ist lebensnotwendig für die ABCbank, ist keine Anwendung auf die wir verzichten, das ist auch klar. Man nimmt einiges an administrativem Aufwand in Kauf, um das zu steuern und es muss dann alles schon lohnen.

C: Die Fähigkeiten, die man dafür braucht um die Anwendungen zu entwickeln, intern als auch extern, **sind die rar im Finanzsektor?**

B: **Das kann manchmal ein Auslöser sein, Outtasking zu machen, Wir haben ein anderes Projekt, wo es um das Umschreiben von existierenden Lotus Notes Anwendungen geht, die auch für WebBrowser enablen. Dazu ist Spezialwissen notwendig**. Das machen wir mit einer Tochter von einem externen Dienstleister in Weißrussland in Minsk. Da war genau der Auslöser: Wo kriegen wir eine Firma mit Spezialwissen her und die günstig ist. **In diesem Fall technisches, es könnte genauso gut fachliches Spezialwissen sein. Ist eher selten, weil wir von uns behaupten, wir sind die fachlichen Experten**. Ich bin ja für alle Outtasking Projekte in der GAD zuständig, mache im Prinzip immer Werbung bei meinen Kollegen, mach doch mal, könnt ihr nicht das noch nach draußen bringen und man merkt doch ganz deutlich, es ist ungeliebt. Die Leute reden, ich muss was abgeben. Ich geben Know-How nach draußen, ich habe meine Leute, die das eigentlich auch entwickeln können, ich habe bloß nicht genug davon, ich



könnte noch ein paar mehr gebrauchen, dann könnte ich es auch entwickeln. Ich muss was abgeben. Es ist heute zumindest noch in der GAD noch mit so einem negativen Beigeschmack behaftet. Nur weil wir nicht genug Ressourcen haben, muss ich es abgeben. Da spielt dann genau rein, wenn man sagt, ich hab ein Outtasking Projekt gefunden, wo in der GAD das Wissen nicht da ist, dann würd man letztlich sagen, du bist mit deiner Mannschaft zu blöd, du kannst es nicht, wir nehmen einen externen Anbieter. Auf dieser Grundlage würde man dann auch dafür sorgen, dass das Outtasking nicht akzeptiert würde.

C: In diese Richtung geht auch unsere Analyse. Die.....geht von einer internen Analyse aus, was hat man für Fähigkeiten aber man betrachtet auch, in wie weit ist das Projekt strategisch. **In diesem Fall des Risikomanagements kann zusammenfassend sagen, das Wissen ist in der GAD vorhanden, es ist aber keine besondere Kernkompetenz der GAD, es ist aber auch keine rare Kompetenz, die billig einkaufbar ist** und deshalb gibt man es nach außen, um sich auf die Dinge zu konzentrieren, die strategisch wertvoller sind.

B: Es war einfach die **Menge, die nicht mehr unterbringbar ist**. Man musste einfach ein Stück rauschneiden nach dem Motto: komm hilf mir mal eben. Ich schaffs nicht mehr.

C: Man hat sich sicherlich schon mit diesem Thema befasst. Ist das jetzt Wissen, was wir intern theoretisch haben sollten

B: Bei dieser Form von Outtasking gehen wir immer davon aus, **Dass das Wissen ohnehin in der GAD vorhanden sein muss oder schnellstens aufgebaut werden muss. Am Ende des Outtasking Projektes muss die Wartung und Weiterentwicklung ja wieder von der GAD eh weitergemacht werden. Es ist impliziert Voraussetzung; das Wissen muss da sein oder muss zeitgleich mit dem übrigen aufgebaut werden.**

C: Es ist kein Spezialwissen, mit dem man sich bei der GAD auszeichnen möchte? Es wird vom Kunden nachgefragt und liefert es sozusagen.

B: Gut. Letztlich ist die Summe aller fachlichen Skills, die bei uns vorherrschen, ist ja das, was die GAD letztlich ausmacht und ein Kunde dafür bereit ist, dafür zu zahlen. Die ABCbank macht mit uns ja letztlich auch ein Outsourcing. In dem Fall ist ja tatsächlich so. Die ABCbank hat ursprünglich ihre Anwendungen mit eigenen Entwicklern selbst gemacht. Die hat dann irgendwann gesagt: Ich schaff das nicht mehr, das funktioniert nicht mehr, ich komm da nicht mehr gegen an. Die haben auch nicht gesagt, wir haben nicht die Gesamtmenge an Skills, die wir notwendig haben. Fakt ist, die GAD hat einfach eine größere Bandbreite und hat damit mehr Skillpotential vorhanden und die haben gleichzeitig Outsourcing gemacht. Und so: ihr macht jetzt unsere komplette Anwendungen und betreibt auch unsere komplette Anwendungen. Das ist ja richtiges Outsourcing, was die ABCbank mit uns gemacht hat.

C: Ist es denn immer noch so, dass die ABCbank sehr spezifische Anwendungen selbst entwickelt?

B:Nein.

C: Also die Softwareentwicklung ist komplett outgesourct zur GAD

C: Was ich interessant fand ist die allgemeine Strategie der GAD, wie sie Outsourcing betreibt. Die GAD hat die Kernkompetenz in der Fachlichkeit, in der Betreuung der Kunden, in der fachlichen Analyse und Design, weniger in der Implementierung.

C: Nein, das ist nicht weniger. Ich glaub, das führt in die Irre, wir haben nicht weniger Kompetenz, deshalb machen wir Outtasking. **Wir haben die Kompetenz, wir könnten das alles locker alleine machen, wenn das Auftragsbuch zu**



voll ist, brauchen wir ein Ventil, wo wir etwas abgeben können, was wir sonst genau so gut alleine machen könnten. Das ist eigentlich die Story dahinter.

C: Man könnte auch wiederum Mitarbeiter einstellen, aber das sind natürlich auch nur Peaks...

B: Das ist das, was meine Kollegen am liebsten hätten, ich brauch noch 15 neue Mitarbeiter. Da hätte man das Problem, die müsste man auch erst einmal neu einarbeiten. Beim Outtasking sucht man sich Partner aus, die sowohl fachlichen als auch technischen Esprit haben. Wenn man neue Mitarbeiter einstellt, muss man meistens den fachlichen, manchmal auch den Skill beibringen. Das sind langfristige Wellenbewegungen: Einstellung von neuen Mitarbeitern. Outtasking ist immer ein singuläres Projekt, das ist üblicherweise ein halbes Jahr bis ein Jahr, und punktuell Mitarbeiter reinpumpen, das ist manchmal nur für 4 Wochen.

C: Wir haben den Fokus dahin gewendet, dass wir analysieren, was würde die Theorie vorschlagen, was ist denn die Praxis? Kann denn die Theorie die Praxis wirklich erklären. Was sind die Hintergründe warum man outgesourct hat die die Theory vorschlägt.

B. Dieses Projekt läuft so, wie wir es uns vorgestellt haben. Wir können aber auch über eins berichten was überhaupt nicht funktioniert hat, das war im offshoring. Das war von den Rahmenbedingungen genau das gleiche, was es inhaltlich war, das war auch eine Fachlichkeit die gemacht werden sollte, in sich geschlossen, wunderbar. Großer Outsourcingpartner, outtasking wirklich im offshoring um wirklich günstige Preise zu erhalten.

Die Erfahrungen, die wir vorher gesammelt haben, da haben wir immer gesagt, andere Kulturen, andere Zeitzonen sind besondere Schwierigkeiten, die meistert man, in dem man sagt, wir haben einen Brückenkopf, der hier vor Ort sitzt, tatsächlich wie ein eigener Mitarbeiter, der hat alle kulturellen Unterschiede, Zeitunterschiede und sonstige Sachen abzufedern, Sprachunterschiede und wir als Auftraggeber wollen damit nichts zu tun haben. Wir wollen nicht mit Manila telefonieren, das hat nicht geklappt. Durch die Konstruktion unseres Outsourcing Projektes haben wir zu viel Berührungspunkte gehabt. Ein Entwickler, den auf den Philippinen saß und irgendwas runter codieren wollte, eine Rückfrage hatte, die dann ein fachlicher Experte beantworten musste und das ist jämmerlich in die Hose gegangen. Also. Wenn Sie das fragen wollen: Offshoreentwicklung funktioniert, aber das was wir damals gelernt haben: Alle Beziehungen, sowohl vertraglicher, juristischer als überwachungs- und rückfragetechnischer Natur sollten immer nur mit einem Brückenkopf besetzt werden, der aus demselben Kulturkreis kommt wie der Auftraggeber. Über Kulturkreisgrenzen hinweg ist für mich die Garantie zum Scheitern des Projektes. D.h. man muss ein Projekt ganz anders aufstellen. Wir haben bei einem Outtasking sehrwohl eine Zusammenarbeit, juristisch ist verantwortlich der Outtasker, wir arbeiten an verschiedenen Stellen zu. Das muss man, wenn man Offshore mit anderen Kulturkreisen arbeitet, anders machen. Man muss noch mehr kapseln und das wäre meine Theorie, die ich daraus gezogen habe, nicht nach unserem Entwicklungsmodell zu arbeiten sondern man soll wirklich nur sagen: Es ist mir egal wie du das machst, Hauptsache, du lieferst es so wie es aussieht. Also ich kann nicht zwischendurch das Haus begucken. Ich lass mir ein Haus bauen und sehe nichts und wenn das Haus dann fertig ist, sag ich, jawohl das wars.

C: Der Unterschied zwischen Haus und Software ist, dass es eine Wegwerfsoftware ist.

B: In solchen Fällen würde man die Wartung gleich mit in den Vertrag geben, also mehr Outsourcing machen. Dies Outtasking nach einem gemeinsamen Entwicklungsmodell, ist meine Erfahrung nach diesem Projekt, ist sehr schwer und ich würde in Zukunft die Finger davon lassen. Man kann von der Gestaltung der Zusammenarbeit Einfluss nehmen, man muss ja nicht ins andere Extrem fallen und komplett outsourcen. Das wäre sicherlich valide Lösung. Wenn man trotzdem will, dass die Projektergebnisse abgeliefert, ein Gewerk abgeliefert, was man selbstverständlich erwartet, muss man die Zusammenarbeit anders machen. Man muss versuchen, noch mehr Kontrollpunkte einziehen, damit man nicht wartet, bis das fertig ist, das Gewerk, und sehr viel Aufwand mehr in die Abnahme reinstecken als in die wirkliche Zusammenarbeit und in die...Leistung. Das ist die Lehre, die ich daraus ziehen würde.



C: Ein Hindernis ist auch noch, dass man nicht weiß, was man einkauft. Man bekommt etwas versprochen, man bekommt zwar eine Anzahl von Mitarbeitern genannt, man weiß nicht, wer das ist und es ändert sich von Projekt zu Projekt.

B: Sie sollten das vielleicht auch bringen: Bei diesem Outtaskingmodell, wo man ein Gewerk haben will, sollte das einen nicht interessieren. Ist auch üblich so, dass einem der Outtaskingpartner nicht hinter die Kulissen schauen lässt.

C: Offen ist, dass sie dies auch weiter geben.

B: Ja, auch erstens das. Und zweitens: Wenn Sie ein Haus bauen lassen, die einzelnen Maurer kennen Sie auch nicht. Sie gucken immer das Ergebnis an. Das muss immer der Charakter sein, was die Jungs da tun, dass wir bestimmte Rahmenparameter setzen. Wir setzen sie bei unserer Konstruktion relativ viel, das ist auch schwer für das Outtasking und das erschwert das Outtasking ein bisschen. Je mehr man an den Prozessvorgaben macht, desto schwieriger wird auch Outtasking. Es wird umso sicherer, je mehr man an Ergebnisvorgaben macht.

C: Warum wird das schwieriger, wenn man in den Prozess eingreift?

B: Weil ein Outtasker eine andere Firma ist, die tickt anders, und es wird immer schwieriger, je weiter man sich in den Kulturkreisen unterscheidet. D.h. die Denke!

Wenn wir hier sagen, wir haben jetzt ein Problem und in dem Integrationstest funktioniert etwas nicht und der andere Anwender muss etwas machen, wenn das eigene Kollegen sind, ist das oft ein Ruf über den Flur: Hey mach mal. Das ist einfach. Ein Outtasker, der sagt, die vereinbarte Schnittstelle ist nicht geliefert, ich kann nicht weiter, ich hab nen formalen Prozesspunkt. Allein was der juristischen Verantwortungstrennung –ein Fixpreis ist ja normalerweise dahinter- es muss ja mit Risiken kalkuliert werden und wenn dann irgendwas passiert, sagt er ganz klar, das ist nicht mehr mein Ding. Und je mehr man in dieser Prozesskette vorgibt, Dinge gemeinsam zu tun, wie er einen bestimmten Prozess abzuwickeln hat, umso mehr redet man dem zu, der seine Expertise im Outtasking hat, ins Geschäft rein. Wenn ich, der Bauherr, seinem Maurer sage, wie er seinen Speis aufzuladen hat, wird das bestimmt nicht besser als wenn man sagt: Mach du mal, du weißt schon, wie du das zu machen hast. Outtasking muss sich beschränken auf möglichst wenig Prozessvorgaben und möglichst viel Ergebnisvorgaben.

C: Wobei man auch im Fall der ABCbank die Prozesse vorgegeben hat, Ist es der Hintergrund, dass man langfristig mit den Ressourcen wieder arbeiten möchte, dass die sich einarbeiten?

B: Richtig. Das ist zwar richtig, dass wir das anstreben, aber das ist nicht die Motivation, dass wir die Prozesse... Wir wollen auch bei anderen Prozessen mitreden. Prozesse heißt einfach nur: wir wollen jedes von diesen Dingen weiter entwickeln. Das würde man mit einem Haus jetzt nicht machen. Wenn ich Schwierigkeiten dadurch habe, dass etwas in einer Art und Weise gemacht worden ist, dass das Ergebnis zwar richtig ist, ich aber trotzdem Schwierigkeiten habe, daran weiterzuarbeiten, weil die Art und Weise, wie das Ergebnis erzeugt wird, trotzdem Einfluss hat, wie das Ergebnis geworden ist. Man würde bei Outtasking sich im Normalfall damit zufrieden geben, mach mir das Ergebnis genau so. Das kann man an vielen Punkten der Softwareentwicklung nicht so exakt beschreiben, deshalb ist es an einigen Stellen gesagt, mach es mit dem Werkzeug, dann weiß ich ganz genau, dass ich es weiter entwickeln kann. Das ist die Motivation, weshalb wir sagen, die Werkzeugnutzung, nicht unbedingt die Prozessanordnung, die schreiben wir vor. Das ist auch untypisch, weil das auch gegen das Patentrezept verstößt, möglichst wenig Prozessvorgabe. Das haben wir aber ganz bewusst gemacht, weil wir gesagt haben, wir wollen nicht dauerhaft die Wartung verlieren sondern wir wollen sicher stellen, dass wir jedes von den Dingen, die da gebaut werden warten können und damit wollen wir nicht nur das Ergebnis vorschreiben sondern stückweit auch den Prozess vorgeben.

C: Das man die Werkzeuge als Mittel nutzt, um das Ergebnis in einem gewissen Bereich zu halten, dass man es versteht und weiterentwickeln kann.



B: Wenn wir eine Firma beauftragen, die nicht Stein-Mörtel-Stein einbaut, sondern einschalt, Beton gießt. Ich kann doch nur Stein auf Stein, weil ich das gelernt habe, dann kann ich das nicht weiter entwickeln in dem gleichen Stil.

C: Meine Erfahrung ist auch, dass es auch softwarespezifische Spezifika gibt. Wenn man eine bestimmte Softwareentwicklungsumgebung hat, hat man auch spezielle Generatoren usw., die wiederum die Wiedererkennbarkeit fördern, wenn man genau mit denselben arbeitet.

B: Das ist cool. Das ist noch ein viel besseres Argument. Generatoren sorgen ja dafür. Wenn wir nur den fertigen lauffähigen Code haben, die hätten den mit anderen Generatoren geschrieben, dann würden wir ja eine Erweiterung für deren Generatoren bauen. Das ist für die die Einschaltplatte oder die Speiskelle.

C: ...damit ist gemeint die GAD SEU, das ist eine Bank 21 JAVA J2EE-Version mit dem technischen Framework der GAD, als würden sie hier sitzen im Büro

B: Da gibt es bei Outtasking 2 Nuancen. Die eine Nuance, so als wenn die im Büro sitzen mit allen seinen Werkzeugen, mit allen seinen Vorgaben oder aber das Ergebnis muss stimmen, die Anwendung funktioniert. Wir machen den Ast, weil wir das mit unserem Werkzeug später weiter entwickeln wollen, und anderes Outtasking, was dann deutlich mehr geeignet ist für Kulturunterschiede würde man,dann haben wir auch nicht viel mit der Wartung zu tun oder wir übergeben dann die Wartung auch in die Verantwortung, dann ist man schon bei dem Übergang zu Outsourcing.

C: Da sich der Fokus hauptsächlich auf die Motivation für das Outsourcing bezieht, könne wir das noch vertiefen, dass wir da noch eine reichere Beschreibung bekommen, warum man sich entschieden hat, das outzuscourcen. Das geht ja über 2 Stufen sozusagen: ABCbank an die GAD, GAD an den externen Anbieter. Ich überleg, ob wir da einige Aspekte nicht betrachtet haben.

B: Motivation für das Outtasking, was wir bei der GAD machen, gibt es unterschiedliche. Einige hatten wir, die können wir auch kategorisieren: mangelnder fachlicher und technischer Skill, den hol ich mir von irgendwelchen Experten. Traf für unser Outtasking nicht zu, es trifft aber ein besonderer technischer Skill bei unserem Lotus Notes-Projekt zu. Es gibt so ein Raster, wann man sagen kann, wann mach ich Outtasking. Ein Punkt: wenn ich den Skill nicht habe- entweder fachlich oder technisch. In unserem Beispiel, was wir als erstes genommen haben, die Risikovorsorge, traf das nicht zu. In dem Lotus Notes Projekt war genau ein nicht vorhandener technischer Skill der Ausschlag, oh, da machen wir Outtasking. Was bewegt die GAD Outtasking zu machen? Es gibt einen bestimmten Kriterienkatalog, den hakt man ab. Wenn's drei Gummipunkte gibt, dann ist das ein ideales Outtasking. Eins ist, der Skill ist nicht da. Beim Projekt ABCbank, war es nicht das Kriterium, bei Lotus Notes war es der fehlende technische Skill. Dann macht man Outtasking im Wesentlichen aus Ressourcenengpässen, das ist wahrscheinlich der erste und wichtigste Punkt. Das ist genau der ausschließliche Faktor gewesen, um bei der ABCbank das Projekt zu machen. Dann macht man Outtasking, wenn man Engpässe in der Steuerung hat, die Steuerungsbandbreite überschritten ist. Das Management von der Anwendungsentwicklung selbst. Wenn man sagt, das ist mir jetzt alles zu viel, ich kann diese vielen Projekte gar nicht steuern, dann erledigt man sich der Steuerungsverantwortung dadurch, dass man Outtasking mit diesem Werkvertragsmodell macht. Das kann ein zusätzlicher Anreiz sein. Das ist so eine Mischform zwischen Ressourcen und Skill, die da fehlen. Ich hab nicht genug Ressourcen oder ich hab nicht genug Skill, um damit ein weiteres Projekt zu steuern.

C: Im Sinne des einen Autors ist alles inbegriffen: Steuerung, Know- How ist inbegriffen.

B: Da würde ich diesem Menschen stumpf widersprechen: Es gibt sowas wie eine ScoreCard Und es gibt eine ganze Menge von Argumenten die für Outtasking sprechen und es gibt eine Menge von Argumenten, die dagegen sprechen. Und man beleuchtet dann Projekte und sagt dann, die 3 treffen zu und die sprechen dagegen, also machen wir das nicht. Und das machen wir. Und es ist nicht: Outtasking Projekte unterscheiden sich garantiert gravierend. Wir haben jetzt gerade 3 beleuchtet. Wir haben insgesamt aber 5 oder 6 Stück gemacht. Die waren alle unterschiedlich,



allen schon von den Kriterien, warum sie gemacht worden sind. Das ist immer ein unterschiedlicher Mix, aus der Situation geboren, was die Kriterien sind und warum man es macht. Da gibt's auf jeden Kuafmännische Kriterien, das haben wir eben schon gesagt, dass man sagt mit Gewerken, mit Aktivierbarkeit und Bilanzabschreibungsmöglichkeiten über mehrere Jahre, das kann ein Anreiz sein.

C: Das war aber bei der ABCbank ein Nebeneffekt.

B: Klar. Aber trotzdem ist das ein Anreiz. Damit man diese Voraussetzungen erfüllt. Das ist ein Punkt in unserer Checkliste. Es muss die Anwendung auch gegenüber einem Finanzamtsprüfer auch als autarke Anwendung erkennbar sein. Wir bauen aber Teile von Bank21. In der Dokumentation muss auch ein Papier entstehen, warum das Ding in sich isoliert ist. Die Finanzamtsprüfer haben meistens von IT nicht so viel Ahnung, die sind eigentlich immer ganz gut zufrieden, wenn das Programm eigenständig umwandelbar ist.

C: eigenständig umwandelbar? Heißt das, dass man das eigenständig laufen lassen kann?

B: Nein, nein, es gibt ja Programme, die im Zusammenspiel mit anderen Programmen umwandelbar sind. Das würde dann beispielsweise, das Programmstück, was mit dem anderen Programmstück umwandelbar sind, das würd nicht funktionieren beim Outtasking. Das ist nicht isolierbar. Umwandeln heißt kompilieren. Letztlich ist die Grundidee dabei, es muss etwas sein, was ich auch jederzeit aus dem Regal kaufen könnte. Es muss irgendwie in sich abgeschlossen sein. Ich kann also- vielleicht hinkt das Beispiel ein wenig, beim Auto nicht ein Rad kaufen sondern müsste das ganz Auto aktivieren.

C: **Könnte man diese Risikoanwendung genau so auf dem Markt kaufen? Mit den Anforderungen?**

B: Nein

C: Deshalb hat man es wahrscheinlich selbst entwickelt.

B: Das ist ja eine ganz andere Entscheidung, die man vorher trifft, eine Make-or-buy Entscheidung. Das ist ja alles eine Variante von Make? Gibt es das, was da gefordert wird, am Markt zu kaufen als Standardanwendung, dann kauft man sie oder lässt es, wenn man meint, sie besser bauen zu können. Wenn man sie machen möchte, dann überlegt man sich, macht man das alleine oder macht man sie in einer Sourcingstrategie.

C: In dem Begriff der Masterarbeit ist für uns Sourcing in 4 Kategorien aufgeteilt: Die eine heißt Insourcing, was verschiedene Interpretationen haben kann. Für uns bedeutet das, dass man es intern entwickelt und dann gibt es noch Formen von Outsourcing. Das ist alles inbegriffen in Sourcingstrategien. Wir haben das noch in der Betrachtungsweise drin, dass man outsourcen kann, intern entwickeln kann, und Outsourcing hat verschieden Charakteren, wie Outtasking. Es gibt noch unterschiedliche Begrifflichkeit in der Entwicklung, z. B. dass man versucht, zu standardisieren. Dadurch dass man keinen strategischen Wert durch die Software hat, Möglichkeiten findet, Kosten für die Anwendungsentwicklung zu teilen. Dass die GAD diese Risikoanwendung entwickelt und dann an die Sparkasse mit verkauft, weil man letztlich gar keinen Vorteil dadurch sieht sondern es eigentlich nur aus Kostengründen versucht.

B: Das ist ja eigentlich mehr eine Insourcingstrategie. Das ist ja das wovon die GAD existiert. Wir sind eine Gemeinschaftsdatenverarbeitung für die Volksbanken, nicht jede Volksbank macht das für sich alleine sondern wir machen die Bankanwendungen für 400 Banken. Und jetzt für die 441. Bank die ABCbank.

C: Ja stimmt, das kann man als Insourcing bezeichnen. Man kann das selber entwickeln, die Standardsoftware-Anwendung ist letztendlich auch eine Form von Standardisierung. Da ist ein externer Anbieter, der versucht, möglichst breit die Kosten zu teilen. Die wollen natürlich auch Gewinn machen.



B: Wenn wir etwas ausschließlich für die ABCbank bauen, dann zahlt die ABCbank 100% der Entstehungskosten. Wenn wir etwas für 440 Banken machen, dann zahlt jede Bank ein 440zigstel davon plus unseren Aufschlag, wo wir Geld verdienen. Aber das ist doch klar. Das ist der Grund, warum man Standardprogramme nutzt und warum man Gemeinschaftsverarbeitung macht.

C: Und die ABCbank das zur GAD outgesourct hat.

B: Die ABCbank hat das vorher für sich gemacht und hat festgestellt, das ist kaufmännisch nicht mehr tragbar. Es ist günstiger, selbst mit dem was die uns jetzt noch bezahlen, ihre Spezialfunktionen zu bauen. Das ist eine von denen. In diesem speziellen Fall wird es für die ABCbank gebaut, aber es können noch andere große Banken, die das bisher nicht gefordert haben, für die sich das bisher nicht gelohnt hat, für die sich das auf einmal lohnt, weil es durch 440 geteilt wird.

C: Gehört die ABCbank auch zum genossenschaftlichen Verbund?

B: Ja. Wir dürfen nur finanziell sinnvolle Umsätze mit Genossenschaftsbanken machen.

C: In der Masterarbeit fällt der Begriff Outtasking so nicht. Wir haben 4 Kategorien und versuchen diese 4 Kategorien in das Projekt reinzubringen. Dann ist noch der Titel Outsourcing als Service. Damit ist das vorher Besprochene gemeint. Man sendet was an einen externen Outsourcer, man schert sich nicht darum wie sie es entwickeln, man kauft ein fertiges Produkt ein incl. der Wartung. Insofern entsteht dann Service und eine Form des Insourcing, worunter wir nichts anderes verstehen als intern zu entwickeln. Man hat was ausgesourct und holt es wieder rein. Es gibt verschiedene Interpretationen von diesem Begriff.

B: In der Literatur gibt es nichts anderes als das Gegenteil von Outsourcing, es gibt Insourcer, die für andere die Outsourcer sind.

C: Was wir meinen ist die Entwicklung, und die 4. Form ist Partnership. Was in diesem Fall nicht gemacht werden soll. Da müssen jetzt keine 50:50. Man hat vielleicht das Know How intern nicht, möchte das aber erhalten und durch die Kooperation soll dann ein Wissenstransfer geschehen und will davon profitieren, dass man erst mal das Know How reinholt. Das sind die 4 Kategorien.

B: Das was wir diskutiert haben, unsere unterschiedlichen Modelle, bewegen sich ja alle da oben. Outtasking, Werkvertrag, wirkliches Outsourcing sind nach Ihrer Definition alles Teilaspekte von Service. Ihre anderen Felder gehen darüber hinaus.

C: Partnerschaft ist in diesem Projekt nicht gewollt.

B: Ich erzähl Ihnen mal ein anderes Projekt, was Kooperation ist. Einer unserer Lieblingspartner. Der Bau der Entwicklungsumgebung, die wir machen, ist ja selbst ein IT-Projekt. Und dieser Partner liefert Standardwerkzeuge für die Entwicklungsumgebung. Wir machen derzeit ein Zweijahresprojekt mit dem Partner, was wirklich in Ihre Gruppe Kooperation passt, wo wir unseren Skill reinpacken, den wir haben und der Partner nicht hat zusammen mit den Werkzeugskills, die der Partner hat, die wir nicht haben. Da bauen wir Werkzeuge des Partners, die uns viel besser gefallen als die heutigen Werkzeuge. Gemeinsam mit dem Partner. Der Partner vermarktet die und wir kriegen die so, dass wir nicht mehr selbst basteln müssen, weil wir es vielleicht gar nicht könnten sondern kriegen sie von dem Partner. Und wirklich als zweijähriges festgezimmertes Kooperationsmodell. Das hatte ich jetzt gar nicht unter Sourcingstrategien verstanden, aber das ist das Typische, was Sie meinen, warum macht man andere Strategien. Ich weiß auch nicht, ob man das unter Sourcing versteht. Ist auch egal, das ist eine reine Definitionsfrage. Von solchen Projekten machen wir relativ viele. Das ist eines, wo wir mit einem technischen Hersteller was



gemeinsam betreiben. Wir machen Kooperationsprojekte mit Spezialfirmen, die Rechenmodule für Finanzbewertungen bauen, wo wir das nicht als Werkvertrag erstellen lassen, wo es auch keine Standardsoftware ist, das gibt es auch. Wo wir sagen, wir machen mit euch ein Projekt, wir entwickeln jetzt gemeinsam etwas, was wir jetzt brauchen wie Zinseszinsformel hoch 17; aber das ist nicht nur was ihr für die GAD macht, sondern das ist eine Kooperation. Wir geben unser Fachwissen in den Skill rein, ihr gebt eure Zinsrechenformeln rein, ihr seid die tollen Mathematiker, und das was da entwickelt wird, ist etwas, was ihr auch woanders verkaufen dürft. Passiert auch. Ist auch ein klassisches Kooperationsmodell.

C: Was verspricht man sich davon. Es ist ja das Problem, dass man den strategischen Vorteil, den man hat, die neue Software dann aber wieder abgibt.

B: Alles was wir an Sourcing machen hat ja was damit zu tun, dass verschieden Partner, die jeweils eigene Interessen haben, die oft konträr sind, verfolgen. Wann immer so was Erfolg haben kann, ist immer eine win-win-Situation Voraussetzung. Jeder muss sagen, o.k. ich hab das davon und ich hab das davon. Das ist meistens was Unterschiedliches. Weil wir unterschiedliche Unternehmensziele haben. Wir haben als Unternehmensziel für unsere Banken eine vernünftige Software herzustellen. Wenn wir sagen, wir wissen genau was da ausgerechnet werden soll; aber mit diesem Rechnen, das können wir nicht. Und wir haben ein Firma XYZ, die kann wunderbar rechnen und alles Mögliche, aber den fehlt ein wenig der fachliche Background. Wir machen ein Kooperationsprojekt, schmeißen unseren fachlichen Skill mit deren technischen Skill zusammen und wir teilen- das Ergebnis ist eins, was wir nicht für uns bauen, das ist nicht Service- sondern Kooperationscharakter, wir haben die Anwendung genau so wie wir sie brauchen, wir mussten nicht Mathematiker anlernen, die das für uns umbasteln sondern konnten auf einen bestehenden Skill zurück greifen, haben die Anwendung genau so wie wir sie wollten und die anderen können diese Anwendung auch am Markt, wo uns das aus Wettbewerbsvorteilen keinen Schaden zufügt, verkaufen.

C: Das ist schon die Bedingung.

B: Klar, sonst wäre das ja keine Win-win –Situation.

C: Stellt man sich das dann so vor als ein Softwaremodul, was man weiterverkaufen kann?

B: Es kommt auf den Vertrag an, ob man dann noch beteiligt ist. Wir haben beispielsweise so etwas mit einem Standardsoftwarehersteller vorgehabt. Standardsoftwarehersteller hatte ein Modul, so ein Finanzmodul, von dem wir gerade geredet haben. Gab's in der Standardsoftware so nicht. Und wir waren relativ weit mit den Vertragsformulierungen mit dem Standardsoftwarehersteller, dass wir gemeinsam mit denen ein Projekt bauen, wir bringen den fachliche Skill rein, der Standardsoftwarehersteller baut so, dass es in das ganze Softwaregefüge reinpasst und der Standardsoftwarehersteller darf das weiter verbauen. Da war das so, dass das ein relativ singulärer Skill war, wo wir gesagt haben, für uns wird eine win-win-Situation daraus, nicht nur dass wir was kriegen, sondern dass wir dann auch an dem Verkauf beteiligt werden. Daran ist das letztlich gescheitert. Unsere Forderungen waren so hoch und der Standardsoftwarehersteller sagte, das machen wir alleine. Haben sie inzwischen alleine gemacht, wird nicht verkauft, weil es nicht gut genug ist, wir haben eine eigene Entwicklung, wir können es selber bauen. Es wäre besser gewesen, es kooperativ zu tun, aber so ist das nun mal im Leben.

Das letzte, was ich gerade gesagt habe, Finanzmodule in der Standardsoftware, da war das so, wir wussten ganz genau, dass wir mindestens in Deutschland, wahrscheinlich sogar in ganz Europa einen singulären Skill haben, den sonst keiner hat, deshalb war der Standardsoftwarehersteller überhaupt scharf darauf, das mit uns gemeinsam zu machen. Wir wollten da auch entsprechend bezahlt werden. Wir wollten an dem Erfolg partizipiert werden. Das war genau der Punkt. Unser Skill war für uns ein unternehmerischer Wert, den geben wir nicht einfach so raus, dass wir sagen, macht das mal in der Standardsoftware und dann kaufen wir das von euch zurück, dann wollten wir gemeinsam was davon haben. Hat nicht funktioniert.



C: Das was in der GAD vorhanden ist, ist das modular. Könnte man das weiter verkaufen? Allerdings nicht in dem Standardsoftware-Format was wahrscheinlicher gängiger ist. Das wäre der Vorteil gewesen mit dem Standardsoftwarehersteller.

B: Richtig. Wir bieten das an, dass wir das einzelnen Instituten anbieten können. Wir sind schon froh, dass wir das dreimal verkauft haben. Wir würden dadurch, dass es ein standardisiertes Standardsoftware-Modul gewesen wäre, einen größeren Zielmarkt erreichen können.

C: Können sie die Fachlichkeit noch etwas genauer beschreiben.

Sagt Ihnen Basel 2 was? Die regulatorischen Anforderungen aus Basel sorgen dafür, dass große Banken ihre Bilanzierung nach IFRS machen können. Und dieses Modul, was die Bilanzierung macht und die Daten einholt, das sollte ein Finanzmodul heißen.

C: Und das ist im Prinzip schon ein Modul, was jede Bank braucht?

B: Jede Bank, die europaweit agiert, nutzt dieses Modul und will dieses Modul haben und da war natürlich unheimlich Musik drin. Jeder von uns, ...überhaupt der Standardsoftwarehersteller, und der Standardsoftwarehersteller hatte ein brennendes Interesse, dass sie bei uns rankommt. Wir haben ja die kooperative Eigenentwicklung eines Bankverfahrens und hätten als erstes dann ein Teil davon mit der Standardsoftware - auf der Werbetafel von dem Standardsoftwarehersteller dann auch besonders werbewirksam. Das hätte eine win-win-Situation werden können. Die Kaufleute haben es dann zum Schluss zerredet.

C: Wobei man festhalten kann, dass das ein Standardmodul ist, das jede Bank kurzfristig haben musste. Jede Bank musste sich der make-or-buy-Entscheidung stellen. Kauf ich das oder nicht. Und das ist eben der Vorteil, dass man sagt, o.k., ich kaufe das. Dadurch dass das Modul mit dem Standardsoftwarehersteller an andere Banken geht, können wir es günstiger und das auf einem sehr hohen Niveau.

B: Jetzt ist es so, dass es das von dem Standardsoftwarehersteller gibt. Und von uns auch. Und von 5 anderen Seiten auch noch. Und je nach dem was die Leute für ein Interesse daran haben, ob sie die Investitionskosten durchweg finanzieren durch Verkauf oder durch Lizenzen, ist ja auch eine unternehmerische Entscheidung. Wie krieg ich das Geld wieder rein.

C: Ja, das ist ein sehr interessantes Beispiel. Das ist natürlich eine Partnerschaft aber im Prinzip ist es genau das, was zu dieser Standardisierung passt. Die Basis 2 ist das, was eigentlich jeder haben muss. Der Wert liegt darin, dass die regulatorischen Anforderungen umzusetzen, sehr kostenintensiv ist und man überlegt, ob man als Unternehmen dieses Risiko eingeht. Man hätte aus Sicht der GAD die Kosten für die Anwendungsentwicklung einsparen können und auf alle verteilen können.

B: Aber das ist ja eine Abwägung. Natürlich haben wir uns hinterher informiert, wieviele nutzen das hinterher noch von Standardsoftwarehersteller, Nachdem, was da zerbrochen ist, haben wir hinterher mal geguckt, was macht jetzt der Standardsoftwarehersteller, entwickeln die überhaupt weiter, sie haben weiter entwickelt und sie bieten das Modul auch an, aber viele Banken nehmen eben nicht das Modul haben eigene Entwicklungen gemacht, und nehmen natürlich auch nicht das GAD-Modul. Es ist so gestrickt, dass wir an weitere Banken weiter verkaufen können aber es hat derzeit noch keiner gekauft. Klar, einer kleinen GAD kauft man so schnell nicht was ab, was man im Standardsoftwarehersteller -Standard kaufen könnte.

C: Das Modul . Es ist eine reine Kostenbetrachtung. Es ist ja nicht von strategischen Wert. Man muss es halt haben.

B: Warum es überhaupt diese Unterschiede gibt, hat damit zu tun, dass es nicht so schwarz/weiß ist. Man kann die regulatorischen Anforderungen relativ einfach abbilden. Besonders intelligent, integrationsfähig in die jeweiligen



Bankenverfahren entwickeln und da entsteht der eigentliche Mehrwert raus. Jeder muss es haben, jeder kommt mit einer Einfach-Lösung aus, aber der wirkliche Gewinn entsteht dann, wenn dieses Ding so gebaut ist, dass man das mit verschiedenen Steckern in die Bankenverfahren reinwerfen kann. Das war die Idee. In andere Bankenmodule einklinkbar oder bei uns in Bank21 einklinkbar. D.h. wie schaffe ich es, dass ich Informationen der IT so integriere, dass ich es austauschen kann. Dass ich nicht einen Monolithen baue, dass ich ein Volumen baue, das eine bestimmte Steckerarchitektur hat, dass ich das einklinken kann und auch in andere Bankenverfahren. Das macht eigentlich den Wert aus. Dass ich es habe, das muss jeder machen, aber wie?

C: Und der Effekt, dass man eben diese Steckerfunktion hat, ist, dass man Mehraufwand verhindert, diese technisch aneinander zu binden.

B: Die IFRS-Bilanz braucht ja letztlich Kontenrahmen, Kontenbestände, usw. Die kann man allgemein navigieren, ist aber auf einer normalen Flughöhe. Ich brauch also irgendwelche Kontensalden, je nachdem welchen Kontenrahmen ich habe. Die verschiedenen Bankenorganisationen zumindest in Deutschland und erst recht in Europa haben ganz unterschiedliche Kontenrahmen, d.h. die Strukturierung der Konten ist anders. Wenn ich ein System habe, was einen festen Kontenrahmen vorsieht und man sagt, o.k. da gibt's einen Stecker, da geht nur ein Skatstecker, alles anderes geht nicht. Dann tut's das auch, aber es tut's nur für solche, die auch einen Stecker haben. Die können sich überlegen, ich habe einen Skatstecker, oder ich muss einen aus meinem Kabel zusammen löten, dass ich nen Skatstecker habe. Je weniger flexibel es ist, desto mehr Aufwand entsteht, dieses Modul dann in die eigene Anwendung zu integrieren. Und mit den Daten aus der eigenen Anwendung zu versorgen, besser gesagt.

C. das war eine komplette Neuentwicklung. Man hat ja nicht Module von der Zentralbank bekommen.

B: Ne, das ist eine komplette Neuentwicklung.

C: In diesem Fall hat man den Standardsoftwarehersteller ins Boot geholt als Distributor?

B: Wir wussten genau, wir haben den skill. Wenn wir das alleine nur für uns machen, kommt uns das sehr teuer, wir haben nicht die Intention, Intention zwar aber nicht die Vermarktungsmöglichkeit, wir können es auch nicht in unserem Genossenschaftsvertrag verankern. Also sucht man einen Partner, der eine andere Kernkompetenz hat, die aber mit unserer kompatibel ist und nicht mit uns im Wettbewerb steht. Wir hätten das nicht mit den Sparkassen gemacht. Es gibt auch Kooperationen, die sind noch lustiger. Wir haben HBCI-Module, die Verschlüsselung von HBCI Transaktionen gemeinsam mit der Sparkassenorganisation entwickelt, also mit unserem Konkurrenten etwas gemeinsam gemacht. Das ist eine besondere Herausforderung, wo findet man da die win-win-Situation. Die war dann so, dass dieses Know-How in beiden Häusern vorhanden war, und dass es einfach arbeitsteilig, auch die Ressourcensituation, die man dann gegenüber den Großbanken als Standard durchsetzen konnte. Das war wieder eine andere Situation.

C: Da war der Fokus ganz klar, dass man einen Standard setzen wollte.

B: Einfach mehr Macht haben wollte, mehr Breite haben wollte.

C: Die Kosten waren wahrscheinlich so ein Nebeneffekt, dass man sagte, gut, wir teilen uns die Aufgaben.

B: Ja.



7.5. Transcript SHBank

M= Mirella

C= Christopher

S = Mr. Svensson

INTERVIEW GUIDE- TRANSCRIPT STOCKHOLM BANK, 16. May 2011, 10:15h – 11:25h

CHARACTERISTICS OF THE IS-SOURCING PROJECT

S: Do you need to know anything about me and who I am and what I represent?

M,C: Yes please, could you introduce yourself?

S: My title is head of sourcing within IT-development and that means that I am responsible for outsourcing and both service regarding development and maintenance of our IT-system within Stockholm Bank. That means also that I have nothing to do with the operation of our system, the IT production part that I s handled in a separate organization. We are now called group operations and IT where I work.

C: Ok. That's perfectly ok because we are also focusing on IS-development and not on the operation, this is exactly our focus.

S: ok.

C: That's perfect.

S: Fine.

M: Shall we start with the question of the interview guide?

S: Sorry, I didn't hear that.

M: So, should we start with the question from the interview guide.

S: Yes, we can do that. You have sent the questions to Gunnel and she sent them to me, I've seen the questions and I tried to prepare myself a bit, yes.

M: Thank you! So, the first question is then... Do you think that the financial sector is different from other industries in regards to IS-sourcing projects?

S: Yes, I think we are little bit different, and I've worked several years before I enter the bank as a consultant and every branch you work for seem unique,...they are a little bit strange compared to the other companies... but I think, banks or financial industry are a little bit more cautious perhaps, and we have more legislations around what we are doing and we need to comply with all these rules and regulations. So I think we are a little bit different compared to other industries.

M: Ok. So, Is IS-development a competence that a bank should have in its possession? What is your opinion about that?

S: Sorry can you repeat that question?



M: yes, is IS-development a competence that a bank should have in its possession? What is your opinion about that?

S: ..., Yes, I, of course we need to have that competence within the bank, it can be more or less, I would say, with own, if we should have it with our own employees or not. We need to have the competence, yes!

M: Regarding the IS-development process, what skills are of the highest value for the bank?

S: ... Of course we must, I think the only competence that we absolutely need to have... in own, so to say, by our own employees, is the governance or steering of the IT... al every other competence is possible to hire from other companies. But we need to have the prioritization of the IT investments and steering of the project portfolio and so on; we need to have it on our own.

Degree of Integration

C: Ok. These were somehow the introduction of the interview and now we have some more questions to a specific project we want to investigate, so, I am not sure whether, ... If we think about one specific project, .. Could you think about one and what is your IS-sourcing project about, then?

S: Yes, we have discussed this a little bit internally and I also had a discussion with the head of IT-development to select a proper project. Regarding the project, the problem we have is that we haven't done so many outsourcing projects yet in IT development, there are some within IT operations but the only one ... I looked into your questions and I think the only one I have answers to of your questions is a smaller outsourcing project where we outsource the maintenance and development of our HR-system. That is perhaps not exactly a strategic project for a bank.

C: It depends on, how much, so... I think, we could investigate several cases, so if you have time we could go through our question with this project and may select later on another example where we can discuss a more strategic case, I mean it depends on how much time you have. It approximately takes 40 minutes to go through the questions.

S: We can go through the questions and we can see if you are pleased with the answers. The problem with the more strategic projects is that they are, there is one that we are running now, but it's not, it's in an early phase, so I don't have the answer to all of our questions, I don't know exactly how it will end.

C: Ok, we could start with the first case, with the HR system and I mean, especially core banking systems as the other case are also interesting, or strategic projects are interesting. Let's do it in that way. So, we start with the HR-system. So, could you describe a bit this project? About what is it?

S: Yes, it is regarding our HR-system that is a system bought from peoplesoft, peoplesoft are nowadays owned by oracle, as you perhaps know, and we decided quite early that we would not built up competence for this very special kind of skills that are needed for maintenance and further development of the system, so we decided that we should start working with consultants and after a while we tried to find a partner that could maintain and develop the system for us. That is now finalized and IBM is our partner and they are doing the maintenance remotely from India, but they have one or two persons working in our premises here.

C: And are there any,...so the question is, how many external people are involved? In this project?

S: Now?

C: Yes.



S: It is something between 5 and 10 persons, it's a rather small project and the number varies, there are four or five persons involved in the daily maintenance and we have about double that size when we are running development projects targeting this system.

C: From which country, you said from India mainly?

S: Yes, the majority is working from an offshore location in India but there are, for the moment I think, we have one person from IBM working in our premises here in Stockholm maintaining the contact between the bank and the people working in India.

C: Ok. And, how many internal people are involved, from SHBank?

S: Now, from this stage, when we have outsourcing?

C: Yes.

S: We could say that we are two or three SHBank employees, working with the demand side, we set up the requirements for the further development and IBM execute it.

Duration

C: Ok, in terms of duration, what is the duration of the project?

S: It took about 18 month, from the start when we decided that we will outsource it until IBM had fully took over the responsibility and that one year ago now. So, the outsourcing has been in operation for one year and the contract length is three years so we have two more years until we have to decide to prolong or change the agreement.

C: Ok. This is pretty much answered, the next question. I can just state it, here and there we may ask questions twice but want to ask every question to have a very structure interview later on. So I just answered again. How far have you come with the project and to what phase?

S: As project, I would say it's finalized. We are now in the steady state phase with the vendor.

Allocation of control

C: ok. Then we have some questions to the allocation of control. So, what are the responsibilities of the internal employees involved?

S: They are working both governance of this vendor, that we could call vendor management. They are working with the demand from the bank, what demand do we have both on the running maintenance and also for further development. Let's say that we will introduce a new system or change a system with an interface to the HR system, then we must document the implication for the HR system and put this as a request to IBM.

C: And,... What are the responsibilities of the external employees in terms of the IS development?

S: They are fully responsible to maintain the system, install all necessary upgrades, this is a standard system provided from oracle and they have these minor and major releases that should be implemented and that is the responsible of the vendor to make it happen and ... Yes, I think that's what they are responsible for.

C: And, ... when there are further developments, is it encompassed in a certain contract? I mean, further development is that meant as customization?



S: Yes, you can say,... yes that's correct, that is exactly what it is. And what's included in the maintenance is only what is absolutely needed to keep the system running. And **for every kind of the further customization or new functionality in the system, for instance... we need to, the agreement with IBM** says that we should be able to order such service from IBM **but it's not included in the price**. So, every enhancement of the system is a new case that is built separately.

C: Ok. You said that... I am just wondering, you said the responsibility is on the side of the supplier somehow, IBM's side, is that also for the IS-development, so that they deliver a project you just check whether they are meeting the requirements? So, is it like purchasing each time this service?

S: I am not exactly sure that I understand your question but I can try to answer and you can say if that was that answer, ...I think if we, we should order an enhancement of the system, they are responsible of course to develop that enhancement according to our demand and we will check if we got what we believed we ordered. And then afterwards they are responsible to maintain also the extra functionality that has been built within the system.

C: And if they do not meet the requirement you somehow reject it? I am wondering what kind of contract is this based? Do you understand me? I can just rephrase the question again?

S: Yes, I think I understand you, but I don't know exactly how I should answer that ... cause the contract of course stipulate that they should do things regarding maintenance. But when we have further development there will be different agreements for each case and normally you set up the new, the add on to this system shall fulfil this and this requirement ... of course we check that, the delivery meets our expectations

C: But its somehow,... the relationship is somehow based on trust they of course try to meet your requirements so that you continue this partnership then?

S Yes, it's based on trust but of course we have also hard agreements such as SLAs and such things that they have to deliver within a timeframe and then if they don't there are penalties in the agreement. There are also if, let's say,... their responsibility is to keep the software on a specific level regarding patches and software upgrades and if they don't there are penalties for that.

C: Good, thanks. So have a question, who owns the software after the project finalization? Also now?

S: Yes, I think it is this way. Cause, this is a **standard-software and the ownership of the software belongs to oracle** and we own a license to use the software. But **all customizations and all additions that we may... are the property of the SHBank. And IBM has no ownership not in the standard software and not in the enhancement.**

C: Ok.

THE STRATEGIC VALUE OF THE IS-SOURCING PROJECT/ PRESENCE OF APPROPRIATE RESOURCES

The motives for sourcing

M: Now we will move on to questions regarding the motives for sourcing. And I wonder, what was the motives for sourcing this project in general? Is it based on your internal competences?

S: Yes, I think, I should mention briefly that we have in **our sourcing strategy identified sourcing driver**, we call it. They are **skills**, the need for good skills for us, its **cost**, and the vendor reducing cost, its **flexibility** and that's



regarding both; flexibility regarding buying resources and also regarding cost. And we have the risk sourcing driver that we are not allowed to increase the risk when we outsourcing some maintenance or development. And finally we have the fifth one that we called focus, where we say that's rather important that we can focus our own employees on strategic matters that are the important for the bank. And in this specific case the main drivers was cost - we had, we use a couple of expensive consultants for maintaining the system earlier, so we have significant reduce of cost when we were entering the agreement by the end. We also have in the beginning when we have decided that peoplesoft competence in this area of software is not a core business for us as a bank to keep, so we don't mind that a partner provide us with this competence instead of building up own competence. And finally it's a small part of focus that we, ... an HR system is something you need to have, every company need to have but it is not differentiating us from other banks or other companies. So it's better to use our internal staff for other things than handling a HR system

M: Ok, why have you divided your responsibilities like this?

S: I read your question in your questionnaire but I am not quite sure whether I understand the question.

M: It's regarding the division of employees, or why you have divided the responsibilities the way you have done with the external and internal employees?

S: ok. Well, I think that is because we don't need to know or have the competencies with our own employees, we could as well use someone else to take care of the system. I think that is the main reasons why we have make this split between us and the supplier in this case.

M: So, it's because of lack of competence internally?

S: Yes, it was lack of competence and it was a strategic decision – of course we could have hired employees to do this instead but we saw it's better to buy this service from the market.

M: Ok. So, what does sourcing of this IS-project mean to your organization?

S: It meant that we have reduced the cost for this HR system and we have no need to secure competence regarding this software anymore, because that competence is provided by our supplier.

M: ok, would you describe the IS-project as a success in terms of achieving the strategic goals underlying the sourcing decision?

S: Yes, success is perhaps a very strong word but I think it has been successful, yes. And we are satisfied with what we have achieved so far. Of course, there are always problems with an outsourcing, especially when you haven't done much outsourcing before. I think the total impression is that is has been successful.

M: Can you please develop that bit further; in what way has it been successful?

S: We have managed to reach the cost efficiency part that we have intended, the cost is lower now. We have are not dependent on external consultant as before and we have a well working governance over the supplier.

M: ok, how do you ensure that you achieve this success through sourcing, or that you achieve reduced cost through sourcing?

S: Some factors are easier to follow up and some are rather complicated. But the financial part is not very complicated. We know exactly what cost we have for maintaining the system earlier and we can see that we have a – compared to before – we have reduced cost. But then, regarding things like how easy or difficult it is to make



enhancement to the system and develop and implement new functions - that is more a subjective decision. And depending on whom you ask you will get different answers. Some say, ok that is fine, that is easier now, they are working well and some of course say that it was easier before, when there was a Swedish guy sitting here just a few blocks away. Now we have to deal with some guys in India so on... That part was a bit difficult.

M: But how do you deal with the knowledge held externally by the suppliers? Do you document it for future use, or this is important for you?

S: Yes, there is a part, I don't know, I've been involved in this development on the agreement with IBM but I am not sure word for word what it is stating... but we have at least one paragraph regarding knowledge transfer saying if we bring back the maintenance to the bank, or we would like to use another supplier when this agreement ends after three years, IBM is forced to make a knowledge transfer to us or the partner we point out. So, of course, currently we have less competence and knowledge of the systems then we had before, but it's possible to go back to the situation that we had before we outsourced.

M: Ok, do you see it as important to attain that knowledge for the future?

S: I think for the moment we have no ambition to maintain the system inhouse, anymore. So, it's not that important but of course you can't put yourself in a seat where you are, when you have no option to continuing with the current supplier. But I think, for the time being and as far I can see, I don't think that we ever maintain such a system on our own, we will use an external supplier but not necessarily IBM, we can chose another supplier next time, possibly.

M: ok

1) The question of value: Do a firm's resources and capabilities enable the firm to respond to environmental threats or opportunities?

C: Now we have some question according to the value of the resources hold internally. So, what are the current opportunities in the financial sector that is related to the IS-project? Respectively threats, if there are any?

S: Yes, if we not. Not just specific to this project but more in general, I think, the opportunity is to produce the needed IT – all banking today is based on IT, we have no processes at all within the bank that can work without IT support – but we need to have a competitive cost-level for the IT produced since it's the major part of the banks cost. That is, I think, the opportunity there.

C: To reduce this cost then, if I understand you correctly?

S: Yes, to reduce the cost but keeping the high quality, we are not allowed to reduce the quality just to reduce the cost.

C: Are there also current threats in the financial sector that is related to the IS-project?

S: Sorry, can you repeat that?

C: Are there also threats that are related to the IS-project in the financial sector?

S: Yes, perhaps, of course there is always the risk when you ...instead of doing it inhouse with your own staff ask someone else to produce services ...and I think the risk s something that we have to consider carefully when we change the way we develop or maintain. It can be an increased risk when we let a partner do this work for us but it could also be a reduced risk, we have...let say we have just a few employees with a competence on a system. Then it can be a good thing to do, to let an external supplier take over that to reduce the risk.



C: Could you explain that a bit further, why is it good to let an external person doing that?

S: Yes, if you say we have only two persons in the bank that have the full knowledge about an old system, if one of them retires and the second one gets sick then we are in a very difficult situation. If we instead make an agreement with an external supplier they will be obligated to secure that they have the correct competence and they can perhaps share competences between several customers so they can have a bigger base, perhaps 10 or 15 persons having the right competences or knowledge about the system. That we can't have, if we should have 10 persons working for the system that is only,... there is not work for more than for two, we would not be very cost efficient.

C: Ok, I am not sure whether you can answer this in this context. I just state it: What role does this project have in addressing *external challenges* that the company is facing?

S: I think, it's the cost factor that we are facing here. And we need, as I mentioned earlier- we need to produce it as cost efficient as possible. So, I think cost is the here.

C: Ok. Is this project then important to reduce the overall cost of the IT, for example?

S: If we should... it's not much money involved in this, because it's a small system. I think it's has a symbolic value that we show that we really can reduce cost without increasing risk or something like that. And if we can do this in a small scale for a small system we can also do it ... in a bigger system. It's a little bit learning by doing. It's easier to start with, ... if we should outsource a core banking system that would be a huge risk and I think no board of director in any bank will take that risk if you haven't tried something else before.

C: So, that is somehow a pilot project?

S: Yes, that's correct; it's one of our pilot projects, the way we need to pass this project so we can go for bigger outsourcing projects.

C: ... and this is somehow also, let us say, part of the overall strategy to step by step outsource functionality?

S: Yes, that's correct. We should always try finding the cost efficient solution for everything we do for the bank. And that might be to produce it with own resources but in this case we have found its more cost efficient and we can keep the quality by letting an external provider help us.

C: So I see this as an opportunity, what role does this project then have in addressing this opportunities? Just to restate it again.

S: Yes, since it is a small project that there is not much money involved, I would say, it has only a minor impact. But it's a role model. It's a good way to show that we really can do it.

C: Would it be possible to address these opportunity without having the IS?

S: No, I don't think so.

C: And the same hold for the threat you was talking about?

S: Yes.

M: It's more that you can show that you are capable of performing this?



S: Yes, I think that's the major point of this. We solved the problem with the expensive external consultant and the lack of right competences and we reduced the cost.

C: The question are going somehow in the **direction that you could have selected a different project to show that you can be cost efficient and deliver high quality at the same time?** Or was the only project to do the first step in that direction?

S: No, we **could have chosen absolutely another project but here we had a situation that was not very good since we had so few internal employees with the right skills. So it was a good project in that way that we had to solve.** Either we could have started to recruit employees to build up those competencies or we could go for this outsourcing... And I think, this project fulfilled all demand we had on a good pilot outsourcing project. But we have other initiatives in pipeline that we haven't come so far with.

C: What kind of capabilities or resources do you think are needed for carrying out this project?

S: We need to have **good support for ...how to evaluate and buy this kind of services from the market.** We have something within SHBank that is called group procurement where we have both **legal and procurement specialists** and of course we need to have a good view of what the market can offer and we can call that... that's the part of the vendor management...to have... to see, what different vendors can offer. We have said before that we should strive to buy service form the market that... which are already available in the market, not invented just for our demands.

C: So, when I understood you correctly, the two major capabilities you have to have is somehow; vendor management in terms of selecting the right vendor and then specialist for the functionality.

S: Yes, that's correct.

C: Then we have some questions to these two resources. We start with the selecting vendors so vendor management. So, do you think...oh first we have two more questions,...what of these resources and capabilities do you have inhouse?

S: Yes, what should I say. Currently, I **think we have or building up this competence.** Sometimes, we call it strategic buyers, they are specialist from our procurement department. They are sometimes very busy and we need to get support from them to handle negotiation process with the vendors. Sometimes they are a bit, they have too much to do. But the other competence, I think, we have inhouse. And from time to time, we also take advice from advisory firms, there are companies like Gardner and so on those are specialized in outsourcing these, and sometimes we use them as advisors.

C: For both, selecting the vendors and somehow the negotiation?

S: Yes, mostly **for selecting vendors and selecting appropriate scope for our request to the market.** What is, what should we ask for, what should we be not asked for?

C: Ok.



2) The question of rarity: Is a resource currently controlled by only a small number of competing firms?

M: Ok, let take a look on the questions of rarity then. And we wonder which of these resources and capabilities that we discussed now are rare in financial organizations such as yours?

S: Ok, then I perhaps answered the wrong question, but that was partly my answer from previous question. That is, what we call **strategic buyers that we have a little bit too few for the moment in the bank.**

M: Ok, are these strategic buyers very rare in SHbank?

S: **not very rare but we have a lot of initiatives that need support from these strategic buyers.** So, the effect of this is that sometimes they can't man the outsourcing project, we have to wait for the next free strategic buyer resource, perhaps.

C: Is that difficult to hire people from the job market for this purpose?

S: I don't know how difficult it is... I don't think **it is impossible but of course you don't want to have too many people employed.** Because then if we have less demand in next year then we have too many employed. I think, this is an effect of that we have a lot of initiatives for the moment and we have a little bit too few strategic buyers. But it's not a huge problem, something that is possible to solve.

3) The question of inimitability: Do firms without a resource face a cost disadvantage in obtaining or developing it?

C: ok, then we have a question... do you think that the internal capabilities needed for the project are hard or costly to imitate by competitors?

S: No, I don't think so. **I think, these are more generic competence and I think... of course it is a competitive advantage we have that we have very good people working with procurement and vendor management but it's nothing different what we need compared to what other banks need.**

C: Ok, then I have a question to the functionality or the know-how in HR developing IT-systems according to this. Would you say that this is rare on the job market somehow, to get these people who can develop...?

S: No, I don't think they are rare on the market. I am not sure but I don't think so.

C: And you would say, just to repeat, somehow you said in the beginning. You would not say that very valuable for SHBank to have this knowledge internally?

S: ok, then I am not sure... What kind of competences are we talking about?

C: Now I am talking about the competence of software developers who are knowledgeable in human resources.

S: ok. Then it's correct this kind of competences is not, ... no big need for the bank to have this kind of competences, I think.

C: Ok. I think we are through the main question, through all the questions for this case. If you have time we would appreciate if we could talk about the more strategic case you was talking about.



S: Time I have perhaps but I am not really allowed to talk about projects that are... this are a little bit sensitive of course, we are in a phase with negotiations with vendors and they are not finalized yet and some are not even started its more that we have a road map saying that within a couple of years... in the end of 2015 we should have another mix of resource consultants and bought services.



7.6. Transcript TKBank

M= Mirella

C= Christopher

K= Mr. Krona

INTERVIEW GUIDE- TRANSCRIPT TREKRONOR BANK, 10. May 2011, 09:00h – 10:30h

According to the RBV the decision of insource respectively outsource is driven by the strategic value of the IS and the presence of appropriate resources for the development. Strategic value is here interpreted in terms of a source of sustained competitive advantage in line with the RBV. Sustained competitive advantage is according to Barney (2002) an advantage that cannot be competed out through imitation. These resources have to be rare, costly to imitate and valuable as well as used with the right strategies. The VRIO model is used to investigate the strategic value through four leading questions.

CHARACTERISTICS OF THE IS-SOURCING PROJECT

M: I would like to start with the more general questions. The first question is:

M: Do you think that the financial sector is different from other industries in regards to IS-sourcing projects?

K: Yes I think that it is different not only from the project perspective but maybe from a sourcing or outsourcing perspective per se. Of the very simple reason that I think of the competitiveness in the Swedish market from the financial perspective if you understand what I mean. I think that you do not see that neither in German, English or American markets..but for sure in the American market. In the Swedish markets there is a lack of competitiveness.

M: If there is a difference- in what way is the IS-sourcing different in the financial sector in comparison to other industries?

K: Well banks are more risk averse when it comes to outsourcing.

M: Is IS-development a competence that a bank should have in its possession? What is your opinion, can you please develop your answer?

K: You mean if a bank should have it?

M: Yes, is it important?

K: Yes, I think it definitely. I mean there are always questions of mitigating risks and also a question of competitiveness, is also a question I think of time, I do not think that it is going to prevail because the competition will be there and all banks and other institutions in the financial sector will also have to look into IS or sourcing and outsourcing as a tool for competitiveness. So that is on the second part but on the risk side there are suitable mitigation activities that you can make in order to make it possible to outsource different activities that you have internal.

M: Regarding the IS-development process, what skills (*analysis, design, development, test, build*) are of the highest value for the bank?



K: Yes that is an interesting question, I mean it is very much a question of the value chain itself I would say. I would not sort of totally capitulate and say that hey you as an outsourcing partner keep and take care of everything. I think that the end parts of the full value chain need to sit in the control that is setting up the requirements from the business perspective and formulating them into some sort of architectural description in terms of IT. That is an asset I think that you should keep within the company, within the bank itself. That also goes for the other side of the value chain, the later part about deployment and how to actually get this into production is also a capability that I think is important that you keep in the bank. So, if you can at all say that this is black and white these are the areas that you keep yourself, but everything in the value chain that is in-between that is something that you can actually outsource to the partner. Does it make sense? Do you understand how I reason there?

M: Yes

Degree of Integration

C: I would like to have questions regarding a specific project. I am not sure do you know one project, or are you involved in one project that we can discuss?

K: Yes, I understood that from the questions. Thank you very much that you sent over these. If you mean one particular project I am happy to answer that.

C: What is your IS-sourcing project about? (*Outsourcing/Service, Insourcing/Inhouse, Partnership, Standardization*).

K: It is about application development. Its bank specific application that we are asking a partner to do a part of the development for us.

C: Ok, so could you say something about the functionality, is it risk management?

K: Of the applications itself you mean?

C: Yes I mean.

K: Well it is part of our framework that is targeted towards for instance the Internet bank that we are using. So it is towards retail side of the bank.

C: How many external (*suppliers*) people are involved?

K: People or suppliers?

C: Yes, so employees of the supplier somehow.

K: Between 30-50, it depends because it varies over time.

C: From which country?

K: From India.

C: How many internal people are involved? (*Internal expertise/competencies*).

K: In that particular project I would say that it is about 10-20.



Duration

C: What is the duration of the project? (*Is it a long term or short-term project?*)

K: Well it is an interesting questions because we have a long term contract with the vendor himself...It is a bit of a complex question of a very simple reason that we have a set up now with the vendor that is sort of a frame agreement with them that is a longer period of time that is depending on how you see it, somewhere between three and five years. But every project that we are doing with them, resulting from a call of that we do it is an amendment to the contract itself: were you say can you please do this for us? And that could be anything from three months and up to a year, one call of. Out of that information you can draw your own conclusion of what is standard, well something between three months and one year I would say that one typical project is.

C: And then I mean this specific project then is...

K: Well take the one that we have closest to that ran about for six months.

C: OK, good.

C: How far have you come with the project? To what phase? (*Analysis, design, development, test (system test, unit test), deployment*).

K: It is finalized. It has been delivered. It is on its way into production.

Allocation of control

C: What are the responsibilities of the internal employees? (*Analysis, design, development, test (system test, unit test), deployment, maintenance, operation (running the system), project management*).

K: The analysis phase for sure per se is the outer responsibility of the internal employees. Also part of the design I would say, the architectural part of things that is really a responsibility of the responsibility internally. Project management that is more or less split because we are running this particular project in an agile environment more of a Scrum method used. So here we have a split project management. But I mean the top level management, project management was the responsibility of the bank.

C: What are the responsibilities of the external employees? (*Analysis, design, development, test (system test, unit test), deployment, maintenance, operation (running the system), project management*).

K: Yes they had then the design phase and not the overall design but the particular design part that they were responsible for, that they give the development the test all the way up to unit test. System test was not and deployment was neither..and then maintenance. Actually maintenance is still debating, but I mean if I get what I want then maintenance will be a responsibility of the external as well. They made the thing and they should maintain it as well. Operating is not there and project management is just partly I would say.

C: Who owns the software after the project finalization?

K: We do.



THE STRATEGIC VALUE OF THE IS-SOURCING PROJECT/ PRESENCE OF APPROPRIATE RESOURCES

The motives for sourcing

(These questions give the opportunity to the interviewee to argue the motives underlying the sourcing project independently to the RBV).

M: What was the motives for sourcing this project in general? (*Is it based on your internal competences?*)

K: This particular project was three different drivers, first was cost we would like to see if we could achieve a cost benefit of the simple reason that they have a lower salary than a Swedish employee would have. Technically it was a question of availability; we simply did not have that competence free internally. Of course we have the capability as such of the very simple reason that we have been doing this for a couple of years. But for that particular timing we did not have the availability on the resources. It is also a question of timing I would say, time to market. The third driver would be the scalability, they have the possibility to scale up on a very short period of time. Which is sort of the same thing as if the availability, but that is more a general statement I would say.

M: Why have you divided your responsibilities (between the internal and external suppliers) like this?

K: We had the opportunity and also a challenge because timing-wise it was a challenge we had to be able to deliver this in a certain amount of time. And the only way to get around that was to employ some sort of the agile methods in order to come and to also the content of the functionality so we were more or less forced into do that. We had not done that before at least not agile development within an offshore development model. We were more than four teams to it (12:50 interview 3), and the reason for doing it was more time to market and given the content of this, so those are the drivers. And that was the reason for it.

M: What does sourcing of this IS-project mean to your organization/company?

K: Looking back to it now we did manage to make the cost savings that we were looking for and were able to live up to the relatively harsh time constrictions that was put on the project.

M: Would you describe the IS-project as a success in terms of achieving the strategic goals underlying the sourcing decision? – Can you please develop?

K: Yes I would, there is of course always a couple of its and buts, but looking at the whole I would say definitely that it is a success. It is quite black and white, if we had not done this, taken the decision to go offshore reducing the partner until this day we would not have to deliver at all, and we would have got the blame for not being able to do it. And I think that we would have missed the market opportunity to actually implement the particular function that we are looking for into the retail bank which we had more or less promised to the market. So this was do or die for the IT-department for sure. Let me expand on that...then you could always ask yourself the question why do we put our self into that situation with the market pressure. Well that is the name of the game, I mean that is either you are in or you are out. Either you take on the challenge from the market or you decide to do something differently. So from that perspective it is just for the IT-department to go ahead and try to deliver.

M: So would you say that it is something that is special for the financial sector?

K No I would not, the financial sector from that perspective is just much more risk adverse..which would mean that are you really really sure about this off shoring and can your really really do it. Then we can always ask back or tell



well yes sure it is the only way to do it if you want to meet the market demands. So it is really a question if this is generic for a bank balancing the level of risk that you have at hand and being able to meet the demands from the market. So that has always been central for the bank. It has not to do with the IT. Before the IT it was the same I would say it is all natural how much risk that you can take on.

M: How do you ensure that you (...achieve reduced cost) through sourcing?

K: There are two answers to that question. For this particular project it was quite easy, we put up a budget and the budget that we had..we had something that is better than was offered internally. But moreover I already told you that internally was not an option because that was timing-wise much more delayed. So from that perspective, I mean keeping the budget and keeping the time plan that was how we ensured that it was a success. Then one can always ask the question, is there a normalised way of measuring of whether if you have a good efficiency or not. And from that perspective we are in a more generic perspective trying to use functional points in the development process to compare to what we do internally...you know how many functional points do you actually get out of the amount of Swedish krona that you actually are spending on it. And from that perspective you can check whether you have good efficiency out of the outsourcing partner or not. I think that there is no easy way to do it, I mean you can do it very local on this particular project but it is more general I would say that you have to do it to measure your partners efficiency.

M: How do you deal with the knowledge held externally by the suppliers? (Do you ask for documentation of this external knowledge? -for future use).

K: Mmm...I mean we have internal capability in terms of this, but of course and that goes for all of the projects that you are to decide to put to an outsourcing partner, you are giving up the full control which is part of the game because you would have to put the trust in the partner. That is the key word I would say. If you do not trust your partner or the organization that you are doing this with, then I do not think that you should go that way. I mean it is more a question of trust and of course they are using all different sorts of methods in order to document what they do and so on. So we do not feel any extra risk on top that we put this sort of information to the vendor.

1) The question of value: Do a firm's resources and capabilities enable the firm to respond to environmental threats or opportunities?

C: What are the current opportunities in the financial sector that is related to the IS-project?

K: For that specific project it has to do with customer usability the ease for the customer to access certain functionalities within the retail bank. This is in the cards area, I do not think that I can go much further in the details, sorry....but I mean that we are facing the customers and different chairmen and this has to do with the Internet bank. But this was definitely a project of retaining customers and living up to the expectations that the customers actually have on our system and our interface towards them.

C: So this is then for the Internet bank to increase the number of customers and to get in this business of Internet banking...

K: I would say that we improve the quality of service in that perspective so that is number one. And the other opportunities reduce the internal lead times and operational cost for the bank. So it is really two fold, but of course I mean the customer part is the important to have a more user friendly way of handling certain things in the bank, Internet bank. You do it both from a customer perspective and then you also see that you have some upside operation internally in the bank so it is sort of a double win scenario that we have there.

C: What are the current threats in the financial sector that is related to the IS-project?



K: No I would not really say so. No.

C: So far I understood it is about improving the quality of the system in order to be as successful as possible in this Internet banking.

K: Let us develop it like this in terms of the threats, I mean the threats are always there, even though I said initially that there might be a lack of competition on the Swedish market. I think that is not 100% true, because in certain areas there is a fierce competition I mean if we cannot live up to these adaptations according to the specifications requirements from the end customers, they are more likely to maybe in the next case to choose another bank for their services. So for sure there is always a underlying threat were the customer eventually tries to abandon TreKronor Bank and go to some other bank.

C: Ok, so far you said that the switching cost are pretty low in this Internet market somehow.

K: They are..

C: What role does this project have in addressing threats (this threat) (*external challenges*) that the company is facing?

K: Well for sure that it is the only factor that,...the project is one of many actions that you have to do in order to stay on the top of the Internet bank business.

C: What role does this project have in addressing opportunities?

K: The same holds for the opportunities, you know when you open up a port telephone for the Internet bank in any bank there is a variety of different things that you can do..you can do trade with the stocks, you can ask for a credit card, and you can look at your balance and take a loan and whatever, so I mean you never run such big projects that are that...but maybe you do in the infrastructure part, but this particular project was just one of the enhancements on one area that we have. So it would be a little bit too much to say that this had a deciding factor whether people should stay or not. It is just one of those actions that you do in order to improve the usability from a customer point of view.

C: Would it be possible to address these opportunities without having the IS?

K: No. It is the basis for us.

C: Would it be possible to address these threats without having the IS?

K: No. It is the basis for us.

C: What kind of capabilities or resources do you think are needed for carrying out this project?

K: Ja that is a good question. I think that...project management..a project management that has experience from similar set ups before. Not only was it of experience of actually having to do with development resources in other countries and likewise having them in Sweden, but it was also a question of having people that were able to run agile, according to agile methods. So we were really...so it is one of the key resources or key capabilities that we have. Internally it was the hard core project manager that had that sort of experience for sure. Secondly I would say, management attention and the steering group for this particular project had a lot of management attention and all that reason that relatively new area within the IT and also across IT and business



management attention for sure. And thirdly the capabilities on the partner side, that you have some sort of business analyst not only an It-person but a person that is on the deliver side or the vendor side that they had and an understanding of what an Internet bank or what an retail bank is. That really was one of the deciding factors I would say and key capabilities. At least for this particular project and that of course goes for the internal and external then.

C: What of these resources and capabilities do you have inhouse?

K: **The project management and the stake holder management** in terms of your own line management of your that obviously had to be internal resources. But then **having the business knowledge is something that we would require from the vendor.**

C: What of these resources and capabilities need external support?

K: I think for sure it is. They have all the knowledge about how to do the agile development for sure. But in that set up, it was essential that they had **business knowledge because if they had not they would not have been able to do this in the short period of time that we were requiring.**

C: As you sad you had this internally available, so it was necessary to carry out this project but it was not a capability that you did not have.

K: **No, it was a timing question.**

C: Is that the same for the agile knowledge? Was that available internally?

K: We had just tried it, so it was sort of...**(29:09 interview 3)**, it was something that we had to keep a close track at.

2) The question of rarity: Is a resource currently controlled by only a small number of competing firms?

M: Which of these resources and capabilities are rare in financial organizations such as yours?

K: From uniqueness point of view, and now I am talking more general..I would say that **none of these are really rare in terms of pure existing. No I do not think so I would not say that it is rare.**

C: So you could easily acquire this on the market if you want to?

K: **Yes I would say so.**

M: Is there a high demand for these resources and capabilities? In what way is there a high demand?

K: Yes because now it is getting really interesting because that you see logically..are they rare. Well I would say it really depends on the demand. But I would say **it is not rare, because a lot of people out there they can do it. But the demand for these resources are for sure high.** That is no question about it. In general it is not a rare species, you know if you talk about the particular with java developers..a lot of people can do java. But then on the other hand the demand on the java developers in the Swedish markets are quite high. So in that case, of course there will be a shortage in one way or another.



3) The question of inimitability: Do firms without a resource face a cost disadvantage in obtaining or developing it?

M: Do you think that the internal capabilities needed for the project are hard or costly to imitate by your competitors? Can you please develop your answer?

K: Not really but, yes that is a good question...I mean this is how I see it: Some of these things you can put down on paper, you can write a lot of good process descriptions, role descriptions and see that these are the responsibilities of this and that. But I think that it has more to do with the values and how to actually decide to implement these kind of processes. So I think what you asked about, they are not hard to copy or costly to copy...it is just for a very interested person in terms of programming processes to try to copy it and put it down. So that is not the hard part. But I think and that you put in your next question here, I think that it is possibly hard of the very reason that if you do not have the values in place internally in the organization and if you do not have the content within the organization that you actually can do it, then it does not matter what you put down on paper you will never be able to make it work. It is sort of the soft spots in between the hard facts that counts. Let me take an example, I have done this in a couple of projects also outside the bank...we put down a description of who is responsible for what and then we start the project as such. And we also define the non site here is an officer role as such and try to specify what that person will do. But then it really came down to the person as such who do we actually send as a Swedish sea-sen officer to the Indian residence to the Indian office. That made really the difference in terms of success or no success. So I mean any competitor could copy or get hold of the paper that we had outlined, but they also have to copy the environment that this person is brought up in and that sort of culture that that person managed to infuse into the relationship with the vendor. It is really a question of copying soft spots, and I think that this is really a difficult thing for a company to do. Because it sits with the values, ja the values within a company.

M: So the values of a company, we should see that as a resource within a company..a capability. Just to see that I have understood you correctly, you say that these resources are then very hard to imitate.

K: Yes you can always put it on paper, but then there is a question of how you can implement it in the organization, and that is much tougher, and it is also a much longer period of time that you have to take into account.

M: So..it is the processes that you can imitate, but you cannot imitate the resources that are used in the processes.

K: For sure, exactly!

4) The question of organization: Are a firm's other policies and procedures organized to support the utilization of its valuable, rare and costly to imitate resources?

C: Do you think that the organization (*work procedures, knowledge, values, management, firm competences or skills the firm employs to transfer inputs to outputs*) of the project supports the use of its values, uniqueness and cost to imitate resources and capabilities? Can you please develop your answer?

K: No I do not think so to full extent. We are more lucky I would say than anything else. But I think that the more experience you get in terms of these sort of projects, the more understanding you will get on that this is valuable. Actually I do think that maybe senior management has a more or larger understanding of this than maybe middle management or lower management. That is not usually the case. But in this specific case I think that it is.



M: Does that affect the organization as a whole? Do the senior managers affect your work procedures, the knowledge and the values in a way that these resources are supported even more?

K: Yes, I would say that. We have values that are simple, open and generic (33:31 Interview 3), and that is something that we are working for a year now in terms of value words. I think that being very persistent now from upper management to work according to these values, and also to implement them into the organization, to sort of that it spills over to every operational part of the organization as well. Because I mean take the four years ago, I think that it would have been much harder to run such a project that we have just done, and then compare to today. That is really how the values and really the appearance of the whole organization changes by actually concentrating on having very clear values at hand. So definitely it is a different factor for the company.

C: I was just wondering is that one of many outsourcing projects running in the bank?

K: This is one of the earlier adopters of the agile methods, so we were definitely in the first phase. Now we are broadening this even further and the project that I just described is a norm setter – that says yes it is possible to do it.

C: So it is somehow in the mid or long run, the bank tries to outsource more and more projects...it is somehow the strategy to outsource more and more projects?

K: Yes we try to make this more of a standard procedure in the bank.

C: I have one more question to the technology...so this is a java based program, it is like J2E technology or?

K: Yes that is correct.



7.7. Transcript Pre-Interview NEBank

C= Christopher

M= Mirella

Ö = Mr.Öqvist

TRANSCRIPT OF THE PRE-INTERVIEW WITH NEBANK, 18. March 2011, 14:00h – 15:00h

Ö: We have 55 persons and then in India we have 80 people working, providing these services.

Ö: We have one unit in Nordea which includes a number of divisions where we provide IT-service which are divided in what kind of system we are supported in the bank.

C: We want to focus on a sourcing model for IT (application) development. We want to investigate what kind of application development projects should be outsourced and what is the appropriate sourcing model for different types of projects. Do we for e.g. have body leasing or do we keep the project management in house and have just software developers abroad. We want to investigate different models for what is the right approach.

M: We will investigate another banks as well a German bank GAD.

Ö: We have one unit in Nordea which includes a number of divisions, where we provide IT-services and then it is divided in what kind of systems we are supporting in the bank. My area is related to application development services and application maintenance services and operation services connected to the finance systems. There are different ways that you can set up application development services. Outsourcing or sourcing matter using external competences in development. In general I think our experience is that the more....body shopping is dependent on the project you are running. The more easy it is to define the deliver-ables and to set up what the projects should deliver. The easier it is to give projects to vendors. Where the tasks are unclear sometimes it is better to have it more like body shopping oriented where you take resources...have it more open. And also in a place where you need a set of skills from different parties it is better to have body shopping approach, where you have a project manager that manages the project delivery. That is my experience on this matter. When it comes to degree offshore onshore mix, the more close it is from the business perspective the more interaction you need. Therefore it is good to have offshore presence in the project. If you run more projects that are more technical oriented with less interaction or defined then it is more easier to do that from an offshore location.

C: So far I understood you still have developers in Sweden and you just outsourced certain projects to India? Is that true or...?

Ö: We are using global a vendor that has that has resources both locally on shore and offshore. And when we set up a project the internal resources is a person that understand and can own the software architecture and the way we design it. The production is different and more external resources offshore. Producing, developing, testing, are more external offshore resources offshore. The vendor is having either India as an offshore working on the project, and then you have a rotation and then go back. Or you have some Nordic resources from the vendor.

C: So far I understood, many projects are done with the help of the vendor. And depending on the project the vendor decides whether their resources are used from Sweden or India, which depends on what kind of software development discipline, for e.g. testing is done in India and requirement analysis is done in Sweden with higher skilled staff from the vendor.

Ö: It is not always like that, but in cases, but it depends on the activities if they are with high interaction requirement



with the client you need to have a lot of work shopping. These activities are located near the client for higher efficiency. But when configuration standard applications or building new solution- producing, then it is easy to have more of these services remotely. Testing with different kind of testing, there are many vendors doing automate testing and testing concepts- test factories. Were you see that this is run form India.

C: Well of the time you are working with the same vendor, it depends on the new project?

Ö: If you think of a specific set up some of our services are exclusive, the main outsourcing partner. But when it comes to projects its the convenient to us that the vendor are outsourcing partner that is also being the maintenance work is part of the development because then the knowledge transfer is minimised. But in certain cases they don't have the right competence or we want to challenge the proposals in terms of having some competing bids, for the development services specifically. Do not have exclusivity. Which means that we would in cases send a request for proposal to our outsourcing vendor, but in many cases we choose to have competitive vendors, to compare. Because we believe that there might be even better skills resources in other companies.

C: But just to ensure, but you still have software developers hired by Nordea, they are employees by Nordea or...?

Ö: We have around 60 persons in our setup, and 12 project managers, many managers because it is complex to manage outsourcing set up. Compared to another unit were you do not have outsourcing we have a high percentage of managers compare to the total employees. But the with whom I am working in my unit are not working with maintenance service, maintaining the applications. They are working in projects and as architects and as application solution owners, owning and being responsible for the different applications in Nordea. It becomes less to the vendor, and it's a difficult task to have a bad governance, and we do not have any control our self...we do not have the competence, and it is difficult to challenge the different ways of setting up the architecture. We have chosen a model were we have these competences internally, were we can see, and take the full operative ownership of the different applications in our unit, on an overall architecture and were we can go in and see. of the activities...these people are senior people, and they are not conducting development themselves...they help out to put up the right architecture and design, requirements and so on.

C: Do you have any number, what is the share of outsourced software development? It seems to be that the architecture, requirement analysis and business knowledge is owned by Nordea, and the doing and the maintenance and the software development is outsourced.

Ö: What we outsource is not much specified in an agreement were we have specified exactly what are the services that the outsourcing vendor is doing. This is of course varying, dependent on the set up and how much you choose to outsource. But if you take the services specifically in our area, then there are outsourced application development and application portfolio maintenance or management which is actually incident management, problem management, service support improvement management and then that is broken down to be more specified for the different underlining activities in the specific service. The nature of our area is not that you have one application that is independent from the overall infrastructure, but very much our area is that we collect a lot of transactions from systems all over Nordea financial transactions. We transform these transactions and then we put them into one area which is the General ega in the bank, and that is were we put all the financial transactions in everyday. It is a lot of transactions, and actually to be able to support this data gathering we have a lot of data batch flows running during the night that is extracting the information and standing it into a certain system. In our setup we have also outsourced the IT operation also to another vendor. So we actually have two outsourcing vendors; one is responsible for the infrastructure in general in the bank. And then we have also outsourced the application maintenance and the development to a separate vendor. When they run maintenance if they are disruptions in the data flows then there is a big dependency on that everyone knows what to do. And then the infrastructure vendor is responsible for all the batch flow monitoring. The maintenance supplier is responsible for making sure that the application functionality is working. But if you have another area were the run maintenance is for the Internet application for example, then that



support is much different because that is more like to ensure that the application as such is open running and that is more like an operating system that works separately from the other applications in the bank. So the data warehouse area and the finance area is very much about the data processing. That of course requires different kind of services when it comes to the maintenance and operation.

C: So I just want to ask is the maintenance also some kind of legacy system based on like from an technical point of view, I do not know like a mainframe system based on COBOL and so on, just to get a picture on what kind of technology is applied there.

Ö: The applications could be built in all kind of infrastructure, it could be an Oracle application, but it could also be in a Unix environment it could be an SAP application on the mid-range platform or it could be a COBOL self-built application in the mainframe. So it is a big variation on all kind of platforms of functionality. The infrastructure vendor is responsible for the platforms running and also the batch flows etc. To make sure that the specific applications on that platform is working is the maintenance suppliers responsibility.

C: So the maintenance supplier has to have a huge range of skills as I understand it.

Ö: Yes, and that is why the skill set needed in order to support these applications and the broad range of these applications, is driving this kind of people and also the skill set in order to support these service. It is about to harmonise to simplify from one aspect which is the standardization, because the more standardized it is the easier it is to find that kind of competence. The more self-built and programmed the application is, the more difficult is and takes more time to learn it. It could be people having built an application and maintained it for 20 years, in some cases it might be poorly documented and in some cases it may be relatively important to get standardization implies in order to minimize the operation risk. Those are the dimensions that are very important in order to drive them of course, but also that we are more conscious before choosing different kinds of applications from a cost perspective. So that we do not run oracle here, SAP here etc..the more we.. of course from an functionality perspective the application needs to support the process and the user from in an effective way. But it is important in an area were we have chosen a strategy on the soft-wares to use it is important to follow that to minimize the needs of competences that drives cost and operation risk.

M: I wonder what is the strategic goal of outsourcing for Nordea, and the motives for outsourcing?

Ö: I will not go into specifically what is the strategy of Nordea because it is confidential but, I think that what we can see on the market is that there is a big trend to outsource. I think that the pressure to become cost efficient and more productive is then putting pressure to enable us to do services were it is cheaper but we can get the same quality. And that is driving the development. And that is also what the role players in the market need to comply to. I think that this is different in different industries. In some industries they have reached consolidation earlier than in other. And I think that especially in banking other industries have reached further for example in manufacturing industries than in some cases in the banking industries, and that is varying form location to location. The manufacturing companies place factories where it is more cheaper to produce things. In more advanced services as in the software industry there can be drawn a parallel that if there are post advantages in doing these things in other place the possibilities are there, and there are a lot of players that are doing this and that are creating the competitive market that they need to comply to.

M: For how long has Nordea been outsourcing, in what time frame? (Since when)

Ö: There have been a lot of different kinds of outsourcing for many years. I do not know really how long specifically, that depends if we talk about the salary process these kind of things have for example been subject for outsourcing for a long time. There might have been a shift when it comes to onshore and offshore outsourcing. And I think that outsourcing as such is nothing new. It is just an increasing trend, and it is more common now that it is



delivered more and more from an low cost side. This trend is seen on the market too, you can have locations in Europe that are low cost that is increasing. Then you get that India is one step and then you also see that outsourcing is in other post countries. I am not saying that the prices are increasing that rapidly in India, but the more people are doing this in India the prices will then also be in line. And then you have to find new locations where the prizes are still relatively low. But there are other factors also specifically connected to that people need to know the language and the communication. There I think that the people of India have an advantage because they know English.

C: So far I understood, you talk now about the finance and the maintenance part of Nordea. But so far I understood Nordea does not make any distinguish between what kind of discipline or functional projects they outsource. So they actually do consider outsourcing for every kind of projects. Is that true?

Ö: No that is not true. I think that that is not true. It is really a definition of outsourcing which is that you do not do things internally, and I think that in all cases were we do not have internal resources then of course we are using consultants. If you do not have the capacity or the skills then of course you are using consultants. But in some cases you want to do that in a more structured way to get benefits or a lower price. We are delivering a lot of services internally as such by using sourcing in different ways and in different areas is being a lot.

C: You said that the actual IT-strategy of Nordea is somehow confidential.

Ö: Well if you are specific then the outsourcing strategy of Nordea is internal information.

References

- Allen, R. (1994): *Service*. Chambers Encyclopaedic English Dictionary, University Press, Edinburgh.
- Andersen, P. H. (2006): Regional Clusters in a Global world: Production Relocation, Innovation, and Industrial Decline. *California Management Review*, Fall 2006, Vol. 49, No. 1, pp. 101-121.
- Ang, S., and Koh, C. (2011): IT outsourcing. *The Blackwell Encyclopaedia of Management*. Cooper, Cary L. Blackwell Publishing, . Blackwell Reference Online.
<http://www.blackwellreference.com.ludwig.lub.lu.se/subscriber/tocnode?id=g9780631233176_chunk_g978140510065613_ss1-30> [Accessed 11. March 2011]
- Ang, S., and Straub D. W. (1998): Production and Transaction Economies and IS Outsourcing: A Study of the U. S. Banking. *MIS Quarterly*, Vol. 22, No. 4, pp. 535-552.
- Babbie, E. (2007): *The Practice of Social Research*. 12th Edition, Wadsworth, Belmont, CA.
- Balaji, S., and Brown, S. A. (2005): Strategic IS Sourcing and Dynamic Capabilities: Bridging the Gap. Proceedings of the *38th Hawaii International Conference on System Sciences*, IEEE Computer Society, Big Island, HI, USA, 2005.
- Baldwin, L. P., Irani, Z., and Love, P. ED. (2001): Outsourcing information systems: drawing lessons from a banking case study. *European Journal of Information Systems*, Vol. 10, pp. 15-24.
- Barney, J. (1991): Firm Resources and Sustained Competitive Advantage. *Journal of Management*, Vol. 17, No. 1, pp. 99-120.
- Barney, J. (2002): *Gaining and sustaining competitive advantage*, Second edition, Prentice Hall, upper Saddle River.
- Basel Committee on Banking Supervision (2010): *Basel III: A global regulatory framework for more resilient banks and banking systems*. [press release], 16. December 2010, Available at: <<http://www.bis.org/publ/bcbs189.htm>> [Accessed 15. May 2011]
- Buhl, H.U., Kundisch, D., Leinfelder, A., and Steck, W. (2000): IT-Enabled Sophistication Banking. Bichler, M., Hansen, H.-R., Mahrer, H., eds., *Proceedings of the 8th European Conference on Information Systems (ECIS)*, Vienna, 2000, Vol. 2, Gabler, Wiesbaden, 2000, pp. 789-795.
- Carr, G. N. (2005): Does Software Matter? in Bode, A., Broy, M. and Taubner, D. (eds.) *Software-Industrialisierung*. Informatik Spektrum, Vol. 28, No. 4, pp. 271-273.
- Davis, G. B. (2011): information systems. *The Blackwell Encyclopedia of Management*. Cooper, Cary L. Blackwell Publishing. Blackwell Reference Online. Available at:
<http://www.blackwellreference.com.ludwig.lub.lu.se/subscriber/tocnode?id=g9780631233176_chunk_g978140510065613_ss1-14> [Accessed 08. April 2011]
- GAD eG, (2009): *GAD Geschäftsbericht 2009*. [PDF] Available at:
<<http://www.gad.de/portrait2/0/geschaeftsbericht.html>> [Accessed 30. March 2011]



GAD eG, (2011): *Unternehmensphilosophie*. Available at: <<http://www.gad.de/portrait2/0/philosophie.html>> [Accessed 30. March 2011]

Gottschalk, P., and Solli-Sæther, H. (2005): Critical success factors from IT outsourcing theories: an empirical study. *Industrial Management & Data Systems*, Vol. 105, No. 6, pp. 685-702.

Hackmann, J., and Prehl, S. (2008): Umfrage unter Banken-CIOs: IT-Budgets trotzen der Finanzkrise. *Computerwoche*, [online] 1. October. Available at: <<http://www.computerwoche.de/subnet/t-systems/1874649/index2.html>> [Accessed 30. March 2011]

Johansson B. (2004): Deciding on Using Application Service Provision in SMEs. Department of Computer and Information Science, Faculty of Arts and Science, Ph.D. dissertation, Jönköping University.

Jochum, C. (2005): Versinkt das IT-Management in der Bedeutungslosigkeit? in Bode, A., Broy, M. and Taubner, D. (eds.) *Software-Industrialisierung*. Informatik Spektrum, Vol. 28, No. 4, pp. 278-280.

Kvale, S., and Brinkmann, S. (2009): *Interviews - Learning the Craft of Qualitative Research Interviewing*. 2nd ed., SAGE Publications, Thousand Oaks, CA.

King, W. R. (2001): Developing a Sourcing Strategy for IS - A Behavioral Decision Process and Framework. *IEEE Transactions on Engineering Management*, Vol. 48, No. 1, pp. 15-24.

Kraaijenbrink, J., Spender, J.-C., and Groen, A. J.(2010): The Resource-Based View: A Review and Assessment of Its Critiques. *Journal of Management*, Vol. 36, No.1, pp. 349-372.

Lacity, M. C., Khan, S. A., and Willcocks, L. P. (2009a): A review of the IT outsourcing literature: Insights for practice. *Journal of Strategic Information Systems, Elsevier*, Vol. 18, pp. 130-146.

Lacity, M. C., and Willcocks, L. P. (2009): IT Sourcing: Reflection on Practice. in Lacity, M. C. and Willcocks, L. P. (eds.) *Information Systems and Outsourcing: Studies in Theory and Practice*. Palgrave Macmillan, New York.

Lacity, M. C., Willcocks, L. P., and Feeny D. (2009b): Making the Outsourcing Decision. in Lacity, M. C. and Willcocks, L. P. (eds.) *Information Systems and Outsourcing: Studies in Theory and Practice*. Palgrave Macmillan, New York.

Lee, J.-N., Miranda, S. M., and Kim, Y.-M.(2004): IT Outsourcing Strategies: Universalistic, Contingency, and Configurational Explanations of Success. *Information Systems Research*, Vol. 15, No. 2, pp. 110-131.

Lewis, B. R. (2011a): service delivery. *The Blackwell Encyclopedia of Management*. Cooper, Cary L. Blackwell Publishing, Blackwell Reference Online.
<http://www.blackwellreference.com.ludwig.lub.lu.se/subscriber/tocnode?id=g9780631233176_chunk_g978140510254422_ss1-18> [Accessed 29. April 2011]

Lewis, B. R. (2011b): service product. *The Blackwell Encyclopedia of Management*. Cooper, Cary L. Blackwell Publishing, Blackwell Reference Online.
<http://www.blackwellreference.com.ludwig.lub.lu.se/subscriber/tocnode?id=g9780631233176_chunk_g978140510254422_ss1-28> [Accessed 10. May 2011]



- Loof, L. A. de (1998): Information Systems Outsourcing: Theories, Case Evidence and a Decision Framework. In Willcocks, L. P. & Lacity, M. C. (eds.) *Strategic Sourcing of Information Systems*, John Wiley & Sons Ltd.m Chicester, pp. 249 -281.
- Mata, F. J., Fuerst, W. L., and Barney, J. B. (1995): Information Technology and Sustained Competitive Advantage - A Resource-Based Analysis. *MIS Quarterly*, Vol. 19, no. 4, pp. 487-505.
- McIvor, R. (2009): How the transaction cost and resource-based theories of the firm inform outsourcing evaluation. *Journal of Operation Management*, Vol. 27, No.1, pp. 45-63.
- McKinnon, W., Grant, G., and Cray, D. (2008): Enterprise Information Systems and Strategic Flexibility. *Proceedings of the 41st Annual Hawaii International Conference on System Sciences (HICSS 2008)*, pp. 402.
- Nilsson, A.G. (2004): Information Systems Development (ISD): Past, Present, Future Trends. *Proceedings of the 13th International Conference on Information Systems Development - Advances in Theory, Practice and Education*, Vilnius, 2004, Springer, New York, 2005.
- NEBank (2011): NEBank homepage.
- Rösler, M. (2008): *Der Genossenschaftliche Bankensektor*. GRIN Verlag, Norderstedt.
- Roy, V., and Aubert, B. (2000): A Resource Based View of the Information Systems Sourcing Mode. *Proceedings of the 33rd Hawaii International Conference on System Sciences*. IEEE Computer Society, Maui, HI, USA, 2000.
- SAP (2011): *SAP for banking - Delivering Solutions for the Dynamic Financial Services Environment*. Available at: <http://www.sap.com/industries/banking/index.epx> [Accessed at 28. April 2011]
- Seale, C. (1999): *The Quality of Qualitative Research*. Sage Publications, London.
- Sommerville, I. (2001): *Software Engineering*. 6th ed., Pearson Education limited, Edinburgh.
- Stockholm Bank (2011): Stockholm Bank homepage.
- Taubner, D. (2005): Software-Industrialisierung. in Bode, A., Broy, M. and Taubner, D. (eds.) *Software-Industrialisierung*. Informatik Spektrum, Vol. 28, No. 4, pp. 292-296.
- TreKronor Bank (2011): TreKronor Bank homepage.
- Wajtrakul, B. (2005): Determinants of IS sourcing decisions: A comparative study of transaction cost theory versus the resource based-view. *The Journal of Strategic Information Systems*, Vol. 14, No. 4, pp. 389-415.
- Wikipedia, (2011): *Genossenschaftsbank*. Available at: <http://de.wikipedia.org/wiki/Genossenschaftsbank> [Accessed at 28. March 2011]
- Yin, R. K. (2003): *Case Study Research: Design and Methods*. 3rd ed., Vol. 5, SAGE Publications, London.