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# **Controlling IT Outsourcing Risks in the European Union Banking Sector**

Common Practices and Potential Challenges

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**ABSTRACT:**

This thesis investigates the risk management practices associated with IT outsourcing in the European Union's banking sector and the rapidly evolving digital landscape. Through qualitative analysis, including interviews with industry professionals, the study identifies key strategies for mitigating risks related to IT outsourcing. These risks include over-reliance on individual suppliers, regulatory compliance challenges, and the need for contingency planning. The study highlights the importance of regulatory frameworks in standardizing outsourcing practices and improving resilience. The data collected from the interviews were analyzed using thematic narrative analysis to identify trends, similarities, or contradictions in the responses, leading to conclusions on effective methods for managing IT outsourcing risks in the European Union's banking sector. Five industry professionals were interviewed, chosen for their professional expertise in the European financial sector, particularly in IT outsourcing procedures and risk management practices. The findings highlight the critical role of well-structured contracts and a skilled IT workforce in mitigating IT outsourcing risks. Effective contracts should clearly define service level agreements (SLAs), liability clauses, and exit strategies to ensure both parties are protected, and obligations are met. Additionally, the study underscores the need for continuous monitoring and evaluation of outsourcing partners to maintain compliance and performance standards. The research also points out the significance of due diligence in the partner selection process. Banks must thoroughly assess potential vendors' capabilities, financial stability, and compliance with regulatory requirements. Certification and adherence to industry standards are crucial in ensuring that vendors can meet the stringent demands of the banking sector. Furthermore, the study suggests that future research could explore the impact of workforce competencies on the outsourcing strategies of banks. As the digital landscape continues to evolve, the ability to attract and retain skilled IT professionals will be vital in managing outsourcing risks effectively. By offering insights into the current state of IT outsourcing risk mitigation in the European banking sector, this thesis contributes to the understanding of how banks can better navigate the complexities of digital transformation while ensuring stability, compliance, and competitive advantage in the digital era.

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**KEYWORDS:** IT Outsourcing, Banking, Risk control, Financial Services, Information Technology, European Union, Regulation

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**TIIVISTELMÄ:**

Tässä tutkimuksessa tarkastellaan tietotekniikan ulkoistamisen riskienhallintakäytäntöjä nopeasti kehittyvässä digitaalisessa ympäristössä Euroopan unionin pankkisektorilla. Laadullisen analyysin ja alan ammattilaisten haastattelujen avulla tutkimuksessa selvitetään strategioita IT-ulkoistamisriskien hallintaan. Näihin riskeihin kuuluvat liiallinen riippuvuus yksittäisistä toimittajista, sääntelyn noudattamiseen liittyvät haasteet ja irtautumisstrategioiden tarve. Irtautumisstrategialla viitataan tilanteeseen, jossa pankki joutuisi nopeasti irtaantumaan IT-ulkoistussuhteesta. Lisäksi tutkimuksessa korostetaan sääntelykehysten merkitystä ulkoistamiskäytäntöjen standardoinnissa ja häiriönsietokyvyn parantamisessa. Haastatteluista kerätty aineisto analysoitiin temaattisen narratiivianalyysin avulla, jotta voitiin tunnistaa trendit, yhtäläisyydet tai ristiriidat vastauksissa. Viisi alan ammattilaista valittiin haastateltaviksi heidän asiantuntemuksensa perusteella Euroopan unionin rahoitussektorilla, erityisesti IT-ulkoistamisprojekteista ja riskienhallintakäytännöistä. Analyysin avulla tehtiin johtopäätöksiä tehokkaista menetelmistä IT-ulkoistamisen riskien hallintaan Euroopan unionin pankkisektorilla. Analyysin tulokset korostavat selkeästi rakennettujen sopimusten ja osaavan IT-henkilöstön kriittistä roolia IT-ulkoistamisen riskien hallinnassa. Tehokkaiden sopimusten tulisi selkeästi määritellä palvelutasosopimukset (SLA), vastuulausekkeet ja irtautumisstrategiat, jotta velvoitteet täytetään ja riskit vähenevät. Lisäksi tutkimus painottaa ulkoistamiskumppaneiden jatkuvan seurannan ja arvioinnin tarvetta sääntelyn noudattamisen ja suorituskyvyn standardien ylläpitämiseksi. Ulkoistamiskumppanin valintaprosessia korostettiin kriittiseksi osaksi riskienhallintaa. Pankkien on arvioitava perusteellisesti potentiaalisten toimittajien kyvykkyydet, taloudellinen vakaus ja sääntelyn noudattaminen. Sertifiointit ja alan standardien noudattaminen ovat tärkeitä keinoja, joilla toimittajat voivat täyttää Euroopan pankkisektorin tiukat vaatimukset. Tutkimuksessa ehdotetaan, että jatkotutkimuksissa voitaisiin tarkastella tietotekniikka-alan ammattilaisten vaikutusta pankkien tietotekniikan ulkoistamisriskien hallintaan. Tutkimus voisi pyrkiä ymmärtämään mahdollisia riskejä, joita pankkien IT-henkilöstön osaamistasoon liittyy ja miten tätä voisi mitata. Digitaalisen ympäristön kehittyessä kyky houkutella ja pitää palveluksessaan ammattitaitoisia IT-ammattilaisia on ratkaisevan tärkeää ulkoistamisriskien tehokkaan hallinnan kannalta. Tarjolla tietoa IT-ulkoistamisen riskienhallinnan nykytilasta Euroopan pankkialalla tämä tutkielma edistää osaltaan sen ymmärtämistä, miten pankit voivat paremmin selviytyä digitaalisen muutoksen monimutkaisista haasteista varmistaen samalla sääntelyn noudattamisen digitaalisella aikakaudella.

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**AVAINSANAT:** IT Outsourcing, Banking, Risk control, Financial Services, Information Technology, European Union, Regulation

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## 1 Introduction

Information technology (IT) outsourcing covers a wide range of services and technologies essential to modern banking, from cloud services and digital platforms to artificial intelligence (AI) and cybersecurity measures (Bhatti et al., 2021; Alshari & Lokhande, 2023.) For instance, banks can use cloud services to access scalable tools, which eliminates the requirement for a large internal IT infrastructure. Similarly, digital platforms enable customer transactions and interactions remotely, improving customer service and accessibility (Hon et al., 2019). The banking sector is undergoing significant transformation as a result of increased competition, increased regulatory measures, and the integration of digital technologies (KPMG, 2022).

IT outsourcing opportunities available to banks allow them to benefit from the use of specific expertise and cutting-edge technology. The effect is twofold, as banks are able to address the complex challenges of the rapidly changing digital financial environment, but at the same time, outsourcing their operations creates new types of risks that need to be managed. Outsourcing IT functions therefore not only facilitates operational excellence but is also a strategic way for the banking industry to adopt high-tech solutions (KPMG, 2024).

According to Deavers (1997) the revolution of IT and global opportunities have encouraged a rethinking of sourcing decisions. An example of this is the implementation of IT services, and many companies have abandoned their own IT departments and are purchasing the services they need from service providers. Although outsourcing has been widely considered an attractive solution for a while, its exact impact on business performance has not yet been confirmed by research due to its complex nature (Deavers, 1997).

Due to several reasons, including the desire to cut costs, increase efficiency, and gain access to specialized expertise, outsourcing has grown in popularity in the European Union (EU) banking industry (European Banking Authority, 2019).

According to the European Banking Authority (2023) henceforth EBA the digitalization of the financial industry is posing challenges to banks' business models, emphasizing the necessity to enhance governance. Due to the current geopolitical instability and increased dependence on third-party providers for digital strategies, the risk of cyber-attacks is increasing (EBA, 2023).

According to EBA (2023), an area of concern is the shifting client preferences and the growing competition from new market participants. Financial institutions are facing mounting pressure to accelerate their digital transformation initiatives and reassess their business models. Additionally, they are confronted with intense competition in attracting IT professionals. Furthermore, EBA considers the escalating cyber and IT-related risks resulting from the geopolitical environment and banks' growing dependence on outsourcing to be particularly significant in their evaluation (EBA, 2023).

Given the complex and evolving nature of these risks, a qualitative research approach is essential to explore effective risk control methods in IT outsourcing within the European financial sector, particularly in credit institutions. This study aims to fill the gap in existing literature by providing insights into governance strategies and risk management practices, thereby contributing to the development of more resilient and secure outsourcing frameworks.

The banking industry is subject to extensive regulation due to the importance to society. Given the heightened risks associated with banks due to their handling of public deposits and the need to maintain customer trust highlight the significance of strong IT outsourcing practices (Financial Stability Board, 2020; Anderson-Princen, 2022). For this reason, this study focuses on banks to provide a comprehensive analysis of risk management methods in IT outsourcing within the EU banking sector.

Banks operate with risk management as their core principle. When a bank transfers its business operations to an external entity, it also subjects its own business to the vulnerabilities associated with that external entity (Nolle & Kelly, 2003). The aim of this study

is to examine scenarios in which banks' outsourcing decisions could expose them to increased risk, and how this risk could be managed effectively.

The research question guiding this study is: "What are key risk management procedures and possible risk points associated with IT outsourcing in the EU banking sector?" The research aims to enhance the current understanding of IT outsourcing risk management in the EU banking sector by addressing both theoretical and practical aspects. By analyzing these practices, we can uncover potential risks that may not have been adequately addressed in a rapidly evolving environment. This current state analysis will help highlight gaps and areas for improvement in managing IT outsourcing risks.

The study also investigates whether the European Central Bank (ECB) and the EBA's efforts to harmonize regulation and risk management in the EU banking sector have been successful. By interviewing industry professionals with experience from various major European banks, the study explores differences in IT outsourcing strategies across countries and assesses whether the harmonization of regulation has led to consistent practices. The research also examines the challenges of managing regulations across multiple countries and the complexities involved in overseeing such a diverse regulatory landscape.

This international perspective is crucial in this subject, given the increasing reliance on IT outsourcing and the rapid integration of emerging technologies like AI, which can pose new risks and require clear, up-to-date regulation (Financial Stability Board, 2020). The study aims to provide insights into whether industry professionals view the EBA's regulatory framework as effective and whether it has facilitated uniform risk management practices across the EU. The international aspect is critical in this context, as banks within the EU operate under the supervision of the ECB and function across national borders within the EU.

The study aims to gather current views from industry professionals on the subject and the possible risks to be expected in the near future. EBA also carries out assessments of the subject as part of its mandate to regulate and manage risk in banks in the EU. The purpose of this study is to complement the existing knowledge through interviews with practitioners and to provide concrete ways to mitigate IT outsourcing risks in EU banks.

Theoretically, it builds on existing frameworks by incorporating the latest technological advancements and regulatory updates. Practically, the study tries to bridge the gap between theory and real-world application by offering actionable recommendations and best practices. These insights are designed to be valuable for both academics and industry professionals, ensuring that the findings are relevant and can be effectively implemented in practice.

In this thesis, IT outsourcing refers to the outsourcing of a wide range of IT services and solutions. The term IT includes a wide range of technologies such as the Internet of Things, distributed ledger technology, artificial intelligence, and cloud computing. These technologies are critical to the development and delivery of modern financial services (Alsboui et al., 2021; Dietzmann, Heines, & Alt, 2020).

IT outsourcing covers both technical tasks, such as application development and server maintenance, and broader services, such as electronic payment solutions and various platform-based services, such as Infrastructure as a Service (IaaS), Software as a Service (SaaS) and Platform as a Service (PaaS). This perspective highlights the importance of IT outsourcing in driving operational efficiency, accelerating innovation, and ensuring the seamless delivery of financial services in the digital age (Thng & Lim, 2021; BCBS, 2005; KPMG, 2022).

## **1.1 Research objective**

Current regulatory frameworks in the EU banking sector can lag technological advancements and current economic situation, leading to potential vulnerabilities. This research aims to fill the gap by identifying best practices in IT outsourcing risk management and the potential risk points in the process. The aim of this thesis is to identify key risk management practices in IT outsourcing within the EU banking sector and to determine whether rapidly evolving IT has outpaced slower to update regulation, creating additional risk for the sector.

The phenomenon of IT outsourcing, particularly in the banking sector, is a significant field of investigation that deserves additional study because of the possible risks and advantages linked to it (Lacity et al., 2010). Despite the recognition of risks and benefits, the exact impact of IT outsourcing on performance and risk management remains underexplored in the EU banking sector. The study will provide an analysis of effectiveness and possible improvements regarding risks managements practices with the help of interviews from industry professionals.

The area of IT outsourcing is changing fast, with new technologies such as cloud computing and artificial intelligence (AI). Current research may not adequately cover these new technologies and their implications.

The subject is complex, and as different IT outsourcing opportunities emerge rapidly, continuous research is required to keep the risks under control. The main objectives of this study are to identify current and potential future issues that may arise from IT outsourcing in the EU financial sector. The study takes an international perspective, recognizing that although the EU has a unified regulatory regime for banks, practices may differ between countries. This study aims to clarify these possible differences in practices within EU banking sector.

Thus, academic research can help identify best practices for IT outsourcing in the EU banking sector. In addition, research can help to discover emerging trends and potential areas of concern that may require regulatory intervention.

The regulation of the EU banking sector can be seen as complex and constantly evolving. Existing research does not necessarily cover all aspects of regulation or their implications for IT outsourcing. Many studies focus on theoretical aspects but may lack practical applications and concrete recommendations. This study aims to fill this gap by providing practical solutions.

In summary, the dynamic and rapidly changing IT outsourcing environment, coupled with evolving technology, introduces new risks that require continuous research. Existing studies may be outdated or contextually irrelevant, particularly regarding emerging cyber threats and security breaches. Continuous research is essential to address these evolving challenges effectively. As banks' technological operations increasingly rely on products and services produced by external service providers, the rapid development of information technology only emphasizes a more in-depth study of the subject.

## **1.2 Structure of the study**

The structure of this thesis is designed to provide a comprehensive analysis of IT outsourcing risk management within the EU banking sector in the 2020s, examining its practices, challenges, and potential areas for improvement.

The first chapter sets the stage by outlining the research objective and gap. It discusses why the research is necessary, how it contributes to existing studies, and what the goals of the research are. This chapter provides the reader with context regarding the topic and its significance, establishing a solid foundation for the investigation

Following the introduction, the second and third chapter delves into the theoretical framework of outsourcing, discussing its definition, motivations including cost-effectiveness and productivity, alongside the risks involved, both strategic and operational. Chapter two also transitions into the IT outsourcing life cycle, dissecting the stages from identifying the need for outsourcing to the final phase of partnership. This progression underscores the cyclical nature of outsourcing relationships and highlights critical decision points that influence risk management strategies. This framework lays the groundwork for understanding the complex dynamics of outsourcing and its critical role in organizational strategy and operations.

The third chapter focuses on the theoretical framework of IT outsourcing in the European banking sector. Chapter three focuses on specific aspects of risk management, such as regulatory frameworks, due diligence processes, contractual agreements, and exit strategies, underscoring the multifaceted approach required to mitigate outsourcing risks effectively. It offers a clear direction for the study, by positioning it within the broader context of existing literature on outsourcing, thereby establishing the foundation for the subject.

Chapters four and five are the core of the thesis, detailing the research methods employed to investigate IT outsourcing risks and presenting an in-depth analysis of risk management practices in the EU banking sector. Chapter four explains the methodology, including the design of the interview process, which provides primary data for the study and how it is analysed.

The fifth chapter presents the research findings, synthesizing insights from the theoretical framework, life cycle analysis, and empirical data to draw conclusions about the state of IT outsourcing risk management. Finally, the sixth chapter discusses the findings of the study with the help of the theoretical framework.

Chapter seven concludes the thesis by summarizing key findings, discussing implications for theory and practice, and suggesting directions for future research. Through this structured approach, the thesis aims to contribute valuable insights into the risk management challenges and opportunities that IT outsourcing presents to European banks in the current decade.

### 1.3 Scope of the Study

The concept of outsourcing in this study is specifically focused on IT outsourcing processes conducted in banks that operate inside the EU, based on the experiences of the interviewees. The IT outsourcing is limited to banks operating within the EU. Additionally, the study is confined to banks within EU member states, rather than geographically encompassing the whole of Europe.

The perspective is kept relatively broad, aiming to map out the viewpoint of IT outsourcers across different EU countries. To provide a comprehensive understanding, risk management experts with career experience in both consulting and in-house roles in risk management and IT outsourcing processes have been interviewed. The interviews are based on people who have professional expertise on the subject through their professional career. They have either worked in a bank in the EU or have worked in the risk management area of banks as consultants or IT specialists. Banks in this study refer to retail banks.

| IT Outsourcing                       | Description  |
|--------------------------------------|--|
| Cloud Services                       | Utilizing third-party cloud service providers for data storage, computing power, and other cloud-based services.                   |
| Cybersecurity Services               | Engaging third-party providers for cybersecurity measures, including threat detection, incident response, and security monitoring. |
| Software Development and Maintenance | Outsourcing the development, testing, and maintenance of software applications.  |

|                           |   |
|---------------------------|---|
| Infrastructure Management | Outsourcing the management of IT infrastructure, including servers, networks, and data centers. |
| Data Management           | Organizing, storing, and maintaining data, ensuring its integrity and security.                 |

**Table 1.** IT Outsourcing Scope (Bomhard & Daum, 2021; Willcocks & Lacity, 2012)

The decision-making and operations of banks are heavily influenced by regulations, which is a significant focus of this study. However, the research aims to examine the current state and future perspectives due to rapidly evolving information technology. The study focuses on large international banks that operate in multiple EU countries. The scope of outsourcing is specifically limited to IT outsourcing, which includes the following aspects presented in Table 1.

For the reader's information, artificial intelligence applications have been utilized for proofreading and linguistic maintenance in this thesis.

## **2 Theoretical framework of outsourcing**

The theoretical basis for outsourcing is presented in this chapter, along with relevant information that supports the research questions. The section explores outsourcing in its various forms, highlighting both its advantages and disadvantages. The chapter discusses important considerations that can influence companies' outsourcing decisions and establishes the theoretical foundations of outsourcing. Furthermore, it delves into the motivations behind outsourcing, the associated risks, and the life cycle of IT outsourcing.

### **2.1 Definition of outsourcing**

Outsourcing is used to describe a wide range of business activities and there is no formal definition. In all its simplicity, outsourcing is assumed to be an attempt by firms to save costs (Deavers, 1997). According to Grimpe & Kaiser (2010), the main purpose of outsourcing is to reduce unnecessary burdens on parent companies. Lankford and Parsa (1999) define outsourcing as something that was previously produced in-house but transferred to an external party. Varadarajan (2009: 1165) puts it this way: "Outsourcing refers to the practice of a firm entrusting to an external entity the performance of an activity that was previously performed within the firm."

Outsourcing essentially means acquiring "sources" from "outside". To be more specific, using a third party to carry out services and produce items is a frequent practice among businesses. It typically occurs due to a labor shortage or for financial reasons, but regardless of the cause, the result is typically the same: to create goods using abilities that the organization typically finds challenging to develop for one reason or another (Arizona State University, 2019).

Outsourcing has become a necessary business practice. It is not a new solution for companies; it has probably been in use for more than 200 years. Outsourcing was primarily initiated by large companies looking to reduce their costs. Today, many small and medium-sized enterprises (SMEs) have discovered the benefits of outsourcing, which allows them to compete with larger companies that have been using outsourcing for years (Click & Duening, 2005).

In recent decades it has become a popular strategic management initiative. Over the last 30 years, the economic value, strategic importance, and complexity of outsourcing activities have increased. Outsourcing is not just a way of coping with small internal functions such as cleaning or security. Companies can use an external service provider for many complex activities (McCarthy & Anagnostou, 2004.)

Companies can outsource several organizational functions such as accounting, computers and information systems management, human resources management, facilities maintenance, logistics, and supply chain management, manufacturing, and marketing. According to Varadarajan (2009), the outsourcing phenomenon focuses on the choice between whether the activity is performed inside or outside the firm.

In certain industries, outsourcing can often be the only rational business model for all firms or a subset of firms. A good example of this is the practice where newspapers outsource part of their news gathering to external entities such as Reuters. Without this arrangement, most newspapers would not be able to publish news from around the world (Varadarajan, 2009).

According to Deavers (1997), outsourcing is the result of a complex change in the cost constraints of firms as they choose between in-house and outsourced production. Outsourcing is a complex process, and many factors simultaneously influence the decision to outsource. The next chapter discusses the basic purpose of the firm and why firms are

created in the first place. It outlines how the size of the firm can influence outsourcing decisions and motivations.

## **2.2 Outsourcing motives**

Globalization and the development of IT have had an impact on how companies operate and build their strategy. A growing number of researchers have identified outsourcing as a critical determinant of firm profitability and a crucial component of business strategy (Ono & Stango, 2005). Companies must be able to adapt both to the changing environment in which they operate and to react to the increasing competition. According to Varadarajan (2009) technological developments in the macro environment can be a driver of a company's decision to outsource an activity.

The development of IT is one factor contributing to the increased rivalry between companies in industries throughout. The development has led organizations to reassess their structure and strategy. As a result, organizations have potentially outsourced activities that are not considered essential to competitiveness or that can be outsourced more effectively (Lacity & Willcocks, 2009).

Outsourcing can provide banks with access to specialized expertise and technology that may be difficult or expensive to develop in-house. As noted by a study by the European Banking Authority, "outsourcing can enable banks to leverage the expertise and technology of third-party providers to improve the quality and efficiency of their operations" (European Banking Authority, 2019.)

McTernan (2015) investigates the prevalent outsourcing strategies within the financial services industry and examines their effects on performance, reputation, and relationships. The study highlights that outsourcing is primarily driven by the need to reduce costs, find new efficiencies, and increase shareholder value. Key strategies identified include cost reduction through leveraging labor markets in low-cost locations,

performance improvement by focusing on core activities and accessing specialized skills, and the impact on reputation and relationships, emphasizing the importance of effective management of outsourcing relationships.

The study also discusses challenges such as the impact on staff morale and job security, and the long-term implications of outsourcing, which require continuous evaluation and adaptation. McTernan recommends developing a structured framework for successful outsourcing and continuously reviewing and adapting practices to remain competitive and relevant (McTernan, 2015).

What comes to outsourcing and its effects, it is vital to understand why companies are organised in the first place and what influences the size and success of a company. In the essay "The Nature of the Firm" Ronald Coase (1937) introduced the leading theory on the purpose of the firm. Coase argued that firms are born because they can produce goods and services more efficiently than individuals could on their own. Coase's theory is mainly based on efficiency, whether it is more efficient to perform an activity internally or externally. Coase states that if the internal transaction costs are higher than the external transaction costs, the product should be purchased and vice versa.

Coase (1937) argued that the firm becomes larger when the entrepreneur organizes more transactions, and smaller when he stops organizing such transactions. Greiner (1972) describes in his article the different stages of organisational development as a company grows. There is a natural explanation for the fact that as a company's business grows, so does the number of employees.

In small organisations, the business owner is usually the sole manager of the whole enterprise. However, the limited capacity of the owner allows growth only up to a certain point. As a business grows, the number of employees increases, as the internal tasks and activities increases. The owner of a company can effectively manage up to  $x$  number of employees, based on the owner's abilities. When the number of employees exceeds  $x$ , new managers must be added. Employees are usually divided into teams and

departments, and managers are appointed to monitor the performance of each department, otherwise free-riding problems can arise that damage the company's performance. (Alchian & Demsetz, 1972).

Optimally, a positive relationship develops between the number of managers and the number of jobs (Williamson, 1967). Thus, as companies grow, the number of employees increases, but so do their costs. Companies often seek to reduce these costs by outsourcing certain processes that are not critical to the business. Outsourcing helps companies to grow without increasing the number of employees, but by expanding their network of suppliers and subcontractors.

Firms seek to maximise their profits, and one reason why firms outsource certain activities is based on Coase's theory that as firms grow, their profits may decrease proportionately. According to Coase (1937), as a firm grows larger, its efficiency tends to decline. As Coase (1937: 394-395) stated, "First, as a firm grows larger, the returns to entrepreneurial activity may decrease, that is, the costs of organizing additional transactions within the firm may increase." The author also argued that it is possible that the costs of organizing certain transactions within the firm may be higher than carrying out the exchange transaction in the open market.

Companies have the decision to either perform certain business functions internally or externally. Coase (1937: 394-395) noted that: "Secondly, it may be that as the transactions which are organised increase, the entrepreneur fails to place the factors of production in the uses where their value is greatest, that is, fails to make the best use of the factors of production. Coase (1937) also added that in some cases, smaller firms might have "other advantages" that are greater than those of a large firm. Thus, Coase's arguments are over 80 years old; they are still relevant. Companies can grow too fast or too large that they become rigid. Companies use outsourcing to tackle this problem.

Schriner (1996: 19) described that growing a company is like blowing up a balloon: “Your first few breaths, though difficult, produce immediate results. Subsequent breaths expand the balloon proportionally until it nears capacity. Stop too soon and the balloon never reaches its potential. Stop too late and it bursts.” By the last sentence Schriner means that companies can become too big. In the column Schriner also states that countless companies are grappling with the “too big” dilemma.

Companies can use outsourcing to expand production without expanding internally. According to (Bakhtiari, 2013) some companies outsource as an anti-growth strategy by which the company is trying to avoid unnecessary risk and to become too big. Click & Dueling (2005), in a guide focusing on outsourcing, argues that any firm that has grown to more than \$25 million in revenue has begun to face growth challenges in back-office processes that may be appropriate for an outsourcing partner.

Outsourcing affects the size of a company, and it is logical to look at issues related to growth and size. For example, Ono & Stango (2005: 2) states that: “Firm size may be important because it affects the scale at which a firm can produce internally if it chooses not to outsource.” Companies make choices based on whether it makes more sense to perform the activity in-house or outsource it. Outsourcing helps companies to focus on fewer tasks, and companies can choose to use the services of other companies rather than producing the activities themselves (Ono & Stango, 2005).

A series of studies conducted by the Outsourcing Institute, suggests that companies have a wide range of reasons for pursuing more flexible arrangements through outsourcing. Four primary reasons for outsourcing are to improve company focus, share risks, free resources for other purposes, and access to world-class capabilities. (Deavers, 1997.) Kakabadse and Kakabadse (2000) state that there are two significant categories of motivations for outsourcing processes that commonly drive the private industry, strategy, and cost. Next, we'll delve into the reasons behind outsourcing in greater detail.

### 2.2.1 Cost-effectiveness

Cost-effectiveness usually measure the ratio of a firm's revenues to the costs of achieving them, or in other words, the ratio of outputs to inputs. Revenue can be measured using the total profit or turnover of the firm. Costs are measured by the total cost of the enterprise or overheads. The ratio of turnover to total costs and operating costs provides a good measure of cost-effectiveness, allowing comparisons to be made between firms of different sizes (Jiang et al., 2006.)

Several academic studies have examined the impact of outsourcing on firms and identified the key factors that influence the success of outsourcing relationships. Ono & Stango's study from 2005, which looked at how outsourcing affected credit unions profitability in the United States, concluded that it could improve business performance. According to the study, credit unions that outsourced more frequently were more profitable and more likely to outperform their peers. The study examined a sample of over 10,000 credit unions. The study also discovered that the positive effects of outsourcing depended on several variables, including the nature of the outsourced activity, the calibre of the outsourcing provider, and the company's capacity to manage the outsourcing relationship successfully (Ono & Stango, 2005).

Cost driven outsourcing can occur when suppliers' costs are low enough that suppliers can deliver a service for a lower price (Harler, 2000). Cost savings due to outsourcing can be quite significant, and in a survey where outsourcing was used for cleaning services saved an average of 46 percent compared to in-house performance of the service in 7500 public organizations in Australia (Domberger & Fernandez, 1999). The direct impact of outsourcing is that the company requires less infrastructure and support systems when having fewer employees (Fontes, 2000). Therefore, companies can respond more quickly and be more agile to changing environments.

The cost savings sought through outsourcing are significantly linked to profitability. As costs fall, profitability improves as the gap between expenses and income widens. The

problem is that measuring the profitability of outsourcing can be tricky, for example, savings can also be made at other activities. (Saunders, Gebelt & Hu, 1997.)

Outsourcing affects companies' performance when it releases resources from inefficient activities. These cost savings are achieved through external suppliers' economies of scale. The idea behind this is that the supplier has specialized in providing the service for many other clients and can focus better on the activity. (Görzig & Stephan, 2002.)

According to Gilley & Rasheed (2000) companies that outsource some of their activities can also see a positive change in their fixed costs, as reduced investments in, for example, production capacity reduce them. Therefore, outsourcing can be seen as an attractive way to boost the financial performance of a company in short terms. Thus, according to Kremic et al. (2006) the effects that outsourcing has on companies' cost are not yet fully understood, and the subject can be more complicated than expected.

Deloitte's 2018 report highlights that outsourcing continues to be an important component of cost management for banks. It helps them to concentrate on their primary competencies and stay competitive against growing regulatory demands and market instability.

### **2.2.2 Productivity**

As mentioned before, companies can become more flexible by focusing on their core functions by outsourcing non-core processes. Geoffrey Moore (2002) defines core competences as, "Any behaviour that can raise your stock price is core, everything else is context." According to Kogut B. & Kulatilaka N. (2001), core competencies consist of capabilities that enable a firm to respond in the best possible way to market opportunities. Core competencies can also be defined as the processes that sales and marketing emphasise to customers (Click & Duening, 2005).

According to Kremic et al. (2006), there are many strategic issues that may encourage firms to use outsourcing, such as organisational restructuring, rapid growth or changing technology. The researchers also note that core competencies are used by organisations to maintain a competitive advantage and are a strategic factor often associated with the decision to outsource.

Strategy-driven outsourcing helps companies to focus on their core competencies when channelling their resources to the places where they are most productive. (Sislan & Satir, 2000; Kremic et al., 2006.) Though outsourcing auxiliary activities, companies can achieve faster production development, in addition, to cost savings by outsourcing the function to a superior supplier whose core competences lies in the function (Dess, Rasheed, Mclaughlin & Priem, 1995). According to Green (2000) a function is more likely to be outsourced if there is a lack of internal human resources to perform it and on the other hand if a function provides critical knowledge to the organization, it is less likely to be outsourced.

According to Jiang et al. (2006) several studies seek to explain the relationship between outsourcing and company productivity growth. Companies which are focusing on their core competencies are also more efficient. Contracting out allows the firm to increase managerial attention and resource allocation to those tasks that it does best. Productivity metrics represent ratios of outputs and inputs. The total revenue or sales of the firm represents the outputs. Inputs instead are measured through the number of employees, total assets or inventory required to generate the outputs. (Jiang et al., 2006.)

In the research Jiang et al. (2006) state that they failed to find evidence that outsourcing improves either firm's asset or inventory productivity and instead, the productivity of outsourcing firms are even lower than non-outsourcing firms. A major challenge for managers of most businesses is managing the level of productive capacity in the long run. As Jiang et al. (2006) put it: "If managers underestimate the need, the firm will not be able to produce goods or services that are in demand and will miss the opportunity

to earn revenue.” Also, Broedner et al. (2009), noticed in their research that outsourcing has a negative effect on a company’s profitability. Authors state that companies should not make the outsourcing decision only based on cost savings and that they should analyze the effects more broadly.

Görzig & Stephan (2002), instead implied in their research that outsourcing product manufacturing would increase productivity, but outsourcing services will decrease the profitability in the short term. They studied outsourcing in big German companies between 1992-2000. The differences between the results suggest that more research could be done on this topic as causal links are complex and difficult to detect.

### **2.3 Outsourcing risks**

While outsourcing has many advantages for businesses, including cost savings, access to specialized talents, and more flexibility, it also has risks, especially for banks and financial service providers. The various hazards that such companies may encounter while outsourcing their procedures are covered in this section.

Outsourcing poses a serious risk to businesses despite its potential benefits because it only transfers business risk to another firm rather than eliminating it entirely. Therefore, when starting outsourcing initiatives, risk reduction should come first. Companies that prioritize risk mitigation during outsourcing are more likely to achieve successful outsourcing outcomes while limiting any negative effects on their business operations, according to a study by Lacity & Willcocks (2014).

Outsourcing carries several risks, from worries about data security to a loss of organizational knowledge. Although each individual risk can be reduced, it is impossible to eliminate risk from an outsourcing operation. Therefore, corporations must balance the risk of taking on the project with the danger of doing nothing.

It is essential to anticipate possible outcomes, such as the full collapse of the outsourced supplier, and have backup plans in place to reduce risks associated with outsourcing. While adding to the overall complexity of the outsourced project, such strategies can support maintaining corporate operations in the event of unforeseen circumstances.

In order to prevent a complete operational failure, outsourcing buyers should also take into account the option of falling back on their old systems if everything else fails, as stated in the Contractor's Business Management Report (2003). The significance of risk reduction was also emphasized by Click & Dueling (2005), who outlined the difficulties and dangers that banks and other financial services providers can have while outsourcing their operations. These dangers include losing control over procedures, data security and confidentiality violations, problems with regulatory compliance, and detrimental effects on staff morale and output. Therefore, before beginning any outsourcing activities, it is crucial to carefully assess the risks associated with this process and create effective risk mitigation techniques.

Failure in outsourcing activities can carry high risks. The literature addresses many risks associated with outsourcing: employee morale problems, over-dependence on a supplier, and lost corporate knowledge. Outsourcing can also fail due to the simple fact of an imprecise or inadequate contract (Kremic et al., 2006).

According to Schwyn (1999) and Görzing & Stephan (2002), companies tend to overestimate the benefits of outsourcing and are not paying enough attention to transaction costs. Schwyn (1999) also states that suppliers are likely to perform better in the early stages of the contract to give a good first impression. Lonsdale (1999) believes that outsourcing failures are not due to an inherent problem with outsourcing but rather the lack of guiding methodology for managers.

The two main risks that outsourcing has to companies are the loss of resources that weaken competitive ability and excessive reliance on suppliers. Even though a function is outsourced to an external provider, the outsourcing company will still have to monitor and try to improve the performance of the activity outsourced.

If the outsourcing company does not control the situation, it will be easier for the supplier to increase costs and reduce performance. (Lonsdale, 1999.) Also, as the size of outsourcing projects increases compared to the size of the outsourcing buyer, the business risk also increases proportionally (Click & Duening, 2005).

To determine the risks and challenges connected with long-term outsourcing contracts, De Boer et al. (2011) conducted a case study on a financial services company. The study discovered that outsourcing could reduce a company's flexibility and agility in responding to shifting market conditions by increasing a company's dependence on the outsourced provider and causing a loss of control over crucial business processes. Additionally, the researchers found that outsourcing may cause a loss of knowledge and experience within the business, which could hinder innovation and reduce the company's capacity to learn from its own operations. The study emphasizes the significance of risk mitigation strategies in long-term outsourcing contracts, such as keeping a strong internal capability in crucial areas and developing strategic alliances with suppliers. According to the findings, it is crucial to manage the outsourcing partnership carefully to make sure that it is in line with the company's strategic goals and objectives.

The potential loss of control over sensitive data and information is one important concern. De Boer et al. (2011) claim that outsourcing firms might not adhere to the same security controls and procedures as the bank does, which could expose private client information.

Potential reputational harm is still another concern. The bank's reputation could be damaged in the event of a security breach or other incident involving outsourcing, which would result in a loss of clients and income. (Lacity & Willcocks, 2001).

### **2.3.1 Strategy risk**

Outsourcing is a strategic business decision that involves transferring specific processes to external service providers. As outsourcing providers become more sophisticated, the

decision to outsource is no longer just about cost savings but also about improving performance in critical functional areas. Today, the adoption of an outsourcing solution is often based on improving a company's performance in the process (Click & Duening, 2005).

According to Kremic, Tukul & Rom (2006), outsourcing is an important part of business strategy, and most organisations use outsourcing for some of the functions they used to perform in-house. Outsourcing can also be seen to reduce the risk of an organisation by sharing it with suppliers, while at the same time acquiring the positive attributes of these suppliers. Outsourcing has become a common practice in both private and public organisations and can be a major factor in giving firms a competitive advantage.

Outsourcing in the banking sector can also present strategy-related risks that can affect a bank's competitive advantage. To get beneficial outsourcing outcomes, Chen and Huang's (2009) study found that there must be strategic alignment between the outsourcing firm and the service provider. Misunderstandings, disagreements, and even the failure of the outsourcing project may result from the outsourcing firm's strategic goals and objectives not being in line with those of the service provider.

Additionally, Kremic, Tukul, & Rom (2006) underline that the corporate strategy should be integrated with the outsourcing strategy to guarantee that decisions about outsourcing are in line with the long-term aims and objectives of the organization. To reduce the risks associated with strategy, financial institutions must carefully assess their strategic goals and integrate them with the outsourcing strategy.

According to Kotabe et al. (2008) there is an optimal outsourcing rate for every company, and if the company deviates from this optimum point, its performance and competitiveness will suffer. If a company outsources too much of its activities, it might lead to increased transaction costs, on the other hand, too little outsourcing leads to inefficiency. The optimal level of outsourcing explains why companies never outsource all their operations and why they do not perform everything internally. (Kotabe et al., 2008.) The service provider may become dependent as a result of outsourcing.

Outsourcing can lead to a situation where a corporation becomes excessively reliant on the service provider, as stated by Baily & Farmer (2015).

Also, the possibility of less innovation and learning within the bank poses another danger relating to strategy. The ability of a bank to innovate and create new services and products may be held back by the transfer of knowledge and expertise to outside sources. Additionally, outsourcing may prevent the service provider from sharing the bank with data and insights, which could hinder the bank's capacity to learn from its own operations. (Lacity & Willcocks, 2001).

According to Bettis, Bradley & Hamal (1992) companies should integrate outsourcing into their corporate strategy, and it should be measured financially. Companies should also identify their core competencies and try to avoid outsourcing any functions critical to them. Lonsdale (1999), in contrast, said in his risk management model for outsourcing that companies should not outsource core functions at all. Outsourcing functions near the core competence increases the strategic risks of the company.

According to Jennings (2002) one of the risks associated with outsourcing is the dissemination of critical information to competitors, especially if the function outsourced is close to the core competencies of business. Outsourcing can in some cases reveal information about companies' financial situation and strategic position. When suppliers operate in the same market, the diffusion of knowledge has a more significant impact on both companies (Arya, Mittendorf & Yoon, 2014).

### **2.3.2 Operational risks**

In order to cut costs and increase efficiency, the banking sector is turning more and more to outsourcing, thus it's vital to take into account the operational hazards that may result from these connections. Operational risks in outsourcing include the possibility of financial losses as a consequence of insufficient or failing internal procedures, people, or systems, or as a result of outside events (Hohental & Kivisaari, 2011).

Lacity et al. (2010) go over how crucial it is to comprehend and control operational risks when outsourcing. They performed a review of the empirical research on IT outsourcing and highlighted a number of operational hazards, such as the possibility of control loss, a lack of flexibility, and problems with data security and privacy. Effective risk management techniques, such as extensive due diligence, contractual safety measures, and regular monitoring and review, can reduce these risks. For outsourcing initiatives to be successful and to protect banks' reputation and financial stability, it is crucial to recognize and manage these risks (Lacity et al., 2010).

To guarantee the success of outsourcing initiatives and protect the reputation and financial stability of banks, operational risk management in outsourcing is essential. Banks can profit from outsourcing while reducing the risks involved by being aware of the potential dangers and putting good risk management strategies into place (Pierides & Mulligan, 2024).

The loss of control over operations is one of the primary risks associated with outsourcing for banks and financial service providers. Outsourcing, according to Baily and Farmer (2015), can result in a loss of direct control over the activities and procedures that have been contracted out. If the service provider falls short of the desired levels of service delivery or if they start to be unreliable or unresponsive, this may result in problems. The possibility of rising costs over time represents another danger. De Boer et al. (2011) remark that while outsourcing may initially be perceived as a cost-saving option, over time, outsourcing providers may raise their pricing or add on extra fees, increasing the bank's costs. Additionally, expenses like legal fees and contract negotiations that are related to maintaining the outsourcing partnership might build up over time. (Lacity & Willcocks, 2001).

Data breaches and other security threats are yet another danger connected to outsourcing. Sahoo & Pati (2020) point out that outsourcing may cause the transfer of sensitive

data to outside providers, raising security concerns. This is especially important for banks and other financial service providers since they handle a lot of sensitive consumer data.

Outsourcing may also result in the service provider's operations and processes being less transparent. Banks and financial service providers should make sure they have access to all pertinent information and data regarding the outsourced procedures, according to Anand & Khanna (2019). If the service provider is not open and honest about its operations and procedures, this may be challenging to accomplish.

The bank and the service provider may experience communication and cultural obstacles because of outsourcing. Cultural and linguistic limitations can result in misconceptions and miscommunications, which can lower the standard of the services offered, as mentioned by Zavyalova et al. (2016).

According to Lee et al. (2010) companies may seek to gain competitive advantage by outsourcing their product development and digital services. By outsourcing companies can increase profitability, but it can also lead to a loss of competency in the long run. Outsourcing poses a risk because the knowledge that is critical to a company's success may not be under its own control (Bettis et al., 1992). Innovation may be reduced when some of the activities are outside the company's control. Companies may not realize that outsourcing involves the risk of losing the knowledge and skills critical to competitive advantage (Chesbrough, 2010).

This chapter has reviewed academic research on outsourcing. It discusses the concept of outsourcing in general terms, as well as the motivators and risks involved. The next section will look in more detail at the process of outsourcing in the banking sector. From identifying the need for it, to selecting and monitoring a partner, to concluding the cooperation. A more detailed discussion of the outsourcing process in the banking sector is important for this study to critically examine the risk management functions associated with the process.

## **2.4 IT Outsourcing life cycle**

Understanding the IT outsourcing process is useful for this research as it provides a fundamental framework to support the study. This knowledge is necessary to formulate appropriate interview questions that delve into the details of the outsourcing endeavors. By examining the stages of the IT outsourcing lifecycle from initiation and vendor selection to partnership management and closure, this study aims to identify critical risk points throughout the process.

This understanding will help with the identification of potential risks and the development of strategies to mitigate them, so improving the overall management of IT outsourcing. Although not comprehensive, the overall picture of the outsourcing process offers significant perspectives on the complicated nature of the client-supplier relationship and the strategic choices at play, hence complementing the analysis of IT outsourcing risk management provided in the thesis.

### **2.4.1 Identifying the need**

As mentioned, banks use IT outsourcing as a strategic tool to hand off some of their operational responsibilities to outside service providers (Bhatti et al., 2021). The desire to concentrate on core competencies, access to specialist knowledge, and cost reduction are a few of the elements that influence this choice (Holzhäuser et al., 2005.) From selecting the function to be outsourced through managing the outsourcing relationship, the outsourcing process contains various steps.

One example of the outsourcing life cycle, as described by Cullen et al. (2006) comprises four distinct phases that form an industry-independent model. The initial step involves evaluating the anticipated outcomes of outsourcing and formulating a comprehensive strategic plan. This leads to a shift in attention towards conducting thorough research,

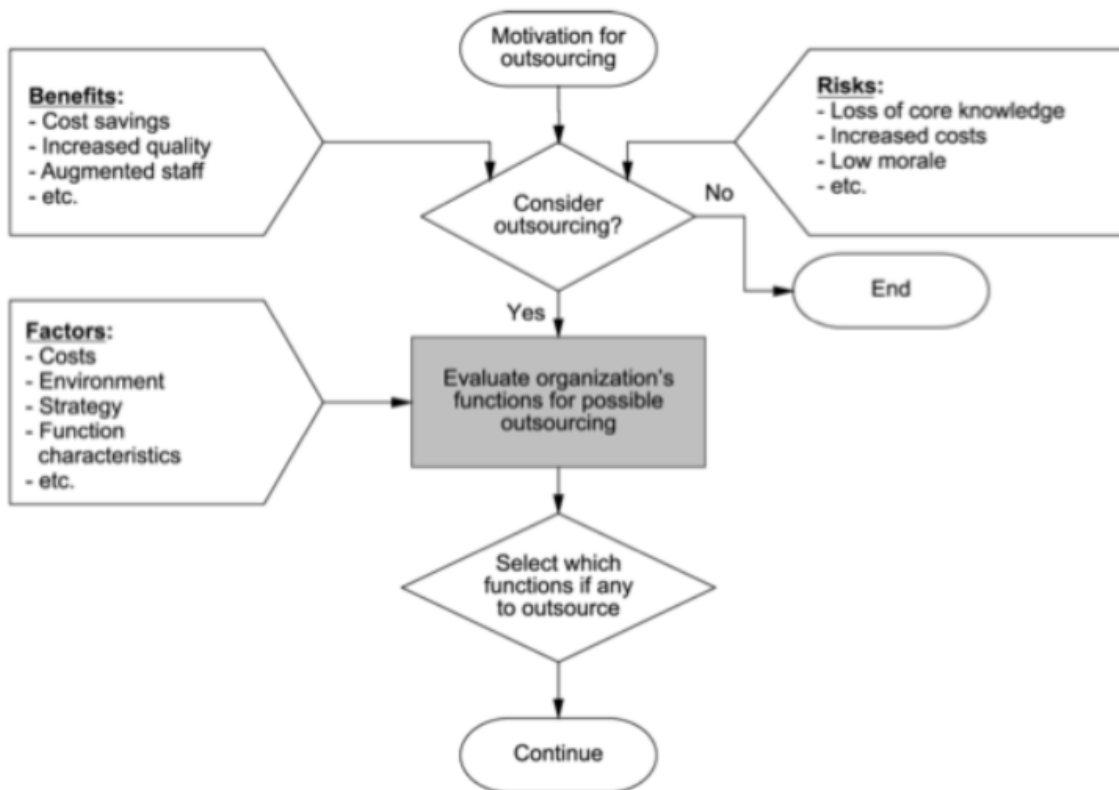
choosing suppliers, and negotiating contracts. Following that, the third stage focuses on overseeing and controlling the outsourced operations, while the last stage assesses the results of outsourcing and identifies future requirements, perhaps leading to the initiation of a new cycle involving alternative vendors or services. The presented model functions as a fundamental framework for organisations contemplating or overseeing outsourcing endeavors (Cullen et al., 2006).

In their study, Lim & Thng (2021) present an outsourcing model for financial firms that supports outsourcing decisions from start to finish. The “Strategy-Risk outsourcing life cycle model” is particularly suitable for the FinTech era, where finance and technology converge. The study emphasizes the importance of comprehensive resource planning and the significance of a well-structured outsourcing agreement for an organization’s strategic success. The model includes evaluating service providers, risk management, and contract monitoring. Understanding the impacts of FinTech and the benefit of outsourcing is crucial for financial sector firms (Lim & Thng, 2021).

There are many steps to consider when banks outsource functions. According to Click & Dueling (2005) at least the following things should be taken into notice: objectives of the outsourcing initiative, timing of the project, the workload required to implement the outsourcing initiative, business structure that supports the outsourcing decision, expectations of senior management, the culture of the entity to be outsourced and risk to the business. Outsourcing has wide-ranging implications, and it is difficult to form an exhaustive list of steps that should be considered in outsourcing process. However, the items mentioned by Click & Dueling (2005) are among those that should be considered to create a successful outsourcing relationship.

The diagram (Figure 2) by Kremic et al. (2006) is a simplified example that helps to identify the first steps of the outsourcing process. The diagram is generic and provides a framework for companies to assess the need for outsourcing. The approach involves a firm having already identified and considering the possibility of outsourcing. It helps to

outline the criteria on which outsourcing decisions should be further assessed and those that should be discarded.



**Figure 1:** Outsourcing decision framework (Kremic et al., 2006).

The inclusion of the outsourcing decision framework diagram (Figure 2) by Kremic et al. (2006) in this research serves as a foundational tool for understanding the initial stages of the outsourcing process. This figure provides readers with a clear, approach for assessing the viability and need for outsourcing within an organization. It simplifies the complexity of outsourcing decisions, providing a generic approach that highlights the foundational criteria for evaluating potential outsourcing opportunities.

In chapters 3.1-3.4, the process of outsourcing will be discussed in more detail. It covers reasons why companies choose to outsource, finding and selecting the right partners, managing the partnership, and properly terminating the outsourcing contract if necessary. This section is intended to give a clearer and general picture of how outsourcing is carried out.

Usually, identification of the business processes that will be outsourced is the first step in the outsourcing process (Kremic et al., 2006.) To identify the processes that can be outsourced without lowering the quality of service delivery, this step requires a detailed review of the bank's business operations. The need to boost efficiency, lower costs, or improve service quality may in some situations be the driving force behind the choice to outsource (Holzhäuser et al., 2005).

According to a study by Wongsaroj et al. (2013), the size of the bank, the complexity of its operations, and the level of competitiveness in the industry all have an impact on the decision to outsource in the banking sector. The study also discovered that banks frequently outsource non-core tasks including accounting, payroll processing, and human resources (Wongsaroj et al., 2013).

Each bank has a different approach for choosing which processes to outsource and who will make that decision. Senior management or the board of directors may make the choice in some circumstances, while a specialized outsourcing team or an outside consultant may make it in other scenarios. An evaluation of the bank's operations is usually the first step in the process to determine whether tasks can be contracted out without lowering the standard of service. The review may be carried out internally or by a consultant from outside the organization (Gewald & Dibbern, 2009; KPMG, 2023; Wongsaroj et al., 2013).

Click & Dueling (2005) present a six-step process for analyzing and selecting an outsourcing opportunity. By applying a six-step process to the analysis and selection of outsourcing opportunities, organizations can better align the outsourcing decision with the overall strategy of the organization. According to them, it is a proven way to maximize the probability of success and minimize the risks associated with an outsourcing initiative. The six steps Click & Dueling (2005) offers are the following:

1. Establish an outsourcing analysis team

2. Conduct a current situation analysis
3. Identify core functions
4. Identify the outsourcing opportunity
5. Model the outsourcing project
6. Develop and present a business case

These six steps follow a logical sequence and outsourcing decisions by banks are usually lengthy and require careful analysis. When examining banks' desire to outsource, we can look at common motivations for companies to outsource, which are to improve cost efficiency and to leverage the capabilities of an external supplier to deliver services and products (Deavers, 1997; Kakabadse & Kakabadse, 2000).

#### **2.4.2 Partner selection**

The request proposal is a tool for choosing the service provider. It helps in the identification of possible suppliers, permits a comparative analysis of proposals, and provides a foundation for assessing service provider effectiveness. The proposal must therefore contain every relevant detail that the service provider would require. The choice of the ideal service provider is essential to the success of outsourcing initiatives (Lacity et al., 2010). Therefore, banks should employ a strict selection procedure to make sure they pick the best service provider.

In their study, Enriques & Ringe (2020) highlight the growing partnerships between fintech companies and traditional banks, emphasizing the mutual benefits. Banks can leverage fintech technology to innovate, while fintech startups benefit from banks' customer base and reputation. The study suggests a "mentoring scheme" to guide fintech startups through regulatory processes, proposing a government-supported program to ensure clear supervision and accountability, ultimately fostering a more reliable financial system (Enrique & Ringe, 2020).

The bank, after determining which procedures require outsourcing, must draft a comprehensive request for proposal outlining its requirements and expectations. A description of the requested services, performance indicators, pricing plans, and contract terms should all be included in the request. A shortlist of possible service providers who fit the bank's requirements should receive the request proposal (Committee of European Banking Supervisors, 2006).

The next step is selecting the service provider. This step includes a thorough assessment of the offers that were submitted by the service providers. The provider's experience, knowledge, financial stability, and the quality of its infrastructure and systems should all be included in the evaluation. Experts specialized in business evaluation may be involved in the creation of the evaluation. A determination of the provider's capacity to meet the regulatory demands and expectations of the bank should also be made as part of the evaluation process (Enriques & Ringe, 2020).

After choosing a service provider, the bank and the provider will negotiate a contract. This step entails a thorough review of the outsourcing agreement's terms and conditions. The scope of the services to be rendered, performance indicators, costing schemes, and contract terms should all be included in the agreement. In addition, clauses governing confidentiality, dispute settlement, and termination should be included (Enriques & Ringe, 2020; Thng & Tristan, 2021; ISO, 2014).

Goo et al. (2009) state that a company enters into a contractual agreement with an IT outsourcing provider, wherein the latter assumes responsibility for the overall functionality of the system and takes on the role of a project manager, overseeing the coordination of the outsourced components. Next, the company establishes their Service Level Agreement (SLA) with the IT outsourcing provider, which outlines the performance

metrics and relational governance attributes necessary for effective management of the outsourcing relationship (Goo, Kishore, & Rao, 2009).

### **2.4.3 Partner monitoring**

Banks are responsible for overseeing the outsourcing relationship once the contract has been signed. This entails regular contact between the bank and the service provider as well as ongoing monitoring and assessment of the provider's performance. Clear performance criteria and reporting requirements should be established by the bank, and these metrics should be periodically compared to the provider's performance. The bank should set up a procedure for handling problems and disagreements that can occur throughout the outsourcing arrangement (Thng & Tristan, 2021; IAOP, 2008).

Effective management of outsourcing projects requires a wide range of skills and expertise. As such skills are rarely available in a single person, effective management of outsourcing projects almost always requires a team structure (Click & Duening, 2005.) Also, close monitoring of outsourced activities is crucial for ensuring that outsourcing relationships are successful and conducted in compliance with legal requirements and industry best practices (Thng & Tristan, 2021; Cox & Pilbauer, 2018).

In a 2018 article by Cox & Pilbauer, it was emphasized that successful outsourcing relies significantly on effective relationship management with vendors. The authors described how treating the vendor as a vital member of the team, supported by a solid strategic partnership, and employing a strict governance framework that regularly assesses service-level agreements and utilizes key performance indicators to drive performance, are key components to success (Cox & Pilbauer, 2018).

#### 2.4.4 Final phase of the partnership

The termination of the partnership is not always the outcome of the outsourcing process. Instead, when a successful contract is reached, the involved parties may choose to extend their collaboration by entering into a new agreement (Thng & Tristan, 2021). The dynamic character of outsourcing agreements is highlighted by the option for contract renewal. However, it is important for outsourcers to develop a "exit strategy" to effectively manage any challenges that may emerge throughout the outsourcing process (EBA, 2019). Section 5.4 provides detailed explanations of the nuances involved in developing and executing such a strategy, emphasizing its crucial function in preserving operational resilience and agility.

According to CEBS (2006), the outsourcing contract should include terms that grant the outsourcing entity the power to terminate the contract through contractual notice of dismissal or extraordinary notice of cancellation, if deemed necessary by the supervisory authority. Outsourcing contracts typically involve ongoing contractual ties between clients and vendors that extend over numerous periods. It is expected that the contract and relationship will be assessed and potentially renewed at the end of each term (Thng & Tristan, 2021).

This highlights the significance of a life cycle approach in managing client-vendor relationships, where diligent evaluation of options and decisions on the future course of action is expected as each term ends. Adopting a life cycle management strategy, as observed by Babin & Quayle (2016), is a testament to an organization's matured outsourcing capabilities, typically seen in entities experienced with navigating through multiple generations of outsourcing engagements (Babin & Quayle, 2016).

The final phase of the outsourcing process may be viewed as the most critical, particularly due to the sensitivity and security concerns surrounding the handling of "critical" data by the IT outsourcing partner. According to Hon and Millard (2018), the complications associated with guaranteeing data privacy and compliance are made clear by the

discussions surrounding termination and post-termination rights, including data retrieval and the responsibility of providers to ease exit procedures. The need for clear terms regarding data deletion and the transition period post-contract is paramount, given the potential for significant costs and the challenges in aligning with regulatory requirements (Hon & Millard, 2018). The statement above highlights the significance of thorough planning and negotiation of exit strategies to protect interests and facilitate smooth transitions.

### 3 IT Outsourcing in the EU Banking sector

#### 3.1 Recent cases

An example of recent IT outsourcing endeavor in the EU banking sector is Danske Bank, a major financial institution operating in Northern Europe, made a strategic push to improve its digital banking capabilities by doing outsourcing contracts with two key partners, Amazon Web Services (AWS) and Backbase. AWS, a subsidiary of Amazon.com, Inc., is a global operator in cloud computing services, offering a broad set of infrastructure and platform services that enable businesses to scale and innovate. Backbase, headquartered in Amsterdam, specializes in engagement banking platform solutions, focusing on streamlining digital channels for financial institutions to improve customer experience (Danske Bank, 2024).

In a press release, "Danske Bank invests in cloud technology and signs multi-year agreement with AWS" the bank revealed its strategic partnership with AWS. The collaboration between Danske Bank and AWS represents a strategic move towards leveraging cloud technologies, including AWS AI and machine learning capabilities, including the migration of over 16,600 servers and 1,000 apps (Danske Bank, 2024).

Cloud solutions have increased the possibility to purchase solutions that were previously created and maintained in-house as a service (XaaS). Outsourcing accelerates the deployment of new solutions and enables cost savings but also increases requirements and complicates regulatory adherence (KPMG, 2024.)

The strategic decision made by Danske Bank is expected to increase the productivity of internal developers and thus improve the digital banking experience for customers. This decision also aims to maintain Danske Bank's position in operational efficiency, compliance, and innovation within the banking industry (Danske Bank, 2024).

In addition, the initiative to provide IT related training to more than 1,500 employees and to include cloud skills in management courses underlines Danske Bank's proactive approach to build a capable workforce and accelerate cloud and other IT technology adoption. This training initiative is in accordance with the bank's comprehensive technological transformation, which utilises cloud technology, data, and AI to expedite the creation of customer-focused solutions. This also mitigates risks as a capable workforce is essential in controlling outsourcing risks related to the use of complicated technology. According to industry professionals Danske Bank is one of many Banks, such as NAB, NatWest and BBVA to have sign deals with AWS in 2024 (Danske Bank, 2024).

Danske Bank intends to redevelop its digital platforms through a separate partnership with Backbase. Danske Bank seeks to leverage Backbase's platform to integrate a new platform that operates across multiple platforms, including web and mobile applications. These outsourcing solutions offer increased flexibility, which is in line with Danske Bank's goals in its strategy to improve its digital banking experience (Danske Bank, 2024).

The contracts with AWS and Backbase offer Danske Bank the chance to further develop its digital transformation efforts. However, it is crucial to carefully evaluate the possible risks associated with these contracts. The decision to outsource essential elements of the bank's digital infrastructure and client engagement platforms to third-party suppliers gives rise to concerns related to the protection of data, the ability to withstand operational challenges, and compliance to regulatory requirements (Pierides & Mulligan, 2024).

### **3.2 Regulatory framework**

With the harmonization of EU regulation, more power will be concentrated in the European Supervisory Authorities (ESAs), leaving less room for national authorities to offer regulatory interpretations. EBA published guidelines on outsourcing arrangements in 2019, which have influenced decision-making processes and risk reduction strategies in

the European banking sector. The purpose of these guidelines is to help ensure that financial institutions have the ability of systematically controlling and reducing potential risks linked to outsourcing operations, thereby establishing operational resilience and financial stability (EBA, 2019).

The guidelines place great value on the governance framework related to outsourcing. They mandate entities establish clear governance structures and processes for outsourcing arrangements. This includes the implementation of policies and procedures that guide the selection and monitoring of outsourcing service providers, as well as the management of outsourcing risks (EBA, 2019; Deloitte, 2019).

One of the main points in the guidelines is the requirement for institutions to keep a comprehensive register of all outsourcing arrangements. The register is an important tool for the management and control of outsourcing activities, allowing institutions to monitor the scope of their outsourcing dependencies and assess the associated risks (EBA, 2019; Deloitte, 2019).

The guidelines also stress the importance of conducting comprehensive due diligence on potential outsourcing partners to ensure that they can perform the outsourced functions in a manner that is compliant with regulatory standards and consistent with the institution's risk tolerance and strategic objectives. The due diligence process is essential to identify, assess and mitigate potential risks associated with outsourcing contracts, particularly those related to operational resilience, data protection and cyber security (EBA, 2019; Deloitte, 2019).

In addition, the EBA (2019) guidelines highlight the importance to establish strong contracts with outsourced service providers. It is essential for these contracts to clearly define the rights and responsibilities of all involved parties, including detailed service level agreements that establish the expected levels of quality and performance indicators for the outsourced services (EBA, 2019; Deloitte, 2019).

It is recommended by the guidelines that contracts provide clauses allowing the institution and relevant authorities to oversee, audit, and gain access to the outsourced activities, so ensuring their continued oversight and control by the institution. According to the EBA (2019), it is recommended that institutions implement good exit strategies for all outsourcing arrangements. These strategies should allow institutions to terminate contracts and transfer outsourced services to alternative service providers or return to their own premises without causing unnecessary problems to their operations (EBA, 2019; Deloitte, 2019).

A study by Kuan Hon & Millard (2016) titled “Use by Banks of Cloud Computing: An Empirical Study” explores the extent to which public cloud computing is used by banks operating in the EU. It highlights that European regulators often lack understanding of cloud computing and suggests that EU authorities could learn from US practices where banking officials receive cloud training. The study also addresses legal and practical issues such as risk assessments, security, business continuity, and data protection laws (Kuan Hon & Millard, 2016).

### **3.2.1 Digital Finance Package**

The evolving regulatory environment required by the challenges of digital transformation has called for a consistent and solid regulatory framework across the European Union. In response to this need, the European Commission adopted the Digital Finance Package (DigFin) in September 2020 (European Commission, 2020).

The package aims to support the digital transition in the financial sector and emphasizes consumer protection and financial stability. Alongside strategies to improve retail payment solutions, the DigFin package lays the foundations for digital financial transformation, with a particular focus on areas such as digital resilience. In addition, the Commission has recognized the important role of service providers in this digital transformation and has introduced a supervisory framework targeting cloud service providers to

financial institutions, including large technology companies. This additional measure will ensure that the adoption of cloud technologies by financial institutions meets high security and compliance standards, further strengthening the integrity and resilience of the financial sector (EBA, 2020; European Commission, 2020).

These regulatory improvements are not only vital for managing the risks associated with the digital finance sector but are also crucial for the EU banking sector's IT outsourcing risk management framework. A focus on digital resilience within the regulatory framework will give banks a clearer path to navigate the complexities of outsourcing in a digitally evolving landscape (Pierides & Mulligan, 2024).

### **3.2.2 Role of RegTech**

In 2023, the EU took significant steps to enhance the digital financial services landscape, proposing new regulations to improve consumer safeguards and streamline the financial data framework. Initiatives like the new Payment Services Directive (PSD3) and the Financial Data Act (FIDA) were launched. Concurrently, regulatory bodies of EU have tightened measures against fraud and financial crime, particularly emphasizing AML and KYC processes (EBA, 2023; KPMG, 2024).

As a result, Regulatory Technology, or RegTech, has become a vital tool for companies navigating the ever-tightening regulatory landscape, especially in the banking industry. According to research by Teichmann, F., Boticiu, S., & Sergi, B. S. (2023), RegTech uses cutting-edge technologies like blockchain, cloud computing, and machine learning to automate compliance procedures and free up capital for companies from the limitations of typical compliance infrastructures (Larsen & Gilani, 2017). RegTech solutions can overcome conventional programming constraints thanks to the use of modern technologies, which promotes a more flexible approach to compliance (World Economic Forum, 2022).

In today's fast-paced regulatory climate, where companies must continually navigate complex compliance landscapes, the need of RegTech is further highlighted. The combination of cloud computing, artificial intelligence, and big data reduces the possibility of human error while simultaneously greatly increasing the effectiveness of regulatory compliance activities. RegTech is positioned as an essential tool for companies looking to preserve a competitive edge because of its ability to reduce costs, enhance customer satisfaction, and effectively mitigate risk (KPMG, 2022).

RegTech's position has become more important considering an increase in cybercrime and more compliance obligations for banks. RegTech's importance in supporting organisations' defensive measures against regulatory breaches is highlighted by its real-time monitoring and risk prediction capabilities, which are especially useful against financial crimes like money laundering (Salami, 2020).

RegTech adoption is not without its difficulties, though. It is crucial for businesses to have an in-depth understanding of how RegTech can help compliance and safeguard the financial system as they work to combat financial crime and stay on top of regulatory developments. To adopt RegTech and remain competitive, businesses must control costs, optimise customer experiences, and strengthen risk management plans. To do this, they must make use of key technologies like big data, analytics, and APIs. (Von Solms, 2021).

In conclusion, the research paper by Teichmann et al. (2023) underscores the transformative potential of RegTech in addressing the complex demands of modern regulatory compliance. RegTech emerges as a critical enabler of innovation, efficiency, and resilience as firms travel the complexities of digital transformation and regulatory compliance. A path to not just survive but also prosper in the regulatory environments of the future is provided by the thoughtful application of RegTech solutions (Teichmann et al. (2023).

### **3.3 Third party risk management**

#### **3.3.1 Due diligence**

To reduce the risks associated with outsourcing, organizations should conduct thorough due diligence on all outsourcing companies that handle critical processes. Good ways to reduce risks include reference checks and, where possible, visits to the company during the outsourcing relationship and before contracts are signed. In-house experts should also establish personal relationships with the outsourcing provider's management team (Click & Duening, 2005).

Coetzee & Lessing (2002) examine management issues in the due diligence and contracting phases of IT outsourcing agreements. The due diligence and contracting phases, as well as the initiation phase, are the foundation of IT outsourcing. In these phases, it is crucial to understand the strategic purpose of the outsourcing and the reality of the existing target environment. Without this understanding and a well-structured agreement, the company is likely to face problems related to relationships, expectations and governance, leading to continuous questioning of its value (Coetzee & Lessing, 2004).

In essence, due diligence and risk assessment in outsourcing serve as vital practices for financial institutions to vet and engage with third parties effectively. By rigorously assessing potential partners through both quantitative and qualitative lenses, banks can address outsourcing risks proactively. This strategic approach ensures compliance with regulatory demands and aligns with the institution's risk management policies, thus maintaining operational security and customer confidence (Click & Duening, 2005).

### 3.3.2 Certification and standards

Alignment with regulatory standards is crucial. Stakeholders increasingly demand increased security, business continuity, quality products and services, and strong customer data protection (KPMG, 2022). To meet these requirements and demonstrate compliance, organizations can utilize a variety of standards and certifications. The following Table 2, is a summary and a comparison of standards that can be used to assess and manage risks associated with outsourcing to third-party service providers:

| Standard/Certification | Focus Area  | Benefits   |
|------------------------|---|--|
| ISAE 3000              | Assurance statements for security/control environment | A service organisation can use ISAE assurance to demonstrate the level of its security or control environment to a number of different parties with a single assurance report (IAASB, 2013.) |
| ISAE 3402              | Assurance statements to service organizations         | ISAE 3402 reports helps customers assess the reliability and security of the services they use (IAASB, 2009.)  |
| ISO 9001:2015          | Quality Management                                    | Demonstrates commitment to quality, risk management, and continuous improvement in IT service management, production, and application development (ISO, 2015).                               |
| ISO/IEC 27001          | Information Security Management                       | Enables organizations to show they have adequate information security procedures, emphasizing protection of customer and partner data (ISO, 2022.)   |
| ISO/IEC 27701          | Data Protection Extension OF ISO 27001                | Assists organizations in creating systems that support GDPR compliance among other data protection requirements,   |

|                |  |   |
|----------------|--|---|
|                |  | serving as a global standard (ISO, 2019b.)  |
| ISO 22301      | Business Continuity Management   | Focuses on preparing for, responding to, and recovering from disruptions to ensure business continuity. Can be integrated with ISO 27001 certification (ISO, 2019.) |
| NIS2 Directive | Directive, aims to significantly improve the cybersecurity posture across various sectors in the European Union, including the banking sector. | Increase the level of cybersecurity protection against network and information security breaches and various security risks and threats (European union, 2022.)     |

**Table 2:** Key Certifications and Standards.

Using the support of these standards and certifications presented in Table 2, entities may scale their operations to efficiently reduce risks and adjust to legislative changes by carefully addressing and managing multiple aspects of security, quality, and data protection. They also provide a structured way to assure stakeholders of the organization's commitment to maintaining high levels of security and regulatory compliance across its services and products (IAASB, 2009).

Table 2 also includes the NIS-2 directive which is not a certificate but an EU directive as the name suggests. It is added to the table because it also affects banks' IT outsourcing and contracts with third parties (European union, 2022).

Certifications and assurance standards have a role in helping banks mitigate risks associated with IT outsourcing. By ensuring that third-party service providers comply to industry standards, banks can monitor the internal controls and regulatory compliance of these partners. This approach provides a way that banks need to trust their outsourced IT services, knowing that these providers are committed to maintaining high standards.

The responsibility of issuing these certifications and ISAE reports falls to accredited bodies and auditors, who assess and verify the compliance and effectiveness of the service provider's practices (KPMG, 2024).

### **3.3.3 Contracts**

This chapter examines the contractual elements banks use to protect their interests and maintain service quality in outsourcing relationships. Contracts play an important role in the event of outsourcing failure. An effective IT outsourcing contract contains various elements, such as service level agreements (SLAs), compliance to regulatory obligations, maintaining of data security and privacy, and means for resolving conflicts (Hon & Millard, 2018.)

The contractual stage of IT outsourcing decisions consists by risk factors that can significantly impact a bank's performance, compliance to regulatory requirements, and maintaining client confidence. The information gained from academic research, such as those by Hon and Millard (2018), provides a useful tool for understanding these details. Hon and Millard (2018) delve into the contractual complexities in cloud outsourcing in the banking sector, highlighting the importance of defining the rights, responsibilities and expectations of all parties involved. To reduce operational, legal, and reputational risks, banks must adopt a thorough approach to contract negotiation when engaging in IT outsourcing. This strategy should be guided by industry best practices and regulatory requirements (Hon & Millard, 2018).

Banks may face legal and reputational risks, especially in settings with strict data privacy laws, if it fails to properly address regulatory compliance and data protection in the contract (Hon & Millard, 2018). Furthermore, the lack of proper risk management and business backup plans might leave banks unprepared to handle IT-related outages or data breaches, so weakening their operational resilience. Thus, the contract must clearly outline the responsibilities of the outsourcing partner in keeping data integrity, ensuring

system availability, and providing comprehensive recovery protocols in case of service issues (Hon & Millard, 2018).

Lacity & Willcocks (1999) offer an insightful perspective on the subject, highlighting the importance of careful research and detailed contract negotiation in IT outsourcing agreements. According to Lacity & Willcocks (1999), their study indicates that an in-depth knowledge of contractual terms and proactive risk management measures are essential in order to effectively mitigate risks associated with outsourcing. This research highlights the importance of the contract phase for the overall success of IT outsourcing operations in insurance services sector (Lacity & Willcocks, 1999).

The contract plays a vital role in reducing risks. Historically, long-term contracts have turned out to be inflexible in the face of business uncertainties and rapid technological change (Lacity & Willcocks, 1999). The trend in their research (1999) is to make contracts more phased and to make contract termination more flexible when necessary. The risk can also be reduced by the continuity clause, which requires the contractor to move smoothly to any preferred arrangement in the event of termination. It was also considered positive that the content of the agreement should be systematically reviewed. Regular review will ensure the flexibility needed to take account of changes in the technical requirements of the business. The contract should also include the possibility of regulatory and performance monitoring measures to ensure that the supplier's performance is controlled and that sanctions can be imposed if necessary (Lacity & Willcocks, 1999).

Prior research has indicated that poor performance in the domain of IT outsourcing often stems from a lack of precise articulation of objectives, improper harmonisation of contracts with strategic objectives, and minimal flexibility in contracts to deal with developments in business or technology (Anderson & Dekker, 2005).

### **3.3.4 Service Level Agreements (SLAs)**

SLAs are official documents that outline the specific services that IT companies will offer and the criteria by which their performance will be evaluated. They are crucial since they clearly define the expectations and needs, preventing misconceptions and ensuring mutual awareness of the required standards (Beaumont, 2006).

The process of developing SLAs requires collaboration among several parties inside the bank, including individuals from the IT, legal, and risk management departments. They communicate with the IT service providers to ensure that the SLA aligns with the bank's requirements and complies with existing laws and regulations. This collaborative effort ensures that the SLA covers all aspects, ranging from technical complexities to strategies for resolving any potential issues (Goo et al., 2008).

Nevertheless, creating an effective SLA is not always a simple task. Occasionally, they have significant vagueness or complexity, making them challenging to utilize or oversee. An effective SLA must achieve an optimal balance, providing enough detail to be beneficial while avoiding excessive detail that may become difficult to manage. The main focus should be placed on the key factors that contribute to the success of outsourcing, including the establishment of well-defined objectives and the ability to adapt and modify strategies as situations change (Goo et al., 2008; Marcolin, 2002; Karten, 2004; Ang & Beath, 1993; Anderson & Dekker, 2005).

SLA provides comprehensive information to all parties involved, including the bank and the IT business, regarding the services being offered, the procedures for addressing problems, and the criteria for evaluating the quality of the service. The objective is to effectively oversee the relationship and ensure that the bank receives the necessary IT services for optimal functioning (Goo et al., 2008).

Ultimately, SLAs play a crucial role in effectively managing the risks associated with outsourcing IT services in the banking sector. Ensuring a shared understanding among all

stakeholders regarding expectations is crucial in mitigating issues and maintaining the seamless functioning of the bank's operations (Goo et al., 2009).

### **3.3.5 Liability**

Negotiations between banks and IT service providers on liability issues play a critical role in IT outsourcing risk management within the banking sector. A primary concern in these negotiations is the allocation of liability for direct damages, with banks typically advocating for unlimited liability, particularly for privacy or security breaches, while IT service providers favor capped liability. The resolution often involves establishing capped liability and indemnities, where the specifics are shaped by the negotiating power of the parties involved and the nature of potential breaches. This approach to liability, more flexible than total liability exclusion, varies for different types of violations, such as intellectual property rights breaches versus data loss. The negotiation process reflects a balance between the need for comprehensive risk management and the practicalities of contractual agreements, underscoring the importance of a nuanced understanding of liability issues in IT outsourcing arrangements (Hon & Millard, 2018).

The discussions around liability also underscore a significant implication for the cost of IT services. As liability is increasingly allocated towards the service provider, there is a potential for an increase in service fees to compensate for the heightened risk. This aspect highlights the intricate relationship between liability, risk management, and cost in the context of IT outsourcing in the banking sector. Service providers may adjust their pricing structures to account for the additional risks they assume under more stringent liability terms, which can lead to higher costs for banks. This dynamic reinforces the necessity for banks to carefully consider the trade-offs between risk management, liability, and cost when negotiating IT outsourcing contracts, ensuring that the agreements align with their risk management strategies and operational needs while also being cost-effective (Hon & Millard, 2018).

### 3.3.6 Exit plan

This chapter discusses the importance and considerations for developing effective exit plans and provides information on how regulations are mitigating the risks associated with exiting outsourcing partnerships in the banking sector. The value of exit plans lies in their ability to help with the smooth transition of services, either to the organisation itself or to an alternative supplier, while minimising operational breakdowns and upholding the continuous availability of services (Hon et al. 2018.) The regulatory framework, and particularly the EBA guidelines, stresses the need for banks to include detailed exit strategies in their risk management systems and to comply with the specific requirements set out by the EBA (2019).

Such strategies are crucial for the secure transfer of sensitive data and intellectual property rights, giving banks an edge in outsourcing negotiations and enabling a more secure approach to IT operations. This advantage stems from the fact that banks do not become overly dependent on a single IT service provider. By integrating comprehensive exit plans, banks can facilitate outsourcing and ensure both regulatory compliance and strategic alignment in IT service arrangements (European Banking Authority, 2019).

As Hon et al. (2018) point out, having exit plans negotiated in IT outsourcing arrangements is an essential aspect of banks' risk management. These plans include termination periods, rights to withdraw from the contract due to fundamental breach or changes in law or regulation, and post-termination procedures, including data access and disposal. A careful approach to notice periods, particularly for contracts without minimum commitment, will facilitate a more straightforward exit strategy, allowing banks to adapt to changes in their operating or regulatory environment. In addition, ensuring that there is a time limit for accessing and deleting the personal data after withdrawal will address key data protection and regulatory compliance issues (Hon et al. 2018).

Including exit strategies in IT outsourcing arrangements is considered an excellent approach for banks to effectively mitigate risks. Legal, IT, risk management, and compliance

departments should actively participate in developing these plans to ensure all critical aspects of the transition process are comprehensively addressed. Regular assessments and updates of the exit strategy are crucial to respond to regulatory changes, technological advancements, and shifts in the financial services industry, ensuring banks maintain their ability to adapt and respond effectively in their IT outsourcing operations (EBA, 2019; Hon et al., 2018).

## 4 Qualitative research method

This study employs a qualitative research method to investigate the risk management of IT outsourcing in the EU banking sector. Qualitative research is particularly suited to this study because it focuses on understanding complex phenomena through detailed, contextual analysis. The goal is to uncover best practices that enhance IT outsourcing efforts. This method provides valuable insights into the complexities of outsourcing, highlighting common practices, challenges, and areas needing further research (Patton, 2002).

As controlling IT outsourcing risks in the banking sector is a complex subject, qualitative research is ideally suited to generate new insights. It allows for the identification of themes and relationships that may not necessarily emerge through quantitative methods (Hammarberg, Kirkman & de Lacey, 2016.)

Qualitative research enables in-depth exploration of the nuances and complexities of managing IT outsourcing risks. Through interviews and document analysis one can gather rich and detailed data that provides a comprehensive understanding of the topic (Rahman, 2017). In qualitative research, stakeholders participate in interviews that allow researchers to gather the perspectives and experiences of people directly involved in IT outsourcing. The method ensures that the results are strongly grounded in the practical realities faced by practitioners and provide valuable and useful insights (Agius, 2013).

Qualitative research offers a high degree of flexibility, making it particularly suitable for exploring dynamic and rapidly evolving fields like IT outsourcing. This adaptability allows the research to respond effectively to emerging trends, risks, and mitigation strategies, which are continuously reshaped by technological advancements and market demands. Such an approach is crucial for gaining a deep understanding of the complexities involved in IT outsourcing within the EU banking sector (Aguis, 2013; Hammarberg, Kirkman, & de Lacey, 2016).

The qualitative approach is appropriate for answering the research questions. In-depth data on the experiences and practices of banks involved in outsourcing relationships can be gathered using qualitative methods to study outsourcing in the banking sector in Europe. The complexities of outsourcing relationships and the elements that influence success or failure can be understood through qualitative research (Bryman, 2010.)

#### **4.1 Data collection method**

Semi-structured interviews are chosen as the main technique for gathering data for this research given that they can combine the framework of structured questions with the flexibility needed to delve deeply into participants' experiences and ideas. The versatility of semi-structured interviews allows for a flexible and responsive interaction with each industry expert participant (Rubin & Rubin, 2005). The interview process involves drafting key questions, conducting the interviews either in person or via video conferencing, and recording the sessions for detailed analysis if the participant agrees to be recorded (Bryman, 2016).

Rubin & Rubin (2005) state that qualitative research and the semi-structured format are highly valued due to their ability to fit the natural flow of conversation, allowing for spontaneous depth in responses. Additionally, these methods possess a structured approach that ensures comprehensive coverage of all essential subjects relevant to the research questions. The chosen methodology is in accordance with the goals of this research, which aims to explore the complex subject of information technology outsourcing risk management in the European banking industry. This requires a comprehensive understanding that can be achieved by semi-structured interviews (Rubin & Rubin, 2005: Bryman, 2016).

## 4.2 Sample

Every research process, including conducting interviews, requires careful planning. According to Rubin & Rubin (2005), the planning phase entails several important tasks, including specifying the study's target, formulating the research questions, choosing participants, and choosing the best interviewing technique. The selection of participants is crucial for ensuring the relevance and validity of the data collected (Bryman, A. 2016.)

To choose the right participants for the study after determining the research objectives and research questions is key. Purposive sampling, which means selecting participants based on their knowledge, experience, and competence relating to the research topic, is a popular way to do this, according to Fontana & Frey (2005).

The sample was carefully selected to ensure a broad and comprehensive understanding of the topic. The interviewees were selected based on their expertise and experience in IT outsourcing and risk management in the EU banking sector.

Networking with industry experts is one technique to identify people who have experience and knowledge relevant to the research issue. This can be accomplished through going to industry gatherings, joining organizations, and getting in touch with coworkers and contacts (Rea, L. M. & Parker, R. A. 2014).

Thus, participants were not selected randomly but were chosen because of their experience and knowledge of outsourcing. A potential problem with this methodological choice is that participants may not have all the necessary knowledge on the subject, which may lead to biased results and incorrect conclusions. The selection process involved identifying potential participants through industry websites and professional networks.

This was followed by an initial screening process to verify whether they met with the study's specified requirements. Prospective participants were then contacted via

professional correspondence, where the objectives and scope of the research were detailed, and their participation was requested.

The final sample consisted of five experts currently working in Finland, although some have had extensive international experience in countries such as Germany, Sweden, and the UK. These experts were selected to provide a broad perspective on the topic, reflecting also the international nature of the research.

The roles of the interviewees varied from senior IT consultants to seasoned banking professionals, all of whom have worked with multiple international EU banks. Their experience spans across different aspects of outsourcing arrangements in banking sector, including business partner assurance, supply chain risk management, regulatory compliance, particularly in relation to requirements by EBA and the Digital Operational Resilience Act (DORA).

Given the time constraints, three of the experts were interviewed twice to ensure comprehensive coverage of the research questions. This approach allowed for a deeper exploration of the subject matter, despite the limited number of participants.

| <b>ID</b> | <b>Role</b>                      | <b>Experience</b>                 | <b>Time</b> | <b>Nationality</b> |
|-----------|----------------------------------|-----------------------------------|-------------|--------------------|
| A         | IT Consultant,<br>Project leader | 6 years in EU IT sector           | two hours   | Finnish            |
| B         | Consultant                       | 8 years in EU financial<br>sector | two hours   | German             |
| C         | Risk Analyst                     | 3 years in EU financial<br>sector | two hours   | Finnish            |
| D         | IT Consultant                    | 9 years in EU IT sector           | one hour    | Swedish            |

|   |  |                                 |          |         |
|---|--|---------------------------------|----------|---------|
| E | Supplier Relationships & Risk management | 12 years in EU financial sector | one hour | Finnish |
|---|--|---------------------------------|----------|---------|

**Table 3.** Profiles of Research Participants.

The criteria for participant selection were carefully crafted to target individuals who had substantial expertise from the EU financial sector, with a particular emphasis on those engaged in IT outsourcing procedures and risk management. The purpose of these requirements was to guarantee the gathering of competent perspectives on the challenges and methods related to IT outsourcing in the banking sector.

The determination of the ideal sample size in qualitative research is mostly influenced by the depth and richness of the acquired data, rather than being driven by numerical criteria. Data saturation is an essential concept in this context, as it plays a significant role in determining the appropriateness of the sample size. Data saturation is reached when further interviews no longer yield new insights or information relevant to the research questions, signifying that the data collection has properly covered the range of thoughts and opinions within the study population (Guest, Bunce, and Johnson, 2006).

In addition to conducting interviews, information from public sources have been used to support the research. This supplementary material has provided valuable insights into IT outsourcing risk management practices in the EU banking sector and served as a basis for the analysis of the interview data. Public sources include industry reports, regulatory guidance and academic articles, which provide a broader context and corroborate the findings from the interviews.

The value of qualitative research lies in its emphasis on understanding complex phenomena in detail, rather than generalizing based on a sample to a population. Therefore, the quantity of interviews carried out is not pre-established but changes as the study

advances, guaranteeing a thorough investigation of the research subject (Rea & Parker, 2014; Rubin & Rubin, 2005).

The recruitment method complied strictly to ethical requirements, namely regarding informed permission and the anonymity of participant responses. The steps mentioned above played a crucial role in maintaining the integrity of the research and fostering a respectful and secure setting that promoted open and honest communication among participants. These actions align with the ethical guidelines proposed by Saunders, Lewis & Thornhill (2007) in relation to qualitative research conduct.

#### **4.2.1 Interview framework**

The first phase in interview planning, according to Patton (2002), is to specify the research goals and the research questions that will direct the interview. This makes it easier to guarantee that the data gathered from the interviews is valuable and that the interview questions are relevant to the research's goals. This involves clearly defining the purpose of the research, what it aims to discover or understand, which helps to set the interview questions. The questions should be open-ended in order to encourage participants to provide detailed and insightful answers. To ensure that the conversation goes naturally and that all relevant topics are covered, the questions should also be presented in a logical order (Fontana & Frey, 2005).

The research question for this study were developed focusing on the need to have an in-depth knowledge of the complexity involved in IT outsourcing risk management and meeting regulatory requirements. The purpose of the question is to explore the strategic reasons behind banks' decisions of outsourcing IT functions, with a particular focus on the extent to which these decisions are in line with their attempts to reduce risks.

Through an examination of the procedures used by banks in the selection of outsourcing partners, this study explores the crucial matter of risk management. It aims to reveal what is required as well as techniques that are carried out to ensure that potential

partners comply with the strategic and compliance standards of the banks and regulations. Furthermore, the inquiries aim to analyze the processes implemented by banks to oversee and regulate outsourcing agreements, so ensuring that these partnerships succeed in their stated objectives while conforming to strict regulatory standards. The questions are also formed in a way that they would disclose areas that would need improvement.

The interview framework included open-ended questions that allowed for in-depth discussion and are intended only to support the interview by providing a framework for discussions. The questions below seek detailed answers by asking for concrete examples, methods and adaptations to this complex subject. This will encourage interviewees to provide in-depth knowledge of the processes, strategies and challenges involved in managing IT outsourcing risks in the EU banking sector. The questions were categorized into four thematic areas, to improve the quality of the interviews and to enhance the coverage of the topic. These themes are presented below:

1. Can you walk me through the decision-making process banks undertake to identify the necessity for IT outsourcing in general? Please detail the steps, including any initial assessments and the specific factors that trigger the need for outsourcing IT functions. How is it decided who takes part in this process?
2. Can you describe the processes and criteria banks use to evaluate and select IT outsourcing partners? How do you ensure that these partners are competent and minimize outsourcing risks? What measures are in place to manage these risks and what do future risks look like?
3. How does the bank approach due diligence process to establish a successful outsourcing contract? What ongoing monitoring and control mechanisms are put in place after the start of the outsourcing contract to ensure that the outsourcing results meet the bank's needs?

4. How does the regulatory framework affect the Bank's IT outsourcing decisions, including vendor selection, contract negotiations and ongoing monitoring? How do you manage and monitor compliance to maintain regulatory alignment in your outsourcing practices and how do you monitor rapidly changing regulation?

The study aims to demonstrate the relationship that banks maintain to take advantage of external IT capabilities for strategic benefit while also managing the risks that come with it and regulatory requirements associated. From this perspective, the study aims to provide insights into methods that support effective IT outsourcing in the banking sector and through this highlight potential problem areas in a rapidly changing environment.

#### **4.2.2 Interviews**

The interviewees are directly involved in IT outsourcing decisions, implementing these processes, and possess in-depth knowledge in this area. This careful selection aimed to cover a broad spectrum of professional positions, thereby ensuring a diverse range of perspectives. Such diversity is crucial for comprehensively understanding the complex practices and challenges associated with IT outsourcing risk management in the banking sector. The participants who agreed to be interviewed cannot be named, or banks they refer to because the information might not be public. This is why interviews were based on anonymized discussions.

The decision to conduct interviews primarily with Finnish professionals in this study was based on two main factors. The logistical and communicative convenience of interacting with local professionals enabled more detailed and comprehensive conversations, which was crucial for achieving the desired qualitative depth in this research. Furthermore, it was expected that the selection of professionals from other EU countries would not greatly improve the diversity of insights into IT outsourcing risk management practices, considering the significant similarity in banking regulation across Europe, primarily attributed to guiding EU directives and regulatory frameworks. This assumption is based

on the underlying belief that, although there may be variations in local operational contexts, there is a significant consistency in the regulatory landscapes and strategic approaches to controlling risks associated with IT outsourcing throughout the European Union. All the participants have worked with international banks in the EU area.

Hence, the study outlined that focusing on four Finnish and one German expert would provide a thorough understanding of the methods and difficulties associated with IT outsourcing risk management, while yet covering a wide range of perspectives that are applicable to the EU banking industry. The selection of this methodology is consistent with the aim of thoroughly examining the topic within a logical regulatory and operational framework, guaranteeing that the research outcomes are both useful and relevant.

The remote interviews for this study were conducted by video calls, with each interview lasting roughly 60 minutes. The use of this digital format not only allowed the participation of individuals from different geographical locations but also reflected the prevailing global trend towards distant interactions. Every session began with a friendly exchange of greetings, establishing a friendly atmosphere that encouraged open communication.

After the initial phase of creating an interaction, participants were invited to share information about their professional experiences and specialized knowledge. The purpose of this start conversation was twofold: firstly, it enabled the researcher to gain a more profound comprehension of the participant's professional path and competence in IT outsourcing and risk management within the Finnish financial industry, and secondly, it facilitated a smooth transition into the subsequent more concentrated conversations.

The interviews were conducted in a semi-structured manner, which allowed for consistent coverage of a core set of themes related to IT outsourcing risk management. However, this approach also provided enough flexibility to explore specific areas of interest or expertise that were noted by the participants during their introductions.

This approach allowed an in-depth and detailed discussion of the topic, while the individuals involved guided the conversation by sharing their perspectives and personal encounters. The utilization of the video call format demonstrated its effectiveness as an instrument for these discussions, as it provided visual cues and fostered a connection that may have been more challenging to build only through verbal contact. Despite the lack of physical proximity, the use of digital platforms allowed an engaging and dynamic exchange of ideas, wherein participants actively contributed detailed descriptions, ideas, and even anecdotal evidence gained from their wide professional backgrounds.

### **4.3 Data analysis method**

The data collected from the interviews were analysed using thematic narrative analysis to identify trends, similarities and contradictions in the responses and to draw conclusions on the most effective methods to manage IT outsourcing risks in the EU banking sector.

After transcription, recurring themes were sought in the data. The final analysis of the data was based on classification, aimed at examining the themes and ideas that emerged from the interviews in the light of previous research. Sarajärvi & Tuomi (2017) consider this point critical, as the researcher's own understanding is important in the analysis and in identifying themes. The primary objective of the thematic approach is to improve the understanding of the main areas of risk management techniques in IT outsourcing. This will contribute to the wider conversation on successful outsourcing methods within the EU banking sector.

Thematic narrative analysis, as described by Riessman, C. K. (2008), provides a structured but flexible approach to qualitative data analysis, allowing the data to be categorised into themes related to the research questions while preserving the narrative context of each interview. Thematic narrative analysis is appropriate for this study because it allows for a systematic identification and analysis of patterns in the qualitative data, which

helps to understand the key risks and management strategies associated with IT outsourcing (Webster & Mertova, 2007.)

Using this methodology, the research aims to provide insights into risk management practices in the EU banking sector and to help understand how these strategies are applied and how they potentially affect the stability of the sector. Thematic narrative analysis allows the researcher to link insights from individual interviews to a broader understanding of the topic and facilitates evidence-based conclusions about risk management practices (Riessman, 2008; Squire & Tamboukou, 2013).

Thematic narrative analysis is particularly well suited to this study because it allows the richness and context of individual stories to be preserved, while at the same time identifying general themes. The method is advantageous for a small number of interviews, as it allows an in-depth exploration of each participant's experiences and perspectives. Considering that the study includes eight interviews with five industry professionals, in addition to data from relevant public sources, thematic narrative analysis provides a comprehensive approach to understanding the complexities of IT outsourcing risk management in the EU banking sector (Riessman, 2008; Squire, Andrews, & Tamboukou, 2013).

Unlike a purely thematic analysis, which focuses primarily on identifying and analysing themes in the data, thematic narrative analysis preserves the narrative structure of each interview (Webster & Mertova, 2007.) This approach ensures that the context and nuances of each participant's narrative are preserved, providing a more holistic understanding of the data. By combining both thematic and narrative elements, this method provides a balanced and in-depth analysis that can provide valuable insights into the risk controlling strategies used in IT outsourcing. The process involves several key steps, like: familiarisation with the data, identify significant themes, detailed analysis of these themes in a narrative context, and synthesis of findings to draw evidence-based conclusions (Jovchelovitch & Bauer, 2000; Chase, 2005).

## 5 Research findings

The aim of this thesis was to identify key risk management practices in IT outsourcing within the EU banking sector and to determine whether rapidly evolving IT has outpaced slower to update regulation, creating additional risk for the sector. Through this methodology, the study tries to close the knowledge gap and improve the understanding of the operational and strategic factors that influence the risk management of IT outsourcing in the banking sector.

After performing a thematic narrative analysis on the interview data, notable themes were identified involved in IT outsourcing risk management in the banking industry. This chapter presents the themes identified and highlights potential risks involved. The second objective was to assess if there are differences in IT outsourcing risks management across EU countries. The interviewees are presented in Table 3. Profiles of Research Participants.

### 5.1 Uniformity in IT Outsourcing Risk Management Across EU Countries

The findings from the interviews indicate that there are no significant differences in IT outsourcing risk management practices among banks in different EU member states. The interviews indicate that industry professionals generally view the EBA's efforts to harmonize regulation and risk management across the EU banking sector as beneficial. They appreciate the standardization of practices, as it makes processes more efficient and clearer.

Interviewee E expressed the matter as follows: "The EBA's harmonization efforts will streamline our risk management processes across different countries. It is much easier to follow standardized practices in various countries, and it enhances our operations in the long term. However, it also creates additional costs when aligning operations with

regulations across different countries, especially in the context of mergers and acquisitions."

Despite the positive views, the interviewee D also highlighted several challenges. They noted that the rapid technological advancements and the accompanying regulatory changes require significant efforts and skilled personnel from banks to keep up. The professional said that: "this situation is seen as quite challenging, and there is a belief that the process could be improved and streamlined." He suggested closer cooperation with regulators to improve on this theme.

The interviewee A with experience from two Northern European bank states, "The EBA's regulatory framework has effectively standardized IT outsourcing risk management practices across EU countries. This means that banks in Finland, Denmark, and Germany, for example, all adhere to the same stringent guidelines and procedures." He adds that "this harmonization helps in maintaining a consistent level of risk management and ensures that all banks are equally prepared to handle IT outsourcing risks."

The interviewee B with experience from Nordic and German banks emphasizes that "the EBA's guidelines have created a unified approach to IT outsourcing risk management. Regardless of the country, banks are required to implement robust contracts, conduct thorough due diligence, and maintain continuous monitoring of their outsourcing partners." He notes that "this uniformity is crucial for maintaining the stability and security of the banking sector across the EU."

The interviewee C, who has worked with several EU banks, concurs, stating, "The risks associated with IT outsourcing are largely the same across EU countries. Cybersecurity, data protection, and regulatory compliance are the primary concerns, and the EBA's guidelines ensure that these risks are managed consistently." He adds that "the regulatory environment in the EU has been designed to mitigate these risks effectively, regardless of the specific country."

Interviewee E with experience in multiple international banks outsourcing endeavors highlights that "the EBA's efforts to harmonize risk controls have been successful in creating a level playing field for banks in the EU. This means that the same risk management practices are applied across all member states, ensuring that no country is at a disadvantage when it comes to managing IT outsourcing risks."

## **5.2 Clear Contractual Agreements**

Establishing clear and detailed contractual agreements was another key practice identified, especially among IT experts. According to interviewee A these contracts should outline the responsibilities of both parties, including service level agreements (SLAs), data protection measures, and contingency plans in case of service disruptions. The IT consultant A noted that "well-defined contracts help in setting expectations and reducing ambiguities that could lead to disputes. Clear contracts also provide a framework for managing changes and ensuring that both parties remain aligned with the agreed-upon objectives."

The risk manager E with twelve years of experience in supplier relationships emphasized the importance of thorough due diligence and clear communication. As he put it: "Ensuring that all parties have a mutual understanding of the terms and conditions is crucial for a successful outsourcing relationship. To address these risks, banks should engage legal and risk management experts during contract negotiations. These professionals can help identify potential pitfalls and ensure that the contract is comprehensive and legally sound. Additionally, involving key stakeholders from both the bank and the service provider in the negotiation process can help align expectations and foster a collaborative approach to risk management."

### **5.2.1 Contract Duration and Associated Risks**

The duration of the contract was mentioned as a factor that can pose risks. Long-term contracts may reduce flexibility to adapt to technological advancements or changes in business needs according to interviewee E. Interviewee B pointed out that long-term commitments might lock the bank into outdated technologies or unfavorable terms, making it challenging to pivot when necessary. Conversely, short-term contracts may lead to frequent renegotiations, which can be resource-intensive and disruptive.

To address these risks, interviewee B and E suggested including clauses that allow for periodic reviews and adjustments to the contract terms. These clauses can provide the flexibility needed to adapt to changing circumstances without compromising the stability of the outsourcing arrangement. Additionally, incorporating exit clauses that outline the conditions under which the contract can be terminated helps in managing potential risks associated with long-term commitments.

### **5.3 Effective exit strategy**

The importance of having effective exit strategies in place was highlighted by several interviewees. According to interviewee E: “exit strategies ensure that banks can smoothly transition away from an outsourcing arrangement, if necessary, without disrupting critical operations.” The interviewee emphasized that a well-planned exit strategy includes detailed procedures for data transfer, knowledge handover, and continuity of services. This preparation helps in minimizing operational risks and maintaining business continuity.

The interviewees also discussed the risks associated with becoming too dependent on a single service provider. This dependency can lead to financial and continuity risks if the provider fails to deliver the required services or goes out of business. Interviewee B

pointed out that diversifying outsourcing arrangements and having multiple providers can mitigate these risks. By not relying solely on one provider, banks can ensure that they have alternative options available in case of any issues with the primary provider. Furthermore, it was noted that the risk of a single vendor, especially for cloud services, is a concern in terms of operational security. Such dependencies underline the importance of sound contingency planning, combining both technical strategies and organizational capabilities to respond quickly and effectively to disruptions.

According to interviewee A cloud services are increasingly becoming a central part of the IT architecture in the financial sector. They offer flexibility and enable the rapid development and deployment of innovative products and services. Cloud services can also replace outdated and maintenance-heavy IT infrastructures. However, interviewee A noted that reliance on cloud service providers can create dependency risks. The IT consultant mentioned that while cloud providers often offer high levels of cybersecurity, the dependency on these providers can pose significant challenges if their systems fail. This dependency can lead to operational disruptions and data security concerns.

One approach mentioned by many of the interviewees is the assessment of worst-case scenarios as part of the exit strategy planning. This involves identifying potential risks and disruptions that could occur if the outsourcing arrangement needs to be terminated unexpectedly. By evaluating these scenarios, banks can develop contingency plans to address possible challenges and ensure a smooth transition. The IT consultant A noted that this assessment helps in preparing for unforeseen events and reduces the likelihood of significant disruptions.

#### **5.4 Talent Acquisition and Development**

Recruiting skilled IT and risk management personnel was identified as a crucial factor in managing IT outsourcing risks. Interviewee C with three years of experience noted that having a competent team in place allows banks to effectively oversee outsourcing arrangements and address any issues that may arise. Skilled personnel are better equipped

to conduct thorough risk assessments, negotiate favourable contracts, and monitor compliance with regulatory requirements.

The interviewees A and D emphasized that the need for skilled employees is expected to grow in the future. Banks should recognize this trend early on, as failing to attract competent workforce could result in falling behind in technological advancements. This could also pose continuity risks if banks do not have sufficient understanding of the technologies they outsource. The IT consultants A and D highlighted that banks must develop strategies to attract and retain skilled IT staff to remain competitive and manage outsourcing risks effectively.

In addition to recruitment, the training of employees was also mentioned as a critical aspect by interviewee E, who put it this way: “ensuring that existing staff are continuously trained on new technologies and risk management practices is essential for maintaining a high level of competence within the organization.” Interviewee D noted that ongoing training programs help in keeping the workforce updated with the latest industry standards and regulatory requirements.

The findings underline the difficulty for organizations to attract and retain skilled IT staff. Collaboration between IT departments and HR professionals is crucial in developing recruitment strategies and promoting a diverse and skilled workforce, which is key to effectively managing IT outsourcing risks. By investing in both recruitment and training, banks can build a robust team capable of navigating the complexities of IT outsourcing and mitigating associated risks.

## **5.5 Due diligence**

Interviewees E and C emphasized the importance of conducting comprehensive risk assessments before entering into IT outsourcing agreements. This process involves evaluating potential vendors' financial stability, technical capabilities, and compliance with regulatory requirements. Interviewees E and A highlighted that a detailed risk

assessment helps in identifying potential vulnerabilities early in the process. This proactive approach ensures that banks can mitigate risks associated with vendor selection and service delivery.

The due diligence process was highlighted as a fundamental practice in establishing successful outsourcing contracts. This process involves a thorough evaluation of potential vendors' capabilities, financial health, and compliance with regulatory standards. Interviewee D emphasized that “due diligence helps in identifying potential risks and ensuring that the selected vendor can meet the bank's needs.” Interviewee E also noted that: “ongoing due diligence, including regular performance reviews and audits, is essential to maintaining a successful outsourcing relationship.”

The conversation with interviewee E highlighted the continuous monitoring and control systems used by banks to ensure that the results of outsourcing are in line with their goals, underscoring the proactive and adaptable nature of these relationships. Also audits made by a third-party ensuring that the IT company adheres to required internal control measures were also emphasized as very important, with a focus on continuous oversight and review. Various certifications and external assessors assist in this process.

Interviewee E highlighted that proper certification of third-party providers can further simplify the outsourcing of IT services, as it increases trust and streamline the outsourcing process for banks. However, full oversight and certification of outsourced activities, including transparency in subcontracting, remain challenging, especially when services are further outsourced to subcontractors. Interviewee E noted that ensuring transparency and control over subcontracting arrangements is crucial for maintaining compliance and effective risk management.

## **5.6 Regulatory Compliance**

One of the significant challenges that interviewees highlighted was the lag in regulatory updates compared to the rapid development of IT. Interviewees B and C pointed out that

outdated regulations can create compliance risks, as service providers may adopt new technologies that are not yet covered by existing regulations. This gap necessitates proactive engagement with regulators to ensure that new practices are aligned with regulatory expectations. Interviewee C mentioned that: “banks must continuously monitor regulatory changes and adjust their outsourcing practices accordingly to maintain compliance.”

The interviewees B, C and E consistently emphasized the impact of regulatory frameworks on IT outsourcing decisions. The regulatory environment mandates a strict compliance landscape, covering multiple points such as vendor selection, contract negotiations, and maintaining governance. The interviews highlighted outsourcing regulation as a key mechanism for reducing risk in the banking sector and that new regulatory requirements are constantly being implemented in the financial sector. Experts stressed that a regulatory framework is crucial to overcome the risks associated with IT outsourcing.

### **5.6.1 Artificial Intelligence as a Future Risk**

During the interviews some concern emerged over the utilization of AI within the financial industry, mainly due to the rapid progression of AI technology. Interviewee E highlighted the importance of implementing regulations that are specifically designed to address the changing nature of AI, highlighting the fact that the rapid advancement of technology can surpass the current legislative structures. The professional also highlighted the importance of addressing this gap promptly, suggesting that incorporating AI-specific guidelines into existing agreements could mitigate potential risks. In addition, the conversation discussed the difficulties posed by AI, including the possibility of unintentional errors in automated processes, stressing the importance for an approach towards the integration of AI. This interview highlighted the need for regulatory measures to keep up with developments in technology.

Interviewee E emphasized the need for clear regulations to manage the risks associated with AI. "As AI continues to evolve, it is essential for regulators to establish

comprehensive guidelines that address the unique challenges posed by AI in IT outsourcing. This includes ensuring that AI systems are transparent, secure, and compliant with existing regulations." The interviewee E agreed that further research is needed to understand the full implications of AI in banking and to develop appropriate regulatory measures to mitigate potential risks.

In addition to these concerns, the interview highlighted the growing reliance on large technology companies for AI services. Interviewee E pointed out that banks are becoming increasingly dependent on a small number of major tech firms for the computing power needed to develop AI capabilities. This dependency poses significant risks, including the potential for operational vulnerabilities and difficulties in switching providers. The risk manager emphasized that the regulatory framework needs to address the risks associated with third-party dependencies, especially when these providers are located outside the EU.

The interviews revealed that there has been industry-wide discussion about regulating financial firms' reliance on external technology companies. Regulators are concerned that issues at a single cloud computing company could potentially disrupt services across many financial institutions. This highlights the need for banks to ensure they can move between different tech providers and avoid situations where they are overly dependent on a single vendor.

Considering the prior discussion, it is worth mentioning that according to interviewee B the financial services sector is already seeing the broad adoption of AI in several areas such as anti-money laundering, and fraud detection. Interviewee B mentioned this as follows: "this phenomenon requires supervisors to determine the extent to which current regulations suitably cover these applications, or if there is a need for further adjusted guidance. An evaluation of this kind would consider crucial elements such as clarity, and accountability, ensuring that the use of AI is in line with current regulatory measures."

The interviewee B also noted that, "AI is becoming increasingly prevalent in banking, and while it offers numerous benefits, it also introduces new risks that need to be carefully managed." They also added, "The regulatory framework has not yet fully caught up with the rapid advancements in AI technology. This creates a gap that could lead to significant risks if not addressed promptly."

According to the interviews regulators proactively aim to reduce risks for banks and closely monitor their activities. Given the critical role banks play in society, regulatory oversight is stringent. It is important for regulators to have a forward-looking approach, anticipating future changes and their implications for IT outsourcing in banks.

### **5.6.2 Digital Operational Resilience Act (DORA)**

The Digital Operational Resilience Act (DORA) was frequently mentioned by interviewees as a significant regulatory framework impacting IT outsourcing risk management in EU banks. DORA addresses the financial sector's increasing dependency on information and communication technology (ICT) by establishing a comprehensive statutory framework. This framework aims to ensure that financial institutions can withstand, respond to, and recover from ICT-related disruptions and threats.

Interviewees B and C highlighted several key aspects of DORA, including the harmonised principles for ICT governance and risk management, which place the responsibility for compliance and ICT risk management on the entity's management board. Regular testing of digital operational resilience was also emphasized, ensuring that financial entities can manage and recover from ICT disruptions effectively.

Additionally, interviewees B and C highlighted that DORA mandates the reporting of significant ICT incidents to relevant authorities, enhancing transparency and risk management. Regulation also includes provisions for managing risks associated with third-party

ICT service providers, ensuring robust oversight and contingency plans. The establishment of an EU oversight framework for critical ICT third-party service providers was noted as promoting coordinated supervision and risk management at the EU level. These aspects of DORA were seen as crucial for aligning IT outsourcing practices with regulatory expectations and enhancing overall resilience.

### **5.6.3 Outsourcing register**

According to interviewee B since 2022, regulatory requirements mandate that all outsourcing arrangements and contracts must be recorded in an outsourcing register. Interviewee E highlighted that this practice helps ensure that contracts are comprehensive and subject to regulatory oversight. They noted that: “the outsourcing register serves as a centralized repository for all outsourcing agreements, facilitating better monitoring and compliance with regulatory standards.”

Additionally, interviewee B mentioned that it helps regulators understand the volume of outsourcing activities and assess how dependent different banks are on third-party providers. The outsourcing register not only aids in regulatory compliance but also enhances transparency and accountability. By maintaining detailed records of all outsourcing arrangements, banks can more effectively manage their outsourcing portfolio and ensure that all contracts meet the necessary regulatory and operational standards. This practice also supports continuous improvement by providing a historical record of outsourcing decisions and outcomes, according to interviewee E.

## **5.7 Data Security and Privacy**

Ensuring data security and privacy remains a top concern in IT outsourcing. Interviewee A highlighted that the increasing complexity of IT environments and the rise of cyber threats require robust security measures. The IT consultant emphasized the need for continuous investment in security technologies and practices to protect sensitive

financial data. Implementing strong data protection protocols and regularly updating security measures are essential to mitigating risks associated with data breaches and cyber-attacks.

In addition, the interviewees A and D discussed the importance of regular security audits and compliance with industry regulations such as GDPR. The IT consultant A noted that these audits help identify vulnerabilities and ensure that third-party providers adhere to stringent security standards. It was also mentioned that the transfer of data between the bank and the outsourcing provider poses risks, including potential interception and unauthorized access. To mitigate these risks, banks should implement secure data transfer protocols and restrict access based on job requirements. The IT consultant A emphasized that maintaining transparency and control over data management practices is crucial for safeguarding sensitive information.

## **5.8 Vendor Management**

Effective vendor management is crucial in mitigating outsourcing risks according to interviewee E. The risk manager E noted that maintaining strong relationships with vendors, along with regular communication and performance evaluations, helps in addressing issues promptly and ensuring that the service providers remain aligned with the bank's objectives. Interviewee E noted that: “vendor management practices include setting clear expectations, monitoring performance, and fostering collaborative relationships to achieve mutually beneficial outcomes.”

Interviewee E also emphasized the importance of having a structured vendor management framework in place. This framework should include detailed guidelines for vendor selection, performance metrics, and risk assessment criteria. They mentioned that “a well-defined framework helps in standardizing the vendor management process, making it easier to compare and evaluate different service providers. This approach not only

enhances transparency but also ensures that all vendors are held to the same high standards.”

Another key point raised during the interviews was the need for regular vendor risk assessments. These assessments should be conducted periodically to identify any potential risks associated with the vendor's operations, financial stability, and compliance with regulatory requirements. Interviewee B highlighted that proactive risk assessments enable banks to address issues before they escalate, thereby minimizing the impact on the bank's operations. Additionally, incorporating feedback from various stakeholders, including IT and risk management teams, can provide a comprehensive view of the vendor's performance and potential risks.

Lastly, the interviewee E discussed the role of technology in vendor management. Utilizing advanced tools and platforms for vendor management can streamline the process and provide real-time insights into vendor performance. Also, interviewee C noted that technology can facilitate better communication, automate routine tasks, and provide analytics to support decision-making. By leveraging technology, banks can enhance their vendor management capabilities and ensure that they are well-equipped to handle the complexities of IT outsourcing.

## 6 Discussion

### 6.1 Interpretation of Results

The findings from the interviews highlight several key risk management practices currently used in the European banking industry for IT outsourcing. These include solid contract management, thorough exit strategies, well-planned recruitment of skilled IT and risk management staff, extensive due diligence processes and strict regulatory compliance. The themes identified through thematic narrative analysis are based on interviewees' experiences reflecting on current methods, risks and approaches to managing risks in EU banking IT outsourcing projects. It is important to recognize that the themes presented in this study are the result of common features that emerged during the interviews. However, it is important to stress that this study does not aim to provide a comprehensive analysis of all possible aspects of IT outsourcing risk management, but rather to address the main tactics and concerns.

One emerging concern raised by interviewees is the potential risk associated with the rapid integration of AI into banking. The rapid adoption of AI may be faster than the current regulatory framework, creating new vulnerabilities. Interviewees highlighted the need for clear and updated regulation to effectively manage these new risks. This is in line with a wider industry trend where AI is increasingly seen as both an opportunity and a challenge in risk management.

In addition, interviewees pointed out that without proper regulatory oversight, the use of AI can lead to unintended consequences, such as distorted decision-making or increased vulnerability to cyber-attacks. They stressed that a proactive approach to regulation, including continuous monitoring and adaptation to technological developments, is crucial. This would help not only to mitigate potential risks but also to harness the full potential of AI to increase operational efficiency and innovation in the banking sector.

By addressing these concerns, banks can better navigate the complexities of AI integration while ensuring robust risk management practices are in place.

## **6.2 Comparison with Previous Research**

In chapter 2.2, the Transaction Cost Theory by Ronald Coase (1937) is presented. By applying the principles of Transaction Cost Theory, banks can comprehensively evaluate IT outsourcing. The profitability of IT outsourcing is strongly influenced by risk management, which must be carefully assessed. If risks materialize, transactions can become unprofitable for the bank. Therefore, risk management in IT outsourcing within the banking sector and the minimization of transaction costs, as outlined by Transaction Cost Theory, are interconnected (Coase, 1937; Sorrentino & Martinez, 2000).

Sorrentino & Martinez (2000) emphasize in their study that Transaction Cost Theory provides a basis for IT outsourcing decisions as it helps banks to assess the costs associated with financial transactions, such as negotiating contracts and searching for suitable suppliers. The authors emphasize the importance of risk management in IT outsourcing and argue that effective risk management is crucial to minimizing transaction costs and ensuring the profitability of outsourcing arrangements.

Their study goes beyond the traditional transaction cost framework by emphasizing the ability of the IT department to manage long-term relationships with IT suppliers, which is important for the success of outsourcing strategies, as it ensures the continuity and reliability of service delivery. Furthermore, the authors suggest that banks should not only focus on minimizing transaction costs, but also strategically manage their relationships with suppliers, including ongoing performance evaluation, to maintain a successful outsourcing relationship (Sorrentino & Martinez, 2000).

These findings from Sorrentino & Martinez (2000) are in line with the themes that emerged in the interviews presented in chapter five raised through thematic analysis. In

particular, the capabilities of the IT department and the importance of skilled employees are common themes across the studies. Thus, both studies show that a continuous development of personnel are key to the success of IT outsourcing in the banking sector.

The results of this study are also consistent with previous studies that highlight the importance of solid risk management practices in IT outsourcing. Studies by the ECB and other regulatory bodies have highlighted similar themes, such as the need for comprehensive due diligence and the critical role of regulatory compliance in reducing IT outsourcing risks (European Central Bank, 2024a; European Central Bank, 2024b). These studies highlight that effective risk management frameworks are essential to maintain operational resilience and ensure regulatory compliance in IT outsourcing arrangements.

Anderson-Prince's (2022) study on cloud outsourcing in the financial sector is in line with the findings in this study but also adds to it. Anderson-Prince highlights the fragmented nature of data privacy regulation and the absence of well-defined policies complicate compliance and risk management for financial institutions operating in multiple jurisdictions. The study emphasizes the need for a sound understanding of local and foreign laws to mitigate these risks. Research highlights the importance of effective internal governance structures in managing cloud outsourcing risks and achieving cost-effectiveness. The study suggests that financial institutions should develop comprehensive and flexible privacy and technology-enhancing policies. It also recommends the use of key performance indicators (KPIs) to evaluate the appropriateness of internal control measures (Anderson-Prince, 2022). While Anderson-Prince focuses on cloud outsourcing, my research extends these findings to the broader context of IT outsourcing within the EU banking sector.

Similarly, Diener & Špaček (2021) examine the barriers to digital transformation in the banking sector and identify challenges such as outdated IT infrastructure, high costs of new technologies and stringent regulatory requirements. Their study highlights the need for strong leadership, clear strategies and employee engagement to overcome these

barriers and successfully implement digital transformation (Diener & Špaček, 2021). This is in line with the findings of my study, which also highlights the critical role of skilled employees in managing IT outsourcing risks. The importance of knowledgeable and experienced staff is a recurring theme in both studies, highlighting that effective risk management relies heavily on the expertise and commitment of employees. By investing in ongoing training and development, banks can better equip their staff to deal with the complexities of IT outsourcing and ensure that robust risk management practices are in place.

The Federal Financial Institutions Examination Council (FFIEC) provides guidance on managing the risks associated with outsourced technology services and emphasizes a comprehensive risk management process. This includes understanding the risks, conducting thorough due diligence when selecting service providers, and having clear contracts that address data security, confidentiality and compliance. The guidelines also stress the importance of continuous monitoring of service providers to ensure that they meet performance requirements and comply with contractual terms. This is in line with the findings of this study, which emphasizes the need for robust governance, due diligence and continuous monitoring in IT outsourcing to effectively reduce risks (FFIEC, 2000).

Both the FFIEC guidelines and this study highlight the critical importance of regulatory compliance and clear contractual relationships in managing IT outsourcing risks. This harmonization reinforces the need for comprehensive risk management frameworks to ensure the safety and efficiency of IT outsourcing in the banking sector.

Whitfield (2023) discusses the growing cyber risks facing European banks, particularly due to the complexity of their IT systems. The article highlights that the combination of old and new technologies creates vulnerabilities that can be exploited by cyber attackers. The rapid digitalization of banking services has increased banks' exposure to cyber threats, and the lack of cybersecurity expertise further increases these risks. Successful

cyber-attacks can lead to financial losses, data ransoms, reputational damage and regulatory sanctions, all of which can affect banks' credit ratings. The article also highlights the need to improve cybersecurity measures and regulatory oversight to improve the cyber resilience of the banking sector (Whitfield, 2023).

These findings are in line with the research, which also highlights the importance of robust risk management practices in IT outsourcing. Both studies highlight the critical role of regulatory compliance. However, Whitfield's emphasis on the vulnerabilities posed by the combination of old and new technologies did not emerge as a significant theme in my research. This suggests that while my research focused on broader risk management practices, the specific challenges posed by the complexity of IT systems still need to be explored in future research.

### **6.3 Limitations of the Study**

There are several limitations to this study that should be acknowledged. First, the sample size is relatively small, with only five interviewees, which may not fully reflect the diversity of perspectives on the EU banking sector. In addition, all participants are currently resident in Finland, although all have experience from international banks. This geographical concentration may limit the generalizability of the results to other EU countries. Additionally, the study's focus on the EU banking sector means that the findings may not be applicable to other regions with different regulatory environments and market conditions.

Another limitation is the reliance on qualitative data which may be vulnerable to interviewer and interviewee bias. Thematic narrative analysis is systematic, but it is also interpretative and may reflect the subjective views of the researcher. Also, the participants highlighted the fact that they cannot tell about confidential client information.

Another challenge is the rapid evolution of IT and the regulatory framework. The results of this study are based on the current state of technology and regulation, which may

change significantly in the near future. This time constraint means that the results may become less relevant as new technologies and regulations emerge. The first interviews for this study were held in late 2022 and updated in late 2024.

Finally, as the research is based on self-reported information, it is possible that the answers are biased. Participants may have given answers even if they did not have full knowledge of the topic without admitting it, which may affect the objectivity of the results. There is also a risk that some interviewees may have withheld certain information, particularly if it concerned sensitive details that their banks did not wish to disclose. This may lead to an incomplete or distorted presentation of the actual risk management practices and IT outsourcing challenges in the banking sector.

According to Babin & Quayle (2016), companies often remain reserved about disclosing the details of their outsourcing operations, including the successes, failures, and financial outcomes, reflecting a cautious approach towards sharing exclusive and performance-related information. The financial services sector's adoption of digital technology combined with the possibility of reluctance to share critical information may pose problems for consumer safety and financial stability.

Recognizing these limitations, future research can build on this research by addressing these limitations, for example by including a larger and more diverse sample or incorporating quantitative data.

#### **6.4 Practical Implications and Recommendations**

The results of this study have some practical recommendations for the banking sector in the EU. Banks should prioritize the development and implementation of comprehensive risk management frameworks that include robust contract management, exit strategies and due diligence processes. These issues are already being addressed more effectively by banks, according to the interviews. There is also a clear need to train and recruit

skilled IT and risk management staff on an ongoing basis to deal with the complex issues associated with IT outsourcing.

Given the potential risks associated with integrating AI, banks should take a long-term view, especially in terms of reliance on an external service provider. Regulators should consider this potential dependency of banks, as well as the rapid pace of technological development, and ensure that regulations are flexible enough to adapt to new developments.

A future study would benefit from a larger sample size, including participants from more EU countries, to improve the generalizability of the results. This is important as the banking sector is based on trust and crises spread easily within the EU if risk management fails in one country. Further research could also focus on the specific risks associated with AI in IT outsourcing and how regulatory frameworks can be developed to effectively address these challenges.

## 7 Conclusions

The conclusions of this study are that IT outsourcing risk management in the EU banking sector is based on several key practices, such as contract management, exit strategies, recruitment of skilled personnel, due diligence and regulatory compliance. The interviews also highlighted the risks posed by the rapid integration of AI, which require clear and up-to-date regulation. These findings answer the research questions and provide information on the risks of AI in IT outsourcing, as well as the importance of skilled employees.

The findings emphasize the importance of understanding and mitigating risks associated with rapidly integrating emerging technologies and the potential for over-dependence on service providers, notably within cloud services. This highlights the need for a proactive and collaborative regulatory framework, ensuring that banks and technology providers transparently navigate the evolving digital environment.

Also, industry professionals generally view the EBA's efforts to harmonize regulation and risk management across the EU banking sector as beneficial. They appreciate the standardization of practices, as it makes processes more efficient and clearer. However, professionals also find the current situation quite challenging due to the rapid technological advancements and the accompanying regulatory changes, which require significant efforts and skilled personnel from banks to keep up. They believe that the process could be improved and streamlined.

Professionals noted that while harmonization has helped standardize practices, the complexity of managing regulations across multiple countries remains a hurdle. The need for continuous adaptation to requirements create difficulties. They see that regulators face a tough task in developing and harmonizing regulations in a rapidly changing environment.

The findings from the interviews underscore the importance of adopting comprehensive risk management practices in IT outsourcing within the EU banking sector. While there are significant challenges, particularly related to regulatory compliance (DORA) and data security, proactive measures and continuous monitoring can help mitigate these risks. The insights provided by the industry professionals offer guidance for banks looking to navigate the complexities of IT outsourcing and enhance their risk management strategies. The study is also in line with the results of previous studies on a similar topic.

This study lays the groundwork for future research on the outsourcing of IT functions in the EU banking sector. More specifically, methods to assess banks' IT proficiency should be investigated, as well as the critical role that a trained IT workforce plays in risk mitigation during bank outsourcing operations. Future studies could examine how a competent technical workforce can make an important difference to the security and sustainability of banks' operations. Research in this field has become crucial since banks are becoming more and more dependent on in-depth technical knowledge to manage and reduce the risks involved in outsourcing IT services (KPMG, 2024).

In the future, it would be useful to expand the research to cover a larger sample and a more diverse set of EU countries to improve the generalizability of the findings. It would also be important to further investigate the specific risks posed by AI in IT outsourcing and to develop regulatory frameworks that can address these challenges. The vulnerabilities posed by the complexity of IT systems and the combination of old and new technologies also require further research.

The study highlights the importance of IT outsourcing risk management and provides insights for the banking sector. The findings help to understand the risks and methods to mitigate them, which will contribute to banks' ability to effectively manage outsourcing-related threats. Continued research and development in this area is essential for banks to adapt to rapidly changing technological and regulatory environments.

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