



**Radboud Universiteit Nijmegen**

# Third-Party Risk Management in the Financial Services Industry

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## Abstract

Financial organizations are currently having trouble managing the risks caused by outsourcing their services to third-parties. Following the recession, there was an increase in outsourcing to third parties in an effort to initially save costs; nowadays, new business models are built on the outsourcing opportunities brought on by third-parties. Organizations are hardly able to implement appropriate risk management procedures because they no longer have control over what and how many services are outsourced to third-parties. As a result, businesses are becoming less digitally resilient and are exposed to potential risks. An exploratory approach to this issue is used in this study, and it is supplemented by an examination of the function of regulations in the financial services sector (FSI).

Since third-party risk management (TPRM) is a topic that is new to the FSI, an initial Structured Literature Review (SLR) was done using Kitchenham's principles (2004). The literature study was limited to the years 2013 through 2022 and its aim was to find all the literature on the outsourcing of IT services in the FSI. Following that, a detailed analysis of the FSI's new and current IT outsourcing regulations was carried out. Finally, IT risk advisory professionals in the FSI actively participated in talks to represent the relationships observed in this section.

According to the findings of this research, the Digital Operational Resilience Act (DORA) will offer more comprehensive standards regarding outsourcing relations across the FSI. Organizations will also be expected to create a comprehensive TPRM framework to help them plan for the hazards that outsourcing relationships can bring. Since a comparable legislation was put in place in the telecom sector, a pattern was noticed. The telecom sector identified the organization's landscaping of third parties as a first step toward compliance. Additionally, it has been determined that direct cooperation and cooperation through an impartial intermediary are useful for achieving compliance without compromising an organization's competitive edge. As long as organizations abide by the laws prohibiting cartel formation and price setting.

*Keywords:* Third-party risk management, digital operational resilience act, financial services industry, information technology outsourcing

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## Abbreviation list

Abbreviations	Explanation
BaaS	Banking-as-a-Service
BPO	Business Process Outsourcing
CC	Cloud Computing
CIM	Customer Interaction Model
DORA	Digital Operational Resilience Act
DT	Digital Transformation
EBA	European Banking Authority
EC	European Commission
EIOPA	European Insurance and Occupational Pensions Authority
ESMA	European Securities and Markets Authority
FICOD	Financial Conglomerates Directive
FP	Fixed Price
FSI	Financial Services Industry
ICT	Information and Communications Technology
IT	Information Technology
ITO	Information Technology Outsourcing
RVIT	Regeling Veiligheid en Integriteit Telecommunicatie
SLR	Structured Literature Review
T&M	Time and Materials
TPRM	Third-Party Risk Management
VCM	Value Creation Model
VPM	Value Proposition Model

## Chapter 1 - Introduction

Currently, significant financial services industry (FSI) organizations, such as those in banking, insurance, and securities, struggle with the administration of their outsourcing contracts. Due to the advancement of digitalization, FSI organizations' supply chains have become extremely fragmented (De Nederlandsche Bank, 2021). A supply chain is defined as "a network between an organization and its suppliers for the production and distribution of a certain product to the buyer" (Hayes et al., 2022). The unbundling and rebundling of supply chain operations has contributed to this fragmentation. In this manner, third-parties are frequently accountable for parts of products or services, resulting in hybrid supply chains. Changing from a traditional closed supply chain to an open supply network makes risk management in this supply chain more complicated (De Nederlandsche Bank, 2021).

Organizations have been cooperating with third parties for a long time. In order to decrease the expense of business processes, organizations increased the amount of work they outsourced to third-parties during the recession (Park et al., 2015). Smaller-scale outsourcing to third-parties carries acceptable risks, but as outsourcing volume increases, so do the risks brought on by third-parties (Park et al., 2015). Additionally, regulators are concentrating increasingly on the management of the risks connected with outsourcing to third-parties (Park et al., 2015). Finally, because organizations are depending more and more on outsourcing of their business processes, a malfunction could have a negative impact on their customers. *"when millions of consumers are personally affected by a third-party system failure or security breach, the reputation of the involved organization can suffer"* (Park et al., 2015 p.1).

Risks are defined in this study as potential negative effects; as a result, they are divided into two parts: the likelihood that they will occur and the potential consequences that they may have (Chipeta, 2022). Cybersecurity risk, operational risk, legal, regulatory, and compliance risk, reputational risk, financial risk, and strategic risk are the several types of risks brought on by outsourcing to third-parties (Chipeta, 2022). Organizations are implementing Third-Party Risk Management (TPRM) practices to control these several types of risks.

The Westpac Banking Corporation Data Breach serves as an example of the effect a third party may have on an organization. A data breach occurred through PayID, Westpac's third-party vendor for bank transfers requiring only a phone number or email address. PayID functioned like a phone book, allowing anyone to confirm the information of an account holder by looking up their phone number or email address using a look-up feature. The flaw gave hackers the opportunity to carry out an enumeration attack. The attack resulted in the banking details of 98,000 Westpac customers (Kost, 2022). Westpac suffered significant losses as a

result of this data breach, despite the fact that the security problem did not originate in Westpac's systems.

Following the advanced digitalization, financial infrastructures have become increasingly interdependent. This interdependency increases the risks, as organizations do not only need to secure their internal environment; they can also be negatively impacted by the security of their third-parties' internal environment. This means that the digital resilience of an organization is impacted by the digital resilience of its third-parties. High-impact incidents caused by third-parties reported by organizations increased from 11% in 2019 to 17% in 2020 (Deloitte, 2020). In order to cope with the increasing complexity of digital resilience, the European Banking Authority (EBA) called for an alteration in regulations regarding organizations' digital processes. These changes in regulations were initiated by the EBA following the large interest in cloud service providers (European Banking Authority, 2017b). In September 2019, these guidelines for cloud outsourcing were extended to apply to outsourcing more widely for banking, payment, and e-money institutions (Reynolds, 2020). Following the need for improved regulations to cope with cloud outsourcing, the European Insurance and Occupational Pensions Authority (EIOPA) published their own guidelines on outsourcing to cloud service providers (the European Insurance and Occupational Pensions Authority, 2020). These guidelines are rather similar to the EBA requirements, although the EIOPA guidelines are more specific to merely cloud outsourcing. Following this, the European Securities and Markets Authority (ESMA) also published guidelines resembling the EIOPA guidelines.

Due to the different regulatory guidelines throughout the entire FSI, the European Commission has proposed a framework for digital operational resilience and management of ICT-risk. This framework is called the Digital Operational Resilience Act (DORA). This proposed framework is to become the reference throughout the entire FSI. However, the framework still needs the approval of the European Commission to become effective. The framework aims to secure networks of information systems that support the business processes of financial institutions. Furthermore, the framework will specify detailed requirements that contracts need to adhere to (European Commission, 2020). However, this has been a mere proposal and has not yet been established as a final regulation. The regulation is anticipated to become effective in the fall of 2022.

Finally, allocating regulations towards the FSI does fail to acknowledge the third-parties working together with the financial institutions. As these regulations are mostly entity-based and applicable to financial entities, this neglects the risks that might occur when working



together with third-parties that are non-financial entities. Whereas organizations from differing FSI sectors conglomerate into one undertaking, specific rules from all sectors involved might fail to address the issue. However, the Financial Conglomerates Directive (FICOD) framework provides directives for the conglomerate as a whole (Smith, 2015). Even though this is true for conglomerates in the FSI, there is no framework to help when a conglomerate forms with a big tech company (De Nederlandsche Bank, 2021; Noble, 2020).

This research aims to develop knowledge about the current frameworks that are coping with hybrid supply chains and the associated risks within the FSI. With this, insights will be gained into the regulatory gap of third-party risk management within the FSI. This is in accordance with the developments in European legislation (European Banking Authority, 2017b; European Commission, 2020; European Securities and Markets Authority, 2020; the European Insurance and Occupational Pensions Authority, 2020), as well as research executed by De Nederlandsche Bank (2021).

For the reasons mentioned above, the question guiding this research will be:

*“To what extent are the existing regulatory frameworks fitting the need for regulation of IT outsourcing with third-parties in the financial services industry?”*

This research aims to answer this question by focusing on the current frameworks of coping with the continuing organization of hybrid supply chains. This research will describe the current regulatory frameworks across the different FSI sectors. The requirements imposed upon the different FSI sectors will be explored, as well as how to develop a framework that guides the cooperation of financial entities with non-financial third-parties. This research will also look at what risks are involved when financial institutions work with third parties inside the FSI, even though the regulations can help create an environment that is open to new ideas inside the FSI.

A systematic literature review will be conducted in order to answer the research question. This structured literature review (SLR) will explore the topics described above, and a framework will be provided in order to cluster the existing knowledge. Several studies have been conducted on the ITO phenomenon (Alsudairi & Dwivedi, 2010; Dibbern et al., 2004; Gonzalez et al., 2006; Könning et al., 2019; Lacity et al., 2009, 2010, 2017, Liang et al., 2016). Könning merged all the research together into one overall framework entailing all investigated components. However, the integration has neglected to address the hybrid supply chains within the FSI due to the high degree of complexity (De Nederlandsche Bank, 2021). For this reason,

this research aims to integrate the increasing trend in regulation into the theoretical framework. Finally, the results found in the theory will be discussed with actors in the FSI to scrutinize the views and opinions these actors have towards the theories. This will lead to a structuration of the theories on this relatively new topic, and this process will allow to answer the research question as mentioned above.

The research is organized around three main themes: outsourcing of information technology; third-party risk management; and the financial services sector. Chapter 2 will provide background information on these subjects, which will serve as an input for the analysis procedures employed in this study. The decisions taken regarding the techniques used for data gathering and analysis will be further discussed in Chapter 3. Chapter 4 will present the findings of the structured literature review. Additionally, active participation talks will be held throughout this research, and the results will be provided in Chapter 5. The discussion of the results will be offered in Chapter 6, and Chapter 7 will present the answer to the research question.

## Chapter 2 - Theoretical background

Within this chapter, the main topics of this research will be defined and trends in current research will be identified. The topics central to this study are the financial services industry, information technology outsourcing, and third-party risk management. The identification and snowball sampling of current literature on these topics enables this research to formulate questions that will guide the following parts of this research.

### 2.1 Financial Services Industry

The FSI is a tumultuous market because of entity-based regulations and the unbundling of services due to fintech startups. In order to better grasp the structure inherent to this market, an exploration of this market is needed first. The FSI is composed of the banking, investment, and insurance categories of activities (Thakor, 2020). For the purpose of simplicity, the FSI activities will be structured according to these major categories.

The banking category can be further divided into; credit, deposit, and capital-raising services; payments, clearing, and settlement services. While investment organizations regularly manage investment services, such as pensions, insurance assets, hedge funds, and mutual funds (Perez, 2020), insurance organizations manage insurance services ranging from car insurance to life insurance and health insurance (Perez, 2020). The variety of services has large impacts on the entire society, as was illustrated by the financial crisis in 2008.

Large financial entities have to deal with regulations for the entire organization. This means that once an entity is classified as a bank, for all activities the same ruleset applies. This was implemented in order to achieve financial stability and prevent another financial crisis. Financial entities such as banks have to deal with requirements for minimum capital and liquidity constraints on large exposures. Furthermore, banks have to deal with consumer protection, anti-money laundering, combating the financing of terrorism or business conduct, which apply to all services a bank offers (Restoy, 2021). This means that a large financial entity is less likely to innovate in smaller processes, as due to heavy regulations, these activities will rarely become cost-efficient (Restoy, 2021).

Nowadays, not all activities in the FSI are executed by the larger financial entities. Rapid innovation in information technology enabled certain activities to be improved upon or to be invented. These financial technology practices are called "fintech" for short. The EBA defines fintech as "technology-enabled innovation in financial services that could result in new business models, applications, processes, or products with an associated material effect on the provision of financial services." (European Banking Authority, 2017a, p.7). These fintech

activities have traditionally been driven by small fintech start-ups through disruptive innovation. However, larger fintech organizations are also striving for innovation in services within the FSI. The impact of fintech has widely been deemed as competitive, leading to an increase in customer choice, decreasing operational costs, and an overall enlargement of the FSI (Bains et al., 2022; Di et al., 2021; Milian et al., 2019; Panos & Wilson, 2020). Although, fintech could still have an adverse impact on the financial supply chain, due to risks undermining the financial stability.

Financial organizations primarily engage in lightly regulated activities. Due to this, there is a disparity between larger financial institutions and fintech companies. Whereas large financial institutions must comply with a comprehensive set of regulations, fintech companies must only adhere to activity-specific regulations. For this reason, smaller financial organizations can provide the service at a lower cost.

## 2.2 Third-Party Risk Management

ITO increases an organization's dependency on the third parties that are executing the business activities for the organization. Therefore, organizations should manage their third parties accordingly. TPRM consists of two main components: the number of risks an organization is perceiving and the maturity of the governance of these risks. The importance of risk perception builds on the notion that a possible risk or threat could become an opportunity when dealt with properly (Sen et al., 2020). The FSI has been stimulated to develop a so-called "risk appetite" in order to foster customer value. The entrance of fintech to the FSI has increased the risk appetite of financial entities by increasing the activities a financial entity is able to offer. While this increases the number of opportunities financial entities have, it is important that the maturity of governance mechanisms is increasing as well (Sen et al., 2020). Organizations with higher levels of maturity in governance mechanisms are better able to adapt to the altering risk spectrum and raise their risk management standards (Sen et al., 2020).

A form of maturity in governance mechanisms is the extent of contractual clauses. Contract management in business process outsourcing (BPO) has been extensively investigated. Contractual structure has been a major topic in BPO studies (Chen & Bharadwaj, 2009; Ge et al., 2021; Schepker et al., 2014). Contract management is generally focused on exculpatory clauses, meaning risks of injury, liability, or damages are shifted from one party to the other (Khalef et al., 2021). Although this is a good motivator for third-parties to not violate contract requirements, it still fails to acknowledge all the other effects a third-party violation of these requirements has. When considering the FSI, it is important to note that the

reputation of this organization could be damaged by a third-party violation. Especially in the instance of the FSI, where organizations are dealing with sensitive private data of customers, a possible violation by a third party has an enormous impact. Even if this has been dealt with contractual clauses.

The ambiguity of contracts is dealt with in the procurement of contracts and in the management of ongoing contracts. The competitive nature of the FSI and vague regulatory requirements differing per sector are causing complex contractual arrangements (European Commission, 2020). These complex contractual arrangements rarely provide sufficient safeguards for fully-fledged monitoring of the outsourcing process. As a result, standardization of minimum requirements for contractual regulations is required to ensure financial stability throughout the FSI by safeguarding monitoring by financial entities.

### 2.3 Information Technology Outsourcing

While disruptive fintech organizations initially posed a threat to financial entities, nowadays fintech organizations are increasingly seen as attractive partners. Most of these agreements share the goal of outsourcing IT activities that have been developed within fintech organizations (Enriques & Ringe, 2020). Due to the unique nature of regulations within the FSI, the entrance and collaboration pose a significant threat, as imposed regulations are not always fitting. There are numerous benefits for fintech organizations and financial entities to start outsourcing agreements. For fintech organizations, this means that fintech organizations can take advantage of the financial infrastructure created by financial entities. Using the bank's license, fintech organizations are able to develop and test products and bring these to the market using the bank's license. For financial entities, collaboration with banks decreases the need to build the business processes needed to enter the FSI (Enriques & Ringe, 2020). With this, banking-as-a-platform came into existence, wherein banks offer contractual arrangements to fintech startups to be able to operate within the FSI. This trend is seen throughout all the FSI sectors.

Financial entities that are outsourcing their activities to other organizations can have differing reasons for outsourcing. Whereas early research was mainly focused on cost reduction, nowadays research focuses on access to expertise and skills, core capabilities, and quality improvements (Könning et al., 2019). This research topic is also classified as a saturated research topic according to Könning et al. (2019). Although a new motivator was identified in the research, organizations started outsourcing IT activities for security reasons. This is mainly

the case for cloud sourcing activities outsourced to a reputable provider such as Microsoft or Amazon (Yigitbasioglu, 2015).

These outsourcing arrangements are regularly welcomed due to their increasing market value, although they also pose significant regulatory problems. Due to a lack of enforcement and effective supervision, the market's stability could become a systemic risk (Enriques & Ringe, 2020). Trying to cope with this, regulatory sandboxes and fintech charters are suggested to help with addressing these problems. However, the availability is lacking within the FSI, and this fails to attract fintech organizations into the regulatory framework. From a regulator's perspective, the financial entity is the outsourcer and the fintech organization is the outsourcee. This means that the financial entity needs to ensure that the fintech organization is adhering to all rules. The adherence is ensured through thorough contract management between the outsourcer and the outsourcee.

Within this chapter, the topics of the financial services industry, information technology outsourcing, and third party risk management have been explored. A trend within the FSI has been identified that, due to ITO to among other fintech organizations, the activities of financial entities are unbundling. In order to cope with these new entrances and still remain entity-based regulations in the FSI, proficient contract management is deemed to be a mediating factor, ensuring financial stability and stable growth within the FSI. The available research lacks a general sense of direction as this topic is relatively new in literature. For this reason, this research will start by executing a SLR, to provide this structure in the literature. Once this structure has been provided, the actors within this market will be confronted with the found results. This will help to validate the results that have been found in this research and formulate general implications.

This chapter has recognized contemporary developments in the FSI, including more vendor participation and increased outsourcing of IT functions. As a result, regulators are paying attention to the ITO process and will propose new regulations. As a result of these restrictions, businesses will be encouraged to exert more control over their outsourcing relationships. The employment of regulations to strengthen organizations' control over third-party risks remains to be explored.

## Chapter 3 – Methodology

This chapter will explain the decisions made throughout this research. As stated previously, this research will include a Structured Literature Review (SLR) and discussions with experts in the field of risk advisory in the Financial Services Industry (FSI). The SLR provides researchers with a comprehensive framework of previous research conducted in this field. Identifying literature gaps enables the formulation of recommendations for future research. Moreover, by comparing these findings with field actors, the results of this research are validated and certain relationships can be explored in greater depth. The SLR is dependent on Kitchenham's steps (2004). By repeating these steps, the results will be less susceptible to bias and will achieve greater levels of validity.

### 3.1 Type of the research

This research focuses on organizing the pertinent literature and comparing these findings with risk advisory actors in the FSI. In an effort to develop a comprehensive and structured understanding of Third-Party Risk Management (TPRM). In order to accomplish this, the existing body of knowledge must first be organized. This research will depend on Kitchenham's execution steps throughout its entirety (2004).

In the second part of this research, the focus is on understanding the perspectives and opinions of FSI actors; consequently, a qualitative methodology will be employed. The qualitative method will allow us to investigate the views and opinions of these actors in depth. When opting for a qualitative approach, participants' opinions and perspectives can be analyzed in greater depth. In addition, since no research has been conducted in this field, an inductive method is employed. While continuing to rely on the executed SLR and the identified themes. Here, the objective will be to structure the observations made throughout the research in order to identify patterns and, ultimately, relations between variables that can be tested in future studies.

As identified in Chapter 2, certain topics of TPRM were saturated in literature. Therefore, the selection of research will be used to explore the field of TPRM in the FSI and specialize in ITO. Earlier research focused on TPRM in general or considered the perspective of BPO. The difference depends on the turbulent developments in the FSI sector regarding the entrance of new outsourcing models. This has been identified in Chapter 2. To the best of my knowledge, this has not been studied before, so starting with a classification of valuable knowledge seems fitting. Furthermore, the discovered results will be communicated to market participants in order for them to scrutinize the findings.

### 3.2 Sources of information

The information processed in this research has been collected from different sources. A SLR has been executed in order to structure all the current research on the topics. After the structuring of current research, ethnographical field research will be executed. Here, active participation conversations will be organized in order to fully understand the problem at hand. By executing a thematical analysis of the information and comparing this with the information found in the SLR, recommendations will be formulated that will guide research towards a profound understanding of the phenomena.

Here an elaboration on the sources of information will be given. This SLR will be executed according to the guidelines of Kitchenham (2004). These principles provide clear guidance on the execution of the SLR, increasing the reliability and validity of the results. For this reason, the SLR will be divided in three parts: planning, conducting and reporting. Within this chapter we will explain the planning and conducting principles of this research. The results will be reported in Chapter 4 of this research. Further explanation on the choices made throughout the SLR will be given in later parts of this chapter.

The aim of the empirical research was to confront business practitioners with the discovered theoretical practices. To investigate the discovered relations in the theory, as reported in Chapter 4, and to gain a better understanding of the field of TPRM in the FSI. Interviews were selected as a research method to cluster the views and opinions of experienced practitioners in the field of TPRM in the FSI. However, due to the field's being hardly developed, another research method has been chosen as the identification of experienced practitioners was not feasible. The approach taken is based upon ethnographic field research. Ethnography is used to study and observe participants in their natural environments. Ethnography requires the researcher to immerse themselves among the participants in the setting that needs to be studied (Katryna, 2022). This has been a valuable fit for this research as the explorative nature of a new field of research has no clear answers. By participating in the research, a collaboration towards the answers has been constructed, as will be shown in Chapter 5. The techniques used for this process will be further elaborated upon later in this chapter.

The process of participative research was heavily dependent upon the researcher initiating the conversations. For this reason, bias could be introduced by the researcher in this process. Bias should be prevented as bias will diminish the validity and reliability of the results. However, the initiation of conversations is sometimes dependent on the sharing of information



found during this research. For this reason, the researcher will only be asking questions that are designed to avoid the introduction of bias by stating facts discovered during the research. An example of this could be: “Did you hear about the introduction of the DORA this summer?”. This question is an example of a question that states a fact and asks for the opinions of participants rather than introducing bias by the researcher. The explorative nature of this research will provide a general sense of direction through which a profound understanding of the problem could be achieved. The participatory coffee corner conversations are mainly focused on grasping certain opinions, views, and trends within the market.

A profound understanding of this market has been achieved after the data has been extracted using the active participation conversations in coffee corners. The researcher will summarize the findings and reflect upon them with actors in the market. By doing this, anecdotal evidence was gathered, which will influence the discussion of the findings and the managerial implications. This process will help establish the validity of this research as other practitioners in this market will reflect on the opinions of others. With this process, triangulation of the data was achieved as the discussion of opinions and views amongst other practitioners generated a general belief.

### 3.3 Case selection criteria

As identified in Chapter 2, certain topics of Third-Party Risk Management (TPRM) were characterized as saturated. Therefore, the choice has been made to investigate the topic of TPRM in the Financial Services Industry (FSI) on Information Technology Outsourcing (ITO). Within this section, the choices that were made during this research on the SLR will be described. Furthermore, the choices made in the selection of participants for the active participative conversations will be explained.

#### 3.3.1 Literature selection

The topic of contract management in outsourcing relations has been investigated largely. There have been structured literature reviews creating frameworks of existing knowledge, most recently by Khan & Khan (2013). Here, Khan & Khan looked at the success factors of contract management within offshore software development. Although this resembles the scope of the literature review executed here, the topic of ITO has had significant developments since. Moreover, the specification towards the FSI will provide us with new information efficiently. Therefore, this SLR uses an adapted strategy from the strategy used by Khan & Khan in order to investigate the current development of changes in the field of ITO.

### 3.3.1.1 Query

The search query used by Khan (2012) is adopted in this research, this query was able to identify current literature on these topics. The search query used by Khan (2012) was:

((“Outsourcing contract” OR “software outsourcing” OR “information systems outsourcing” OR “information technology outsourcing” OR “IS outsourcing” OR “IT outsourcing” OR “CBIS outsourcing” OR “computer-based information systems outsourcing” OR “software facility management” OR “software contracting-out”) AND (barriers OR barrier OR obstacles OR hurdles OR risks OR “risk analysis” OR “critical factors”) AND (“Outsourcing contracts” OR “outsourcing agreement” OR “outsourcing marriage” OR “contract” OR “outsourcing relationship” OR “contractual coordination” OR “IT contract” OR “relational governance” OR “contracting” OR “contractual agreement” OR “co-ordination” OR “Relationship management” OR “contract level” OR “contract stages” OR “agreement level” OR “contracting levels” OR “post-contract” OR “pre-contract” OR “during contract”)).

The syntax has been adapted per database, in order to conform the requirements of that database.

With the intention of specializing the search results towards the recent developments in the FSI, an additional part of the search query needs to be added. Outsourcing of financial technology has been widely investigated. However, the application of contract management to the outsourcing of financial technology has not been structured in a singular literature review, to the best of my knowledge. Therefore, combining both fields into one singular search query will yield all research in this field. The SLR of Milian et al. (2019) was opted to be integrated with the search query of Khan (2012). However, once this search query was subjected to a preliminary search, the search results excluded too many papers, therefore this query was not included in the final search query. The research of Suryono et al. (2020) included a search query regarding Fintech and the FSI and was included in a preliminary search, wherein again, the expected results were not found. For this reason, it has been decided to include the common factors in these search queries: ("financial services industry" OR fsi OR fintech OR "financial technology") in a preliminary search result. This query yielded 149 results containing all the expected articles. For this reason, the query as shown below was used in order to execute the SLR.

((“Outsourcing contract” OR “software outsourcing” OR “information systems outsourcing” OR “information technology outsourcing” OR “IS outsourcing” OR “IT

outsourcing” OR “CBIS outsourcing” OR “computer-based information systems outsourcing” OR “software facility management” OR “software contracting-out”) AND (barriers OR barrier OR obstacles OR hurdles OR risks OR “risk analysis” OR “critical factors”) AND (“Outsourcing contracts” OR “outsourcing agreement” OR “outsourcing marriage” OR “contract” OR “outsourcing relationship” OR “contractual coordination” OR “IT contract” OR “relational governance” OR “contracting” OR “contractual agreement” OR “co-ordination” OR “Relationship management” OR “contract level” OR “contract stages” OR “agreement level” OR “contracting levels” OR “post-contract” OR “pre-contract” OR “during contract”) AND ("financial services industry" OR fsi OR fintech OR "financial technology"))

#### *3.3.1.2 Databases*

The resources to be searched are the databases of Web of Science, ACM, and IEEE. Furthermore, the Scopus database will be used. Google scholar will be excluded from the SLR since a search query using Boolean search operators cannot be used in Google scholar. The use of Boolean operators allows for the structured inclusion and exclusion of articles. However, this still creates a risk of excluding articles from the initial search scope. This has been taken care of by using Google Scholar and the snowball sampling method in the theoretical background of this study.

#### *3.3.1.3 Inclusion criteria*

The inclusion criteria used during this research are adapted from the SLR exerted by Khan (2012). The papers considered for this research are only the papers concerning offshore outsourcing regarding fintech activities. The criteria are listed below:

- Studies that describe financial software outsourcing contracting;
- Studies that define the critical success factors in the contract management process of financial software outsourcing;
- Studies that describe the critical barriers in the contract management process of financial software outsourcing;
- Studies that describe the relationship between financial software outsourcer and vendor;
- Studies that describe criteria for a successful financial software outsourcing contract;
- Studies that describe motivation for financial software outsourcing contract management;
- Studies that describe issues in financial software outsourcing contract management;
- Studies that describe regulators’ point of view in financial software outsourcing;
- Include paper whose title is related to outsourcing contract management;

- Include paper that contain keywords that match with those defined in the search strings;

#### 3.3.1.4 Exclusion criteria

The exclusion criteria for studies that will be excluded in this research are the following:

- Studies that do only contain results that are non-applicable to outsourcing in the FSI;
- Studies that concern back sourcing;
- Studies that concern knowledge transfer in outsourcing relationships;
- Studies that contain non-generalizable results;
- Studies that are not accessible publicly or through institutional access;
- Exclude all papers written in non-English language;
- Exclude all duplicate papers;

#### 3.3.2 Participant selection

Throughout this research, a purposive sampling method will be used. This is due to the closely defined scope of this research, by means of which we are mainly interested in IT practitioners in the field of FSI. These participants will be approached for active participative conversations to establish a profound understanding of trends that occur in the market. For this part of the research, six participants have been selected. The method of approaching participants has been by inviting participants to a coffee meeting for at least half an hour. However, if the participant still had time and was able to share more information, the conversations could be prolonged. This suited perfectly with the explorative nature of this research since the researcher was never sure what to find in these conversations. The open-mindedness towards these conversations has positively influenced the validity of these conversations. Participants were free to share their opinions, and through this process, the researcher developed a good understanding of the opinions and views in the industry. Throughout these meetings, participants referred to other colleagues who could also provide valuable insights. Therefore, this approach is also heavily dependent on snowball sampling, through which one conversation leads to the next.

Due to the selection criterion of snowballing, for the active participation conversations, non-participation was realized. Some participants were scoped too broadly, which means the participant had no information regarding the topics on which questions were asked. Because of this, these conversations were mostly left out of the analysis if no new information was found during them.

#### 3.4 Techniques & methods for data collection

Since the data in this research has been collected in two ways, the differing approaches will also be further explained in terms of how the data was collected. Firstly, the collection process

of the SLR will be elaborated upon. Secondly, the collection methods of the active participation conversations will be discussed.

### 3.4.1 Collection of relevant studies

The identification of research aims to find as many primary studies that are relevant to the research question as possible (Kitchenham, 2004). In order to create an unbiased report of the literature, the search strategy as identified in the case selection criteria section of this chapter was followed as closely as possible. The sources that were searched thoroughly are listed below, whereby the main database used to collect the data was Scopus. Since this search strategy was founded on the SLR of Khan & Khan (2013), the search results were limited to being published from 2013 until 2022. As a double representation of articles in literature reviews could create bias on its own due to overrepresentation of articles within literature reviews. I have been careful to not represent the results of Khan & Khan (2013) again in this SLR.

As stated by Kitchenham (2004), a mere search in an electronic database is not sufficient on its own. This should be complemented with additional searches so as not to exclude literature due to the bias of the search query. During the reporting phase of the search of the electronic databases, it was found that there was a small presentation in the literature on regulators' views regarding this topic. For this reason, a search has been conducted on the electronic databases of the regulators as specified below. This is important since the regulators' documents are not included in Scopus. Furthermore, a search on Google Scholar has been conducted in order to overcome this hardly reported perspective. In Table 1 the data sources are identified and structured in a clear overview.

*Table 1: Data search identification*

Data Source	Documentation
Electronic database	Scopus Search string as described in Section 3.1.1 26-04-2022 2022 - 2013
Electronic database	European Banking Authority Search string is: "outsourcing" 26-04-2022 2022 - 2013

Electronic database	European Securities and Market Authority Search string is: “outsourcing” 26-04-2022 2022 – 2013
Electronic database	European Insurance and Occupational Pensions Authority Search string is: “outsourcing” 26-04-2022 2022 - 2013
Electronic database	Google Scholar Search string is: “regulator IT outsourcing Financial services industry” 26-04-2022 2022 - 2018

#### 3.4.2 Data collection of participative conversations

The participative conversations meetings were highly explorative in order to grasp a wider understanding of participants within this market. Through the process of snowballing, participants appointed other participants that could be asked for a conversation. As prescribed, the conversations were altered to suit the conversation, since some participants did not have much to say about the topic, whereas others talked for longer. With one conversation, the researcher was lucky enough to move into a room that had a whiteboard, by means of which the participant could illustrate some of his views and opinions. Some conversations were able to be recorded, while other conversations could not be recorded. After the conversations that were not recorded, a so-called data dump was performed, through which the researcher was mainly dependent on the taken notes and wrote down all the information he remembered. Unfortunately, this allows bias to slip into this research as a researcher will most likely remember the most interesting parts of the conversations. For this reason, underreporting of certain phenomena could happen, creating a bias in the literature. In order to prevent this bias, the researcher made sure during conversations to not go too long without writing down a keyword. For this reason, the reproduction of the entire story was easier to achieve.

### 3.5 Techniques & methods for data processing

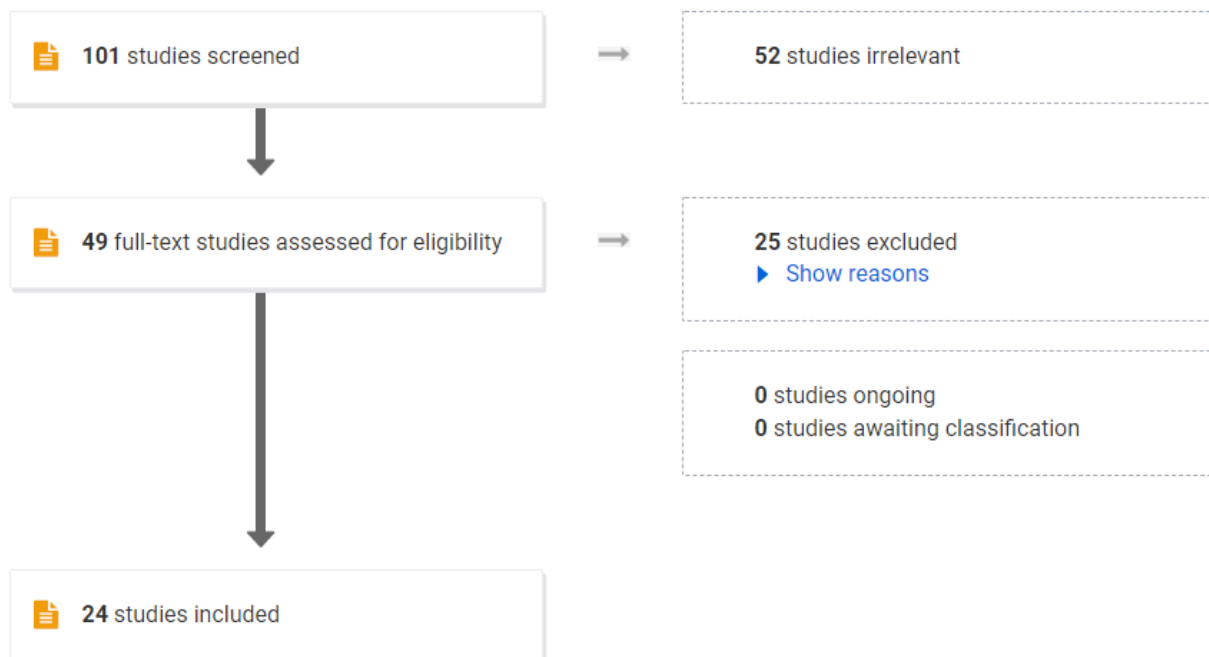
Within this section of the SLR, the process of data processing will be explained. Furthermore, remarks will be made on this process and explanations will be given for certain choices that were made during this process.

#### 3.5.1 Selection of research

Within this paragraph, remarks are made on the selection process of studies within the SLR. Within this section, there is a differentiation between the initial literature search on Scopus and the additional searches on the added databases. Since the other databases did not contain Boolean operators, the search query was more prone to presenting results that were less suitable for the search.

An initial Scopus search yielded 101 primary studies from multiple databases. During the process, the structured literature analysis tool "Covidence" was used. The literature was reviewed in 3 phases. These phases are represented in figure one. If studies were included, a full-text assessment was performed before data was extracted from the studies. The exclusion criteria as formulated in Section 3 of this chapter were used in order to exclude the texts that were not helping to answer the SLR's research questions.

Figure 1: The review phases



The studies included were all included based on one of the inclusion criteria. Figure 2 gives an overview of the inclusion criteria, which will help researchers in the future find the most important ones.

Figure 2: Inclusion criteria

Inclusion criteria	Amount of studies
Include paper that contain keywords that match with those defined in the search strings	3
Include paper whose title is related to outsourcing contract management	4
Studies that define the critical success factors in the contract management process of financial software outsourcing	7
Studies that describe financial software outsourcing contracting	7
Studies that describe issues in fintech outsourcing contract management	1
Studies that describe the critical barriers in the contract management process of financial software outsourcing	2

A total of seven articles were identified during the search of literature in the regulators' databases. The articles taken into consideration were included on the basis of their description of financial software outsourcing contracting. Furthermore, in the articles, the point of view of regulators could be identified as one of the missing points within the current literature. The search on Google Scholar yielded two articles that were omitted from the initial Scopus search. This underlines the Kitchenham (2004) procedure principles, meaning that a single digital base search should be avoided, as bias would have decreased the validity of this SLR. The studies found on Google Scholar were included on the basis of the inclusion criterion: studies that describe regulators' point of view on financial software outsourcing.

### 3.5.2 Data extraction structured literature review

Within this section, there will be a focus on the choices made considering the data extraction of the identified studies. This section aims to design data extraction forms in order to reduce researcher bias during the data extraction. Firstly, a notion should be made about this process: the data extraction phase was, due to the nature of this research, carried out by a single researcher. As there was only one researcher, inter-researcher consistency could not be computed. However, the researcher has made every effort to avoid interpreting the findings when reporting the results. The data extraction form has been based on the recommendation of



(Kitchenham, 2004) and on the data extraction form as used by (Khan & Khan, 2013). An example of such an extraction form can be found in appendix A.

### 3.5.3 Active participation data processing

Since this research has had multiple differences in the collection of data, a process has been developed to compare the data with one another. After the active participation conversations, the researcher ended up with three types of data: spoken, written, and depicted. The recorded conversations have been transcribed by making use of 'Amberscript', a transcription tool, after which a control was executed by going over the text output and listening to the conversation. This transformed the data into similar pieces of information, that could be analyzed. The depicted data has been archived within the data dump of this conversation and is shown in the text where references were made. The clustering of this data is an important process as it allows to compare different forms of data and provides analyzable information.

As explained in Section 1 of this chapter, this research was conducted as qualitative research. Qualitative research seeks to reduce and organize the gathered data into themes and essences (Walker & Myrick, 2006). Through these themes and essences' descriptions, models or theories can be built. The underlying approach for analysis in this research is dependent upon thematical analysis. In theoretical analysis, information is analyzed by means of establishing codes in differing steps. The steps of creating codes were initiated by creating vague codes by means of coding in vivo. Here, a component of the data is deemed valuable, and a code with the name of this valuable data was created. After this, a second iteration was made wherein a larger meaning was given to the code during the open coding phase. Since the interviews were mainly in the native language of participants, this step was used in order to translate the data. Since the process of translation will induce the data with a chance for bias, it is best executed during a summarizing process. This is because the summarizing process has the potential to introduce bias, and reducing the moments of bias that may occur during the process will increase the validity of the research. Once the open codes have been formed, more general concepts will be established during the axial coding phase. Here the intent is to group open codes within larger and more broadly defined constructs. Finally, selective codes will be made in order to establish a profound understanding of the constructs involved in this process.

In order to analyze the data that has been collected within this research, the transformed data files were added to an Atlas.ti file. Atlas.ti is a coding program that helps with the analyzation of the data as collected through the research. Atlas.ti has functions that will allow for thorough analysis of the data by creating a coding scheme and later creating networks of

the selective codes that were made in this research. While the research was exploratory in nature, some major themes in the literature were identified during the SLR. These themes were: cooperation, regulations, control, and risks. These will be elaborated upon in Chapter 4 of this research. While this research has an inductive nature, the aim of this research is to compare the findings of the SLR to the participants within the market. Therefore, these themes were the main topics of interest during the research and were explored.

The process of structuring the codes in this research has been as prescribed, starting with the data and developing relations in these codes to eventually understand the larger topics of this research. This research had overarching themes that were discussed with the participants, and the aim of this research was to identify the views and opinions of actors on these relations. The held conversations were unstructured and informal talks about the themes that were identified in the SLR. While the themes had not been thoroughly explained before in this context, no indicators existed that could be relied upon during the analysis. For this reason, the axial codes were developed by theming multiple open codes into one axial code. An overview of the developed axial codes can be found in Table 2. A more detailed understanding of the open codes constructing the axial codes can be found in Appendix B. Chapter 5 of this research shows the results of the analysis of the processed data.

*Table 2: Axial codes*

AC - Anonymously information sharing	AC - Landscaping
AC - Competitive advantage	AC - Privacy affects cooperation
AC - Cooperation through independence	AC - Regulatory implementations
AC - Creating a TPRM framework	AC - Response to regulations
AC - Demanding regulations	AC - Responsibility
AC - Direct cooperation	AC - Risk management
AC - DORA	AC - Segmental cooperation
AC - Independence	AC - Third-party risks
AC - IT in FSI	

### 3.6 Trustworthiness of the research

Several arguments were presented throughout the research to explain the research's trustworthiness. In order to establish the trustworthiness of the research within this section, the choices made in this research will be structured. The structure will be exerted according to the principles of Lincoln & Guba (1985).

### 3.6.1 Credibility

The credibility of research is characterized by the amount of confidence a researcher has in the ‘truth’ of the findings (Cohen & Crabtree, 2006). In order to establish credible research, a researcher could apply certain techniques. The first technique applied in this research is prolonged engagement, meaning that the researcher has spent sufficient time in the field to understand the culture, social setting, and the phenomenon at hand. This was achieved by undertaking an internship, which enhanced the credibility of the research. Furthermore, trust with the participants was established, allowing the researcher to ask more probing questions. It is expected that certain answers would have been avoided once they had been asked by a researcher who had not established trust. This was especially valuable in the process of the active participation conversations.

The second method of adding credibility to this research is the addition of triangulation of data sources. This research was dependent on the data evaluated in the SLR and the data processed in the active participation conversations. Therefore, different sources have been collected through different methods. Unfortunately, due to the nature of the research, analyst triangulation could not be achieved. This is seen in the SLR with the inability to perform a quality assessment of the data extraction. Moreover, this is also found in the interpretation of the data, leading to the results of this study. In order to cope with this, the researcher has reported all steps in the process as transparent as possible. Unfortunately, this leads to the conclusion that the triangulation could have been better once more analysts were used to establish interrater quality assessments. However, this was not possible due to the nature of the research, and it must be noted that effort has been made to overcome this.

Finally, the method of peer debriefing has been applied to this research, as the researcher had a peer that scrutinized this research’s findings. This has led to the uncovering of biases the researcher might have taken for granted throughout the research. Therefore, credibility has been positively influenced by applying this method.

In conclusion, with the notion that triangulation of analysts was impossible in this research, it is stated that every effort was made throughout this research to increase the credibility of the results.

### 3.6.2 Transferability

The transferability of the findings of this research are unfortunately limited to the industry that was selected for this research. Although the results can be transferred between sectors in this

industry and linkages have been made throughout the research with the telecom industry the transferability of the findings outside of the FSI is yet to be investigated in future research.

### 3.6.3 Confirmability

As described within this research, triangulation is achieved. This not only affects the credibility of the results, but also positively affects the confirmability of the results. Furthermore, the developed steps are transparently reported throughout the research. Creating the opportunity for researchers to audit the findings when the results are contradicted upon. For these reasons, the confirmability of this research is positively influencing the trustworthiness of the research.

In conclusion, the researcher has made every effort to increase the trustworthiness of this research by using the reported techniques for establishing credibility, transferability, and confirmability. Within the following chapters, the results of the separate research will be provided.

## Chapter 4 – Results Structured Literature Review

The goal of this structured literature study was to explore all literature available on the subject of ITO inside the FSI. The SLR was explorative in nature. The findings have been clustered by theme to allow for thorough reflection on the various topics that have been addressed in the literature. IT outsourcing, IT outsourcing contracts, IT outsourcing governance, outsourcing agreements, digital transformation, and cloud computing were among the themes discovered. An overview of the articles found for each topic is shown in Table 3 below.

*Table 3: Overview articles per topic*

Topic	Articles
IT Outsourcing	3
IT Outsourcing contracting	8
IT Outsourcing governance	3
Outsourcing arrangements	4
Digital transformation	1
Cloud computing	5

### 4.1 Information Technology Outsourcing

Within this topic, the literature found has an aim to better understand the peculiarities of ITO within the FSI (Gonzalez et al., 2013; Zelt et al., 2014). Gonzalez et al. (2013) were mainly concerned with the further specification of ITO: how it is configured, what the reasons are, and what the risks are. Zelt et al. (2014) conducted their research towards a better understanding of the application services outsourcing strategies in the banking sector. According to Zelt et al. (2014), regulations are restricting the outsourcing of IT applications within the banking sector. Furthermore, it was found that the individual portfolio management structures and the lack of application management portfolio capabilities are complicating the outsourcing of IT applications within the banking sector (Zelt et al., 2014). The use of certain outsourcing models, such as offshoring, is deemed unfeasible due to interfering regulations (Zelt et al., 2014), and due to the inability to govern the banking processes.

To overcome the struggles of outsourcing, organizations are mainly reliant on the reports of successful outsourcing by other organizations (Zelt et al., 2014). However, this is something that is rarely reported, according to Lim & Thng (2021), creating a barrier for further reflection on the current issues of ITO within the FSI. The under reporting of failures and successes of outsourcing to third parties in the financial services industry has been identified as one of the main issues limiting the construction of profound third-party risk models (Babin & Quayle, 2016; Lim & Thng, 2021; Zelt et al., 2014).

It has to be noted that the articles found on this topic were mainly all written from a client perspective. Therefore, critiques of regulators have been mainly investigated from one perspective.

#### 4.2 ITO contracting

Within this section, all literature concerning the contract choices, the contract types, and contract procurement will be discussed. Traditionally, a differentiation between Fixed Price (FP) contracts and Time and Materials (T&M) was made. It was found that in order to prevent specification volatility within FP contracts, a specification change cap could be implemented. Furthermore, a cap on prices could prevent price escalation in T&M contracts (Fink et al., 2013). It was found that contracts with high specification volatility were likely to be given to familiar vendors in order to prevent opportunistic behavior (Fink et al., 2013). Moreover, Lim & Thng (2021) found that outsourcing contracts are typically long-term contractual relationships, diminishing the amount of opportunistic behavior over time. Later, it was discovered that the level of completeness in archetypal contractual design variations has evolved into a design flexibility continuum (Fink et al., 2018). The distinction between T&M and FP contracts was not fitting anymore, due to the continuum of design specifications in between. However, the contracts presented on this continuum are still functioning on this spectrum in between more FP contracts and more T&M contracts. For this reason, research concerning this distinction should still be taken into account, although researchers should be careful of this continuum while researching (Fink et al., 2018).

The choice of a contract in an outsourcing arrangement depends on multiple variables. As found by Fink & Lichtenstein (2014), smaller projects are more suited to the contract structure of FP contracts, while larger projects are more suited to T&M contracts. When projects are faced with the transferring of assets, contracts are traditionally more extensive in order to prevent ex-post opportunism (Chang et al., 2017). Here, clauses are implemented in contracts in order to mitigate the risks for vendors when vendors are making large investments (Chang et al., 2017). Due to the increased need for flexibility in contracts and increased uncertainty in the environment in which the project is exerted, there is a need for more scoping room in contracts (Dong et al., 2016). Contracts that do not allow for additional scoping room and are thus tight decrease the performance of ITO projects (Dong et al., 2016).

*“A contract has to define the role, responsibilities, liabilities, and expectations, fix the service levels and give a clear guideline on actions taken.”* (MacKerron et al., 2015 p.158). Here, the relation between a client and vendor is highlighted, and communication was

identified as a critical success factor for performance management in ITO arrangements. This emphasis on relationship management in the procurement of ITO arrangements was also highlighted by de Araújo et al. (2017).

#### 4.3 ITO governance

Within the literature on ITO governance, governance is made up of two components: a contract and a relationship (Lioliou et al., 2014). These two components are always present, but managers do have a preference for one over the other, while both are equally significant (Lioliou et al., 2014). *“A good contract cannot make up for a bad relationship, as the very own distinctive strengths of relational governance can become relevant under certain conditions (e.g. unpredictable environments), which a good contract cannot make up for. Conversely, a good relationship cannot make up for a bad contract, because the very own distinctive strengths of formal governance can become more relevant under certain conditions (e.g. workforce changes).”* (Lioliou et al., 2014 p. 530). In order for ITO projects to be successful, the employees and the managers should commit to the ‘spirit’ of the formal contract, so that a psychological contract can be developed. Before the evaluation of the results, output and behavior controls are needed in order to achieve effective ITO governance (Christ et al., 2015). This is hard to achieve since projects are currently moving towards more vaguely defined projects, creating a challenge in ITO governance.

#### 4.4 Outsourcing arrangements

This section explains critical success factors and critical barriers from the outsourcing literature that can be translated towards the ITO literature. Within an outsourcing arrangement, once a ‘win-win’ scenario can be created, maximum success of the project will be achieved (Bhattacharya et al., 2013). Mutual benefits are most likely to occur when both parties genuinely contribute to creating intrinsic value for each other (Bhattacharya et al., 2013). This was underlined by the research of Ee et al. (2013), as they found that the client-vendor relation is a key predictor of outsourcing success. The quality of the client-vendor relation is positively influenced by top management support, communication, commitment, and business understanding (Ee et al., 2013). Here it was also found that the relationship age had no influence on the success of the outsourcing arrangement. This research has been client and vendor centered, excluding the role of regulators in this process.

#### 4.5 Digital transformation

The initial starting point of the research on digital transformation in the FSI starts with FSI organizations being put in a rather uncomfortable position due to the increasing digitalization

(Dehnert, 2020). Digital transformation is predicted as a key driver to increase profitability by reducing costs and increasing revenues. However, Dehnert (2020) found that the relation between digital transformation and performance is non-linear, since there are also FS organizations with low digital transformation and high performance.

Digital transformation (DT) could impact an organization's performance in accordance with three models; the Value Creation Model (VCM), the Value Proposition Model (VPM), and the Customer Interaction Model (CIM) (Dehnert, 2020). The VCM captures the impact of DT on how financial entities' products and services are created. The VPM represents the impact of DT on what services and products are created by a financial entity and changes in revenue models. The CIM explains how DT impacts the nature and content of how customers interact with financial services. Although it was found that DT has a non-linear relation with performance, the high maturity of the DT models leads to superior performance and sustainable competitive advantage (Dehnert, 2020). 'Façade digitalization' is when a financial entity directs their attention only to the CIM and neglects the VCM and the VPM. Thus, high investments in customer interaction but neglecting to digitalize the internal aspects of the financial entity will lead to low performance (Dehnert, 2020).

#### 4.6 Cloud computing

Cloud Computing (CC) is a relative new theme in the literature. It has gained a significant amount of attention due to the benefits and threats inherent in this system. As seen in the previous section, the organization of financial entities' services is changing (Dehnert, 2020). Dehnert (2020) identified that 'Façade digitalization' should be prevented and that overall digitalization leads to sustainable competitive advantage. The literature on CC underlines this, as in order to gain advantage from CC, an organization's IT activities should be bundled and directed towards the cloud to optimize advantage from the cloud (Rockmann et al., 2015). This means that seemingly large investments are required in order to direct all activities towards the cloud (Ghouri & Mani, 2019). However, when organizations can structure their IT structures in the cloud, significant cost savings can be realized (Hon & Millard, 2018).

Cloud services are usually delivered by a cloud service provider such as AWS, Azure, or Google Cloud, among others. The structure inherent to this is that they function as an Infrastructure-as-a-Service. Here, the networking, servers, storage, and virtualization are executed by the cloud provider. The organization can then build their own applications on this (Ghouri & Mani, 2019). The advantage of this is the flexibility of the costs that need to be incurred, as (de-) scalability is rather fast compared to in-house (de-) scalability. The increased



flexibility was found to have a positive influence on customer satisfaction (Ghouri & Mani, 2019). Ohpen, an organization that originated in the Netherlands, has created a cloud-native banking platform (Hon & Millard, 2018). This has altered the literature on cloud initiatives within the FSI, creating Banking-as-a-Service (BaaS). From now on, banking entities can license an off-the-shelf core banking software platform (Hon & Millard, 2018).

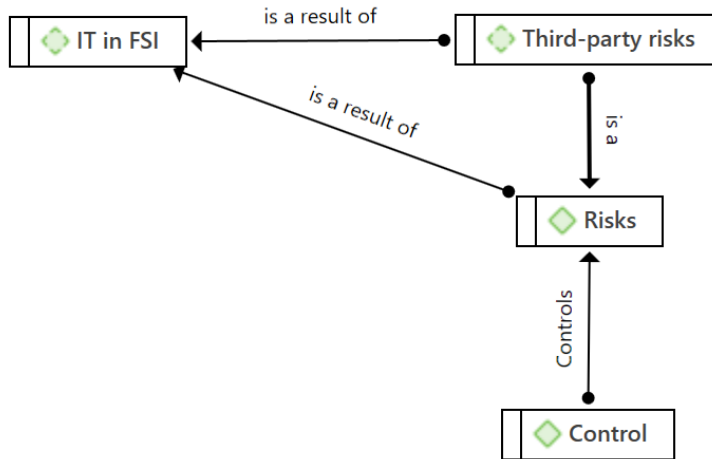
Within the CC literature, multiple hurdles have been identified for CC to be implemented. Regulation is typed to be falling behind, as one of Hon & Millard (2018) interviewees had indicated that: “Regulation is killing cloud initiatives from the start”. When starting conversations of moving towards cloud initiatives actors immediately say: “That’s illegal”, while upon investigation there were really no issues (Hon & Millard, 2018). There are concerns regarding the perceived lack of data security and confidentiality (Hon & Millard, 2018). While this was found to be mere hardware issues as most security risks measures are available (Wulf et al., 2019). Moreover, cybersecurity was found to be contributing towards the rising operational costs within the FSI (Uddin et al., 2020). The rise in security risks has caused regulating bodies to intervene with this and create guidelines covering both technical and non-technical solutions (Uddin et al., 2020). Finally, issues concerning contract relationships and revoking access risks have been identified (Wulf et al., 2019). This is in line with concerns identified in section 3.3.4. Creating a ‘win-win’ situation for both parties should help overcome these issues (Bhattacharya et al., 2013).

#### 4.7 Conclusion

Within this SLR we have identified six main topics of research on ITO within the FSI. While the literature has been extended profoundly in order to explain the increasing digitalization within the FSI, in general this has mainly been investigated from a client or vendor perspective. Regulations have been identified multiple times as a critical barrier through which the FSI is not able to innovate. Although, there is also a gap in perspectives between practitioners in different fields. Whereas sometimes innovation seems to be limited by regulation, at other times this is caused by the conservative perspectives instantly stating this is not possible in the regulation (Hon & Millard, 2018). For this reason, an understanding of the regulators’ perspective is needed to identify what the critical barriers are for them. How innovation can be enabled best within the FSI without compromising the soundness of the financial structure. Overall, this study has found that Risks are being caused by ITO within the FSI. The risks caused by ITO can mainly be typed as third-party risks and are part of the larger overall risks an organization wishes to indulge upon. In order to control these risks an organization has to

implement certain controls. Therefore, the first relations of our model have been identified and can be seen in Figure 3.

Figure 3: Relation ITO, risks and controls



Furthermore, it is deemed impossible to create an overall risk comprehension model regarding ITO in the FSI. Since this process is reliant on information about what caused a success or a failure in an outsourcing relation. Nowadays, organizations are not willing to share the information gathered throughout outsourcing arrangements. Due to the lack of information regarding these outsourcing arrangements, profound models concerning the risks caused by outsourcing to third-parties are not currently able to be constructed.

#### 4.8 Regulations

As explained in Section 3.4, the views of regulators have been mainly excluded from research. For this reason, the research chose to incorporate regulatory literature into the literature review. The findings of this will be explained in the following section.

Within the FSI, there has been a significant increase in regulatory pressures. This has been caused, most importantly, by the call for a more unified approach towards regulations within the entire FSI. This is to transmit more vivid regulatory requirements throughout the entire industry. A clear set of guidelines will enhance clarity throughout the FSI, making complying with the regulations easier to achieve. Furthermore, the clarity of guidelines will decrease the barrier to entry caused by regulations, since a vendor is then not only entering into a mere sector, but will also be able to operate throughout an entire industry. The call for clearer regulatory guidelines throughout the FSI is in line with the findings as mentioned above.

Nowadays, there is a regulatory proposal, initiated by the EC, named the Digital Operational Resilience Act (DORA), which is expected to enter into force by the end of the 2022 summer (Deloitte, 2022). The DORA aims to harmonize European legislation throughout

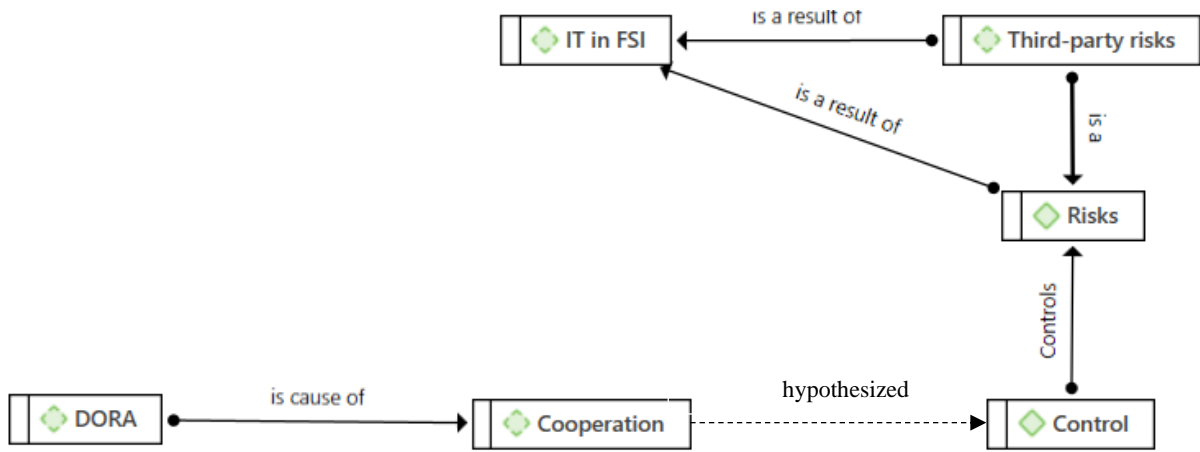
the FSI across borders in the European Union. The DORA also aims to strengthen the authorities of the supervisors in order to establish direct oversight regarding the risk management of organizations functioning in the FSI. Compliance with this regulation is crucial as fines of up to one percent of the average daily worldwide turnover could be imposed. Although the EC is allowing for a transition period of twelve to eighteen months. Because more than sixty percent of organizations now work with over a thousand third-party vendors (Gartner, 2019), organizations must begin preparing for this change.

The DORA focuses on four key aspects: information and communication technology risk management; management, classification, and reporting of ICT-related incidents; digital operational resilience testing; and managing ICT third-party risks (Deloitte, 2022; European Commission, 2020; Scott, 2021). The DORA encourages financial institutions to conduct risk assessments and due diligence prior to entering into new outsourcing relationships. This is founded on the same principles as preexisting regulations. However, the DORA adds a requirement to rapport new outsourcing relations to the applicable regulator. This will increase the amount of information shared regarding outsourcing relations, although this is only to the regulating agencies.

Information is a key attribute in the process of risk management, as profound risk assessments are expensive and consume a large amount of time. Therefore, the DORA is recommending that organizations develop segmental initiatives to collectively leverage their individual knowledge and practical experience at strategic, tactical, and operational levels with the aim of increasing their capabilities to assess, monitor, defend, and respond to cyber threats (European Commission, 2020, at Article 32).

Due to the implementation of new legislation that gives more strength and authority to the regulators and due to the call for information sharing in both the literature on IT outsourcing and the new regulation. The question arises why organizations are not cooperating with each other in order to profoundly define the threats caused by the conglomeration of third-parties. For this reason, it is hypothesized that the issue of organizing TPRM could be addressed by segmental cooperation between organizations in the FSI. This cooperation would, in turn, increase the control organizations would have over their risks. For these reasons, the model as shown in Figure 3 will be adopted and would be supplemented by the cooperation that has been caused by the implementation of the DORA. This hypothesized relation, as shown in Figure 4, will be tested by means of the active participation conversations from which the results are reported in the following chapter of this research.

Figure 4: Increasing control through cooperation



## Chapter 5 – Results active participation conversations

The main concepts that this thesis investigates are how to establish control over the risks caused by Information Technology Outsourcing (ITO) within the Financial Services Industry (FSI). This thesis makes an argument that by gaining more control over their third-parties, organizations are able to embark on more risks. During the review of the relevant literature, it was discovered that there has been a demand for ITO-related information sharing. Information regarding the failures and successes of outsourcing endeavors with this information scholars would be able to develop detailed ITO risk outsourcing models. Throughout the conversations the names of the participants have been anonymized in order to promote the sharing of information. Therefore, within this process participants will only be referred to as participants. Moreover, the organization the participants are working for is also anonymized as organization A throughout the reporting of the results.

In contrast, there has been a growth in FSI laws governing the management of third-parties. This has been a continuing development, beginning with advice for outsourcing to cloud service providers (European Banking Authority, 2017b). In preparation for the upcoming adoption of the Digital Operational Resilience Act (DORA) (European Commission, 2020). Initially, the majority of the regulations were recommendations, but the DORA gives market regulators more authority. Changing regulations necessitate the need for organizations to adapt and comply. Here, it can be argued that the goals of the regulations should be aligned with those of the organizations, as the organizations are now able to assume more risks due to the increased control. The DORA suggested sharing information on a segment-by-segment basis regarding how to apply the regulations and developing more implicit requirements for them. Hence, also establishing a form of cooperation within the industry, making cooperation also one of our main concepts.

In this chapter, we will explore the findings of the gathered data within this research. The results will be presented by organizing them into different parts corresponding with the main concepts of this research. For this research, the concepts in which the results will be presented are: cooperation, regulations, risks, and controls. It was discovered that cooperation is possible, but the type of cooperation depends on competitive advantage. When sharing knowledge reduces an organization's competitive advantage, it has been said that the organization is reluctant to do so. The results of a further investigation of the different forms of cooperation are detailed in Section 1 of this chapter. The adoption of legislation enhancing operational digital resilience was investigated. It was discovered that not only the FSI is affected by such a regulation; the telecom sector also experienced its own implementation last

year. Landscaping was suggested as a first step in coping with the regulations in the telecom business, building on the lessons learnt from that industry's experience. The transferability between these two industries will be defended. Further investigation into the causes of third-party risks will be conducted, and solutions will be found.

## 5.1 Cooperation

Within this section cooperation between financial entities is explored. Practitioners have been asked in conversations what their views and opinions are regarding cooperation between these entities. First of all, the practitioners also agreed that cooperation would ease compliance with the DORA. Since the creation of an overall framework would reduce the time spend on developing a third-party risk model themselves. A learning component was identified as a cause for cooperation throughout this market. Since, organizations could leverage the pools of knowledge that have been constructed in both organizations. Furthermore, cooperation would have improved the process of implementation, as cooperation would allow organizations to create clearly defined implementation steps. With these implementation steps organizations could define more narrowly which requirements they have to implement to adhere to the new regulations. Finally, an important distinction was made by the interviewed practitioners, as cooperation was said to be achieved through two different ways; direct cooperation, and cooperation through independence. The differences and the factors affecting both will be explained below.

### 5.1.1 Competitive advantage

Competitive advantage is a key topic in the discussions on cooperation within the FSI. According to the interviewed practitioners, organizations in the FSI were deemed hesitant to share information concerning their IT processes. This has been caused due to the organization of these IT processes to best facilitate their targeted customers. A participant responded during the coffee corner conversations: *“I don’t know if there are disadvantages to cooperation, but the willingness of organizations to cooperate will be low, as organizations want to keep their competitive advantage.”* This indicates that competitive advantage is the main issue regarding the cooperation of organizations to comply with the new regulations. Another participant mentioned during one of the conversations that competitive advantage would not be a limiting factor, as he stated: *“Behind closed doors, organizations really want to learn from each other how problems should be tackled.”* Furthermore, a practitioner said: *“Competitive advantage arises from an organization’s focus, how they organize processes, and on which clients they focus. Not on what systems an organization uses.”* This is contradictory to the previous

mentioned beliefs, as it devalues the importance of IT systems and their relation to competitive advantage. Although this notion is good to be taken into account, it is debatable whether IT systems are part of the competitive advantage. In this research, it was discovered that the role of risk management positively impacts an organization's competitive advantage. This was explained by a participant with the following statement: *"With risk management, you will do things smarter, more efficiently, which in turn will impact your cost baseline, which will affect the pricing of your products."* For this reason, the relation between risk management and competitive advantage has been established, as it allows organizations to price their products more competitively.

For the aforementioned reasons, this research has found that cooperation is limited by competitive advantage, due to the information that is shared. On the other hand, the effect of IT resources on competitive advantage is contradicted by the participants. Therefore, since this relation could neither be confirmed nor denied by the participants, further research should more thoroughly investigate the relation between IT resources and competitive advantage. Finally, it was found that in these cases, competitive advantage is positively influenced by risk management.

#### 5.1.2 Direct cooperation

Direct cooperation is the process by which organizations cooperate and share information directly. Within the context of this research, this means that organizations would start initiatives and discuss their risk management frameworks with one another. A participant said, *"I think that the first disadvantage of direct cooperation would be the willingness to share information between organizations."* This implies that competitors would likely not be willing to share information concerning vital parts of their organization. Another participant said, *"Would cooperation be beneficial?"* Here, the participant hinted that the benefits of cooperation would not weigh up against the loss of competitive advantage regarding the organization of vital processes. This was complemented by another participant with the words: *"In other sectors, organizations could cooperate to achieve higher results and still do not do this."* For this reason, direct cooperation was deemed infeasible due to an unwillingness to share information with competitors to prevent a loss of competitive advantage. implying that direct cooperation would lead to a decrease in competitive advantage. In the previous section, the participants contradicted the influence of competitive advantage on cooperation; this suggests that the influence of cooperation on competitive advantage is dependent on the type of cooperation.

Further conversations brought other insights into how the FSI is organized. As the participant indicated, the organizations have established a segmental cooperation through which organizations are collectively acting. With this segmental cooperation, we see that organizations collectively tackle problems and challenge one another. While explaining this structure of cooperation, the participant stated: *“This is an initiative organized by the actors for the actors.”* This indicates that a form of direct cooperation is achieved in the market in order to tackle problems that are similar. This could be achieved through another set of rules: *“Chatham House rules and rules guiding cartel forming throughout the market.”* These meetings are held behind closed doors in order to achieve information sharing in which practitioners are not held back, no notes are taken, and practitioners can never call themselves on statements made here. This is to create a good environment for the sharing of information. The Chatham House rules are in order to stimulate the sharing of information, while the rules against cartel information govern that not too much information is shared, in order to prevent price setting and other hazardous activities. Furthermore, agenda setting is maintained by the practitioners of that segment so that only topics of high interest are discussed in these meetings. Segmental cooperation is now also putting pressure on regulations once the consensus is reached that a regulation is farfetched and non-achievable. In order to put pressure on these regulations, the cooperation is lobbying with the regulatory entities in order to adjust the planned regulations. Finally, for these reasons, we can conclude that direct cooperation is possible even with direct competitors, as long as this is under certain rules and requirements.

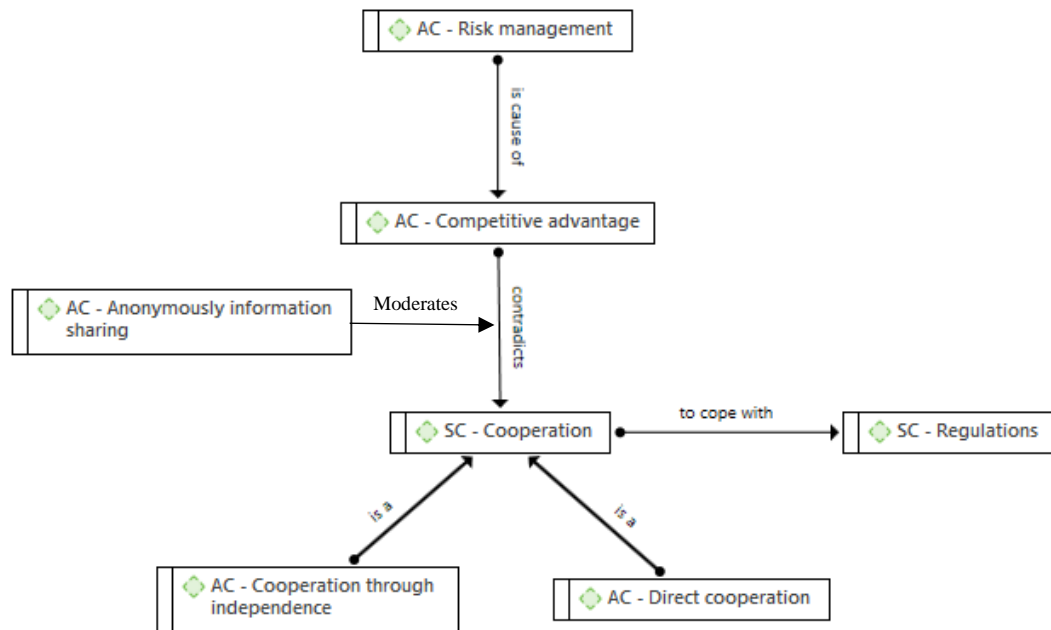
#### 5.1.3 Cooperation through independence

Independence is an increasingly large aspect of this industry, as certain collaborations are hard to achieve without independence. In order to illustrate, one of the participants said, *“The FSI wanted an overview of the earnings of all organizations. This is highly sensitive data that could impact an organization thoroughly. Organization A gathered all this information and created an overview that was to be shared in the market by reducing the data to only the important information.”* For this reason, the role of independence in the process of cooperation to deal with regulations in the FSI needed to be explored. The crucial factor here is that, through another organization, anonymous information sharing can be established, by means of which organizations are more likely to share information. Obtaining the same results as the Chatham House rules without the risk of a cartel forming. For this reason, it has been found that cooperation without the loss of competitive advantage can be achieved in two ways; a direct form of cooperation with the governing Chatham House rules and anti-cartel forming rules,



and cooperation through an independent organization by means of which information is shared anonymously. Consequently, a moderating effect was found, as anonymous information sharing moderates the effect competitive advantage has on cooperation. While anonymous information sharing is achieved, organizations are willing to cooperate. The results of these findings can be seen in Figure 5.

Figure 5: The found relations concerning cooperation



## 5.2 Regulation

Within this market, it has been identified that regulations are the main drivers for change regarding the control of risks. As participants indicated, most of the time, financial entities are just waiting for regulations to be finalized before implementing the guidelines. Recently, a trend has been identified in the FSI that regulations are being aligned throughout the FSI and throughout Europe. The result of this is that organizations constantly have to deal with demanding regulatory change. As stated by one of the participants, *“organizations are confronted with so many changes that they will deploy a reactive strategy towards new regulations.”* The reactive strategy causes organizations to wait for the implementation of the new regulations: *“the insecurities while regulations are being developed is a cause for organizations to wait until the regulation is crystallized.”* Unfortunately, this might cost organizations their chance to exert influence over the newly proposed regulations.

### 5.2.1 RVIT

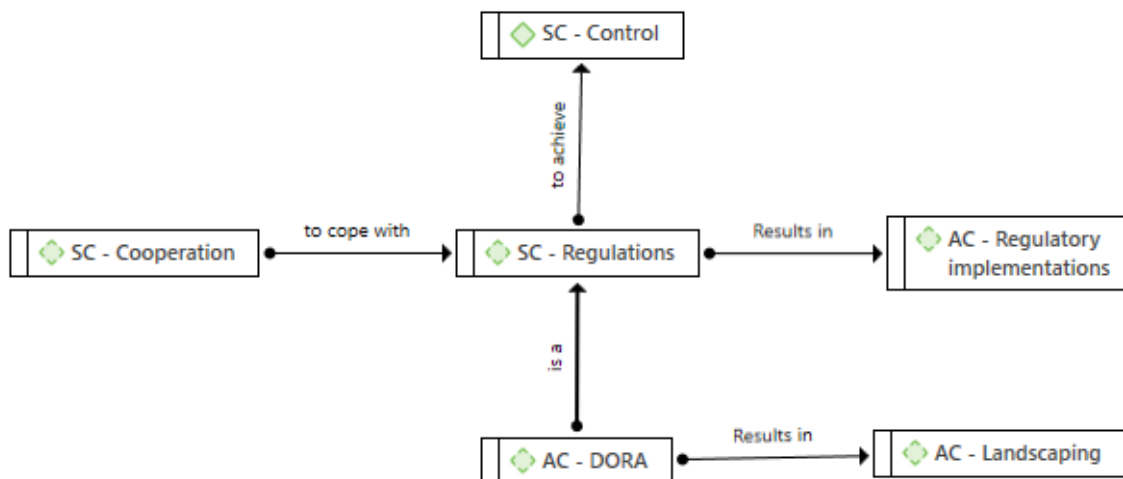
The telecom market is a market with similar regulations to the FSI, which is a heavily regulated market. One of our participants stated this: *“Both industries are heavily regulated, so that is a large similarity between both markets.”* For this reason, when analyzing the regulations in the FSI, sometimes information can be drawn from the Telecom industry. A meeting was scheduled with an IT practitioner in this market who stated during this meeting: *“On October the 5th, 2021, a new regulation called the Regeling Veiligheid en Integriteit Telecommunicatie (RVIT) became effective that resembles the aim of the DORA.”* The focus of the RVIT was, just like the DORA, mainly on creating digital resilience and landscaping an organization’s vendors. Due to the similarities, an analysis of the RVIT could identify the pitfalls and shortcomings of the DORA. First of all, the participant stated: *“The regulations were fairly broad and needed to become more tacit requirements.”* Our participant explained that organization A was planning on executing this process. However, organization A was not able to do this as the required steps for compliance took too long. By not having vivid requirements for implementation, the implementation phase was more difficult to embark upon. Therefore, our participant recommended that organizations facing such a change in regulation try to influence the process to create more tacit requirements while also realistically stating that within the telecom industry *“there was no time for that.”* Moreover, the participant stated that once an integrative iterative process was taken in this process, the implementation would most likely take ten years. The participant continued that organizations should try their best to become compliant, while he expected that, *“the usual policy of tolerance will probably leave a phase of five years until organizations need to be fully compliant.”*

### 5.2.2 DORA

While organizing the interviews and having the conversations with the participants it is important to notice that not all participants had heard of the DORA. Some participants knew the name DORA and some soft principles about it, although not knowing the specific details of this regulation. As described before, organizations maintain a reactive strategy regarding regulations. This is also the starting point for the implications of the DORA for the FSI, summarized by a participant: *“I have heard that few parties are concerned about the DORA as there is still little traction”*. The impact of the DORA can be divided in two categories; cyber, and TPRM. The section on cyber was according to a participant mainly concerned about testing digital resilience. Whereas, the section on TPRM mainly concerns landscaping within organizations, *“identifying the vendors an organization is working with”*. Since, the impacted

areas are already current organizational practices the implementation of the DORA will be nested in current organizational practices. According to one of the participants: *“this causes a one size fits all to become very complex”*. For this reason, standardized frameworks are hard to be identified. As identified in Section 5.2, organizations are hesitant to respond to prognosed regulations due to uncertainties in the regulations. Although this research has found that one section of the implementation is that organizations are confronted with the need to landscape the vendors an organization is working with. One of our participants added to this: *“this is a process that de Nederlandsche Bank is now shifting their attention to”*. Thus this part of the implementation of the DORA is also stimulated by a regional regulator. Making landscaping of vendors one of the key areas of operating in the FSI to become compliant with the regulators. Finalizing the findings regarding this topic in figure 6 below.

Figure 6: The found relations concerning regulations



### 5.3 Controls

Variable control has been about controlling the risks an organization is willing to take. In the previous section, we have seen that the aim of current regulations has been to increase the control organizations have over their risks. During the research, we have found that variable control is comprised by the risk management framework of an organization. All organizations have a risk department that aims to identify the risks an organization is taking by indulging in business. These risk frameworks are built up by differing components, among others, a TPRM framework. The DORA and other undertakings, such as the preidentified one of de Nederlandsche Bank, are aiming to increase organizations' control by increasing the grasp organizations have over their third-parties. We have identified before that organizations have

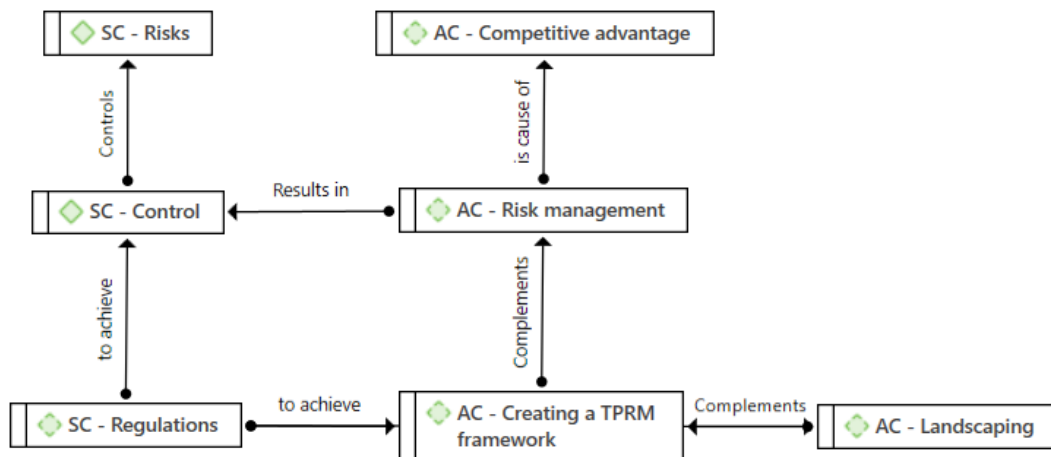
lost their grip over their third-parties. However, this will be more broadly discussed during section 5.4.

### 5.3.1 Landscaping

Previously, we have established that organizations are choosing to maintain a reactive strategy regarding the implementation of regulations. This has been caused by later crystallization in the regulations by which resources are not optimally allocated. However, in previous parts, we have identified landscaping as one of the key focus areas for regulators to currently focus upon. During the research, landscaping has been identified as the process in which an organization is scoping the organization's departments, assets, and processes. Then a supplier register is constructed, by means of which an organization has a clear overview of what vendors the organization is working with. One participant compared an organization with a house: *“If you take a picture of your house, then you can identify the roof, windows, and doors, for instance. However, the foundation is hard to take into consideration in this picture as it has been buried by the ground. This is the same for an organization's IT systems: they have been built on top of each other for years.”* With this reasoning, the IT systems are hard to identify and, therefore, creating control is difficult. *“Nowadays, landscaping is used to develop a clear picture of what IT structures an organization is using.”* The information developed by the process of landscaping complements the creation of a TPRM framework. For this reason, landscaping is a determining factor in the process of TPRM.

As stated in section 5.1.1, an organization's competitive advantage can be increased through good risk management and competitive pricing. As the participants explained during this research, risk management is complemented by a TPRM framework. Furthermore, the landscaping process supplements the process of developing a TPRM framework by providing oversight of the third-party vendors that an organization employs. The relations as described by the participants have been summarized in figure 7.

Figure 7: The found relations concerning Control



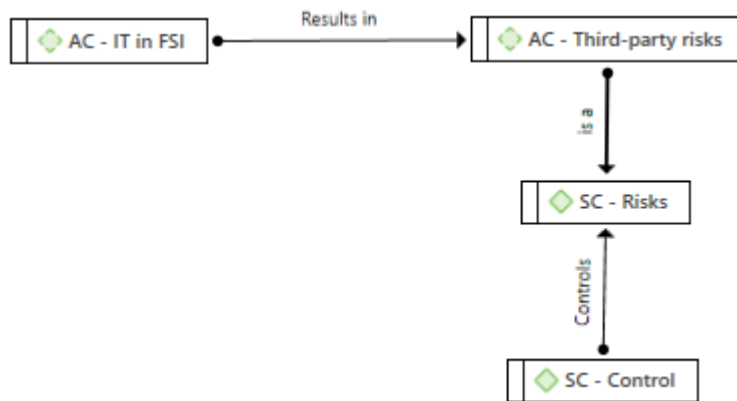
## 5.4 Risks

Finally, the variable risks will be further explained. This will help to better understand the objects regulators try to control. The topic of research here is risks caused by conducting business with third-parties. This variable will be further explored below.

### 5.4.1 Third-party risks

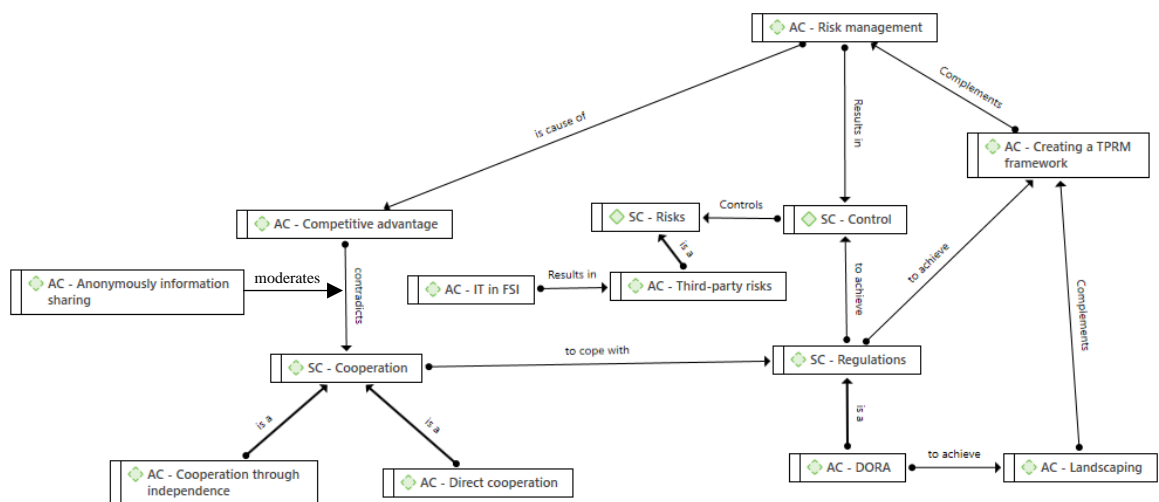
The current problem with risks caused by third-parties is that these risks are difficult to identify, as previously explained with the house anecdote in section 5.3.1. Moreover, organizations usually do not know all the vendors that they are working together with, according to the participants: *“Third-party risks are caused due to a lack of oversight over the third-parties.”* The lack of oversight over third-parties has even resulted in organizations paying for vendors that are not providing any services to the organizations, according to the participants. Participants stated that *“by not controlling their third-parties, organizations risk paying too much for services that are not being provided or are not being used.”* Furthermore, perhaps more concerning is the underlying cyber risk an organization has when indulging in third-party endeavors. The reason organizations are taking risks caused by third-parties is, according to some of the participants, to create a competitive advantage. Other participants identified it as a mere necessity to outsource some IT services to third-parties, claiming it to be a hygienic factor. Furthermore, one participant said, *“Actors in an organization could start collaborations with third-parties without the organization knowing about it.”* As a result, the organization's reasons for using third-party vendors differ. However, the usage of third-parties seems to be fairly normalized by some businesses in the FSI. Providing the final part of our model as shown in figure 8.

Figure 8: The found relations concerning risks



The relationships between the selective variables have been investigated throughout this chapter. This has formed some initial explanations of how the variables are related to one another. A total overview of these relations is shown in Figure 9 below. In Chapter 6, there will be a more in-depth look at the findings from Chapters 4 and 5.

Figure 9: Total model of found relations



### 5.5 Summary of the findings

Different types of cooperation, including direct cooperation and cooperation through independence, have been identified in this chapter. Cooperation is possible as long as businesses employ Chatham House rules or an intermediary to maintain their competitive advantage. Additionally, the FSI contains regulations protecting cartel formation and price setting. Regulations pertaining to operational digital resilience have been discovered in the telecom sector as well. Here, landscaping has been identified as a crucial coping mechanism for managing hazards brought on by third parties. The fundamental issue that organizations

face today is that they have little control over their outsourced processes, risks produced by third parties may have a number of effects on the organizations. As a result, it is challenging to identify risks, which makes organization-wide planning and the construction of controls over the addition of new third parties even more crucial.

## Chapter 6 – Discussion

In this chapter, the results of the research will be discussed. Furthermore, the theoretical implications and the managerial implications will be discussed. Finally, recommendations for future research will be given and the limitations of this research will be identified.

### 6.1 Discussion

This research has been compromised of two main components; the SLR, and an empirical research. During this discussion the findings of the research will be discussed by integrating the separate findings of the studies.

Although cooperation was generally seen as having a favorable impact on regulatory compliance within the SLR, it is crucial to first place emphasis on the word compliance. Regulations were anticipated to lead to cooperation, and it was anticipated that cooperation would strengthen organizational control. It has been discovered that most people view cooperation as a way to deal with regulations. Changing the model mentioned in the SLR is necessary because cooperation is merely a way of complying with the requirements set in these regulations and does not result from cooperation. Making the regulations the main driver for control within the industry. The structured literature review fell short in identifying the ways of cooperation that organizations could achieve in the FSI. Participants have elaborated on the hindrances organizations could face towards cooperation. Some organizations may be hesitant to cooperate for fear of losing their competitive advantage. However, organizations could also be limited by other rules in the industry, preventing cartels from forming. For this reason, this research has elaborated on the forms of cooperation within the FSI when coping with regulations.

Furthermore, regulations are found to be the main drivers for the improvement of control. It has been identified that the regulations are trying to achieve a more profound way of establishing control within the FSI. Regulators are doing this by increasing control through regulating the process of TPRM, as organizations will be mandated to organize their third-parties in a resilient manner. While this process was also seen in the telecom industry, the reactions within the FSI remained the same, even though critique on the reaction has been given by participants in the telecom industry.

In the literature study, it has been identified that organizations are indulging in risks in order to achieve higher organizational outcomes. This has been contradicted by the participants in this research as the relations between third-party risks and competitive advantage could not be confirmed. However, this relation could be explained by the risk management practices an



organization engages in, as this seems to lead to a competitive advantage for the organizations within the FSI.

Furthermore, organizations in the telecom market are now coping with their regulations throughout the process of landscaping. This process starts with identifying the third parties an organization is working with, which is difficult due to the number of third-parties organizations are working with currently. Moreover, this process is also hindered as identifying these third-parties is deemed difficult by actors in this market. This is complemented with the finding that 60% of organizations in the FSI are working with over 1000 third-parties (Gartner, 2019). Actors in this market have been confronted with these findings and respond with underlining this problem. The disadvantage to this problem is that per organization, the third-parties are differing, therefore a standardized approach is difficult to be formulated. Some of the actors state that there are software packages allowing organization's vendors to upload the needed information. This is still not providing the organizations with the information who their third-parties are. Therefore, the urge in the FSI for the landscaping of processes is increased similar to the execution of landscaping in the telecom market.

Since this research is based on the assumption that no other research has been executed in order to investigate this phenomenon. Numerous relations have been formulated that can be investigated more thoroughly in future research, the relations can be found in the results. These results should be read with care due to the transferability constraint towards other industries and the small number of experts in this field of research.

## 6.2 Managerial implications

An analysis of the regulations in the FSI was executed. Here an interesting finding was found, as the DORA will heavily influence TPRM and is projected to be implemented later this year. The research has acted on the latest guidelines, therefore the assumptions made could be different for the final implementation of this regulation. This is in line with current actors in the market as they are also starting to identify the regulatory influence of the DORA. Currently, actors are working on aligning the implementation plans for the DORA throughout multiple sectors. This research has found that in order to become compliant, organizations need to start identifying their third-parties by means of landscaping. This process has been identified in the telecom industry and needs to be transferred to the FSI. This is in line with the recommendation found in the literature, since a call for consistent regulations in the FSI was identified. Lastly, a call for cooperation between segments was identified in the DORA. This coexisted next to a

call from theory for more information sharing so that researchers are better able to create profound TPRM frameworks.

### 6.3 Theoretical implications

This research has contributed to existing literature in multiple ways. First of all, the framework in which the results of the SLR have been presented, is a valuable starting point for further analyzation of the theories found in these topics. Furthermore, future research can build upon this research as the integration of regulations has not been executed in current literature.

Secondly, the found relations by means of the active participation conversations have not yet been identified in previous literature. Moreover, the differing types of cooperation that are existing in the FSI have not yet been reported.

### 6.4 Recommendations

Future research is recommended to execute a more thorough analysis of the relations that have been identified in Chapter 5 of this research. Even going as far as to quantify some of the relations, and further develop a model that will help research and organizational management. With the aim to eventually develop a theory that can build on the presented model.

Furthermore, this research recommends that organizations operating in the FSI start landscaping the processes executed for organizations by third-parties. Doing this will decrease costs, will create a larger understanding of the organizational landscape, will make regulatory compliance easier and could even go as far as creating a competitive advantage in the market. This research has differentiated itself from other research as the role of landscaping has not yet been identified as an important part of the process of TPRM. Replicating this from the Telecom industry in the FSI will bring fruitful results that have not been identified previously.

### 6.5 Research strengths

The SLR was based on an explorative approach. Although this is not usually how a SLR is executed, the developed framework for analyzing these results increases its theoretical implications. Since the SLR was constructed in a non-usual way, the methodology chapter has become of greater importance. In order to establish a valid result, a query has been used from previous research and complemented partly with a new query that has been identified to specialize the query for the needs of this research. Since the approach of the SLR has been explorative, an open-minded view towards the findings has been guaranteed, as the researcher did not know what the findings would be. This decreased the amount of bias in the results of the SLR, as the researcher focused on reporting the findings rather than evaluating whether the findings benefited the outcome of the SLR.

After the development of the SLR, feedback was given by one of the practitioners that the researcher had lost its grasp on the practice. In order to deal with this, a non-traditional form of data collection has been used in order to retrieve the practical relevance. These active participation conversations yielded valuable insights and practical relevance on the researched topics.

As explained in Section 3.6, the researcher has performed a variety of techniques to increase the trustworthiness of the findings. For this reason, the researcher is confident in the trustworthiness of the findings.

### 6.6 Research limitations

Unfortunately, due to the explorative nature and the relatively small scope of research, only 24 articles have been identified out of the 101 articles that were found during the search. Whereas this is a relatively small number of articles, the researcher has made every effort to cluster all the research on the topics. Since this field of research is fairly new and expanding, it is expected that in the coming years, more research will be conducted on these topics. Therefore, the framework that is reported in this research can help guide future research. Although the number of relevant articles that have been found is rather small, the steps of executing this literature study provide the relevance for the study in itself. Furthermore, the triangulation with the legislation has gained valuable insights for the research and has provided further relevance for the findings.

Unfortunately, during the execution of the active participation conversations, it was found that the pool of practitioners with valuable information was rather small. For this reason, fewer conversations have been organized with these practitioners than initially aimed at. Although the researcher used multiple techniques, among other targeting and snowball sampling, this makes the results that have been found in this research less transferable. Not diminishing the results' value, only recommending for further investigation towards these topics.

Furthermore, the active participation conversations were limited in the way of documenting the data. In some of the cases, recordings could be made. However, in the majority of cases, this was not a viable option. On the one hand, this has encouraged participants to share information. This has been compensated for, on the other hand, by appropriate steps to record the data, by taking notes and performing data dumps afterwards. However, this limits the research in its ability to audit the findings of another researcher. Furthermore, the conversations were mainly performed in the native language of the

participants. Although participants could perhaps express themselves better through this, translation bias is something to keep in mind. Unfortunately, due to the nature of this research, it has not been audited yet. Therefore, the quotation report can be found in Appendix C. This allows researchers to audit the data when scrutinizing the findings.

The research findings are also limited in the transferability of the findings. This is due to the scarcity of information regarding this topic, so the research has been organized in an explorative manner. Since here, the goal was to develop relations that could explain the behavior of the identified variables, relations between two differing industries have been established, and it has been identified that these industries could learn from each other. Further testing should be executed to test the transferability to other settings.

### 6.7 Research relevance for information sciences

The investigation of the outsourcing of IT systems explains the relevance of this research to the study of information systems. While an organization's expenditures could be reduced by outsourcing its IT systems, there are extra risks that are sometimes overlooked. Despite the increased dangers that organizations face, the risks that need to be controlled have been described here. Students studying information sciences were exposed to theories that elaborated on the integration of information systems in business models throughout their coursework. This research has revealed that the new dangers are difficult to understand by examining the growing number of information systems added to the organizational environment. There is a call for further understanding of the risks that organizations who depend on these technologies but don't fully understand them may face. This is in line with the study of information sciences as the complexity of an information system is already explained.

## Chapter 7 – Conclusion

This research aimed to identify the fit between the regulations regarding Third-Party Risk Management (TPRM) and the need for regulations regarding this topic. Within this research it has been identified that a new regulation will shortly be implemented within this market which has been taken into consideration when writing this thesis.

The role of regulations has been identified as the reason for organizations to increase their control over the risks they are taking. Therefore, the need for regulation arises in order to meet the need for control over the risks an organization indulges in. Roles and regulations have had little investigation from a regulator's perspective, and overall, organizations are found to be rather hesitant to implement them. During this research, we have found that this is due to organizations merely wishing to become compliant with the regulations, even though organizations could attain a competitive advantage with effective control. For this reason, it is stated that the need for regulation in the Financial Services industry (FSI) is to establish effective control over the risks an organization is willing to take.

Multiple regulations have been investigated in order to determine the fit of these regulations towards this need. The main focus has been on the Digital Operational Resilience Act (DORA), which is soon to be realized. This regulation aims to standardize regulatory demands throughout the FSI. Furthermore, requirements regarding digital resilience testing and TPRM have been enacted. This research has advocated the need for TPRM within the FSI. Due to regulatory standardization and TPRM implementation, the enactment of the DORA will increase the fit with the need for regulations within the FSI.

The inability of companies to identify the third parties they are collaborating with has also been noted as a problem. As a result, organizations become vulnerable to hazards that they are unable to recognize, which could result in serious harm. Companies in the telecom sector are now identifying third parties through landscaping. This procedure makes it possible to organize data flows throughout organizations and improves an organization's adaptability. Landscaping increases the compliance with the DORA and will improve an organization's adherence to the rules governing this sector. However, research participants expressed that this method alone was insufficient since firms also needed to set up controls to prevent the entry of more third parties into the supply chain.

Although the regulations encourage cooperation, organizations may benefit by working with competitors to achieve regulatory compliance. Current research, however, has so far not looked into how cooperation should be accomplished. Direct cooperation and cooperation through an independent intermediary are the two distinct types of cooperation that have been

identified by this study. In addition to creating a common platform for innovation, this would preserve the competitive advantages that firms already enjoy over one another.

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## Appendices

### Appendix A – Extraction form example SLR

Final Decision	
<b>General information</b>	
<b>Study ID</b>	10.1080/09537287.2011.648491
<b>Title</b>	Revisiting the outsourcing debate: two sides of the same story
<b>Authors</b>	Bhattacharya, Singh, Bhakoo
<b>Notes</b>	Notes
<b>Characteristics of included studies</b>	
<b>Methods</b>	
<b>Aim of study</b>	Use agency theory to highlight complexities and areas of convergence and divergence between service receivers and providers
<b>Study design</b>	Interview
<b>Start date</b>	
<b>End date</b>	2 Feb 2012
<b>Possible conflicts of interest for study</b>	None
<b>Participants</b>	
<b>Population description</b>	5 Organizations, 10 outsourcing arrangements
<b>Country in which the study conducted</b>	Australia
<b>Participant view</b>	<input checked="" type="checkbox"/> Client <input checked="" type="checkbox"/> Vendor <input type="checkbox"/> Regulator
<b>Inclusion criteria</b>	Include paper whose title is related to outsourcing contract management
<b>Exclusion criteria</b>	
<b>Critical success factors</b>	- For providers and receivers, mutual benefits from outsourcing arrangements is most likely to occur if both parties genuinely contribute to creating intrinsic value for each other
<b>Critical barriers</b>	- Discrepancies were found regarding degree of formality, opportunistic behaviour, mutual dependency of the parties involved, goal compatibility and switching costs
<b>Real world practices</b>	- A 'win-win' situation creates maximum success

## Appendix B – Code book

<b>Code</b>
AC - Anonymously information sharing
AC - Anonymously information sharing: OC - Anonymosity of information will increase willingness to share information
AC - Anonymously information sharing: OC - Chatham house rules for cooperation
AC - Anonymously information sharing: OC - Willingness to share depends on the details of the information to be shared
AC - Competitive advantage
AC - Competitive advantage: OC - Competitive advantage is achieved by organizing business processes
AC - Competitive advantage: OC - Competitive advantage is how organizations focus on clients and organize their critical processes
AC - Competitive advantage: OC - Competitive advantage is not dependent on the systems organizations use
AC - Competitive advantage: OC - Competitive advantage is not the limiting factor, organizations are willing to share
AC - Competitive advantage: OC - Gaining competitive advantage through risk management
AC - Competitive advantage: OC - Organizations do not want to show trade secrets
AC - Competitive advantage: OC - Sharing of information will not affect the competitive advantage
AC - Cooperation through independence
AC - Cooperation through independence: OC - Cooperation through an external organization can be achieved
AC - Cooperation through independence: OC - Cooperation through independence is a viable alternative
AC - Cooperation through independence: OC - Independence could play a role in this to process the information
AC - Cooperation through independence: OC - Solution for when organizations want to cooperate without losing their competitive edge
AC - Creating a TPRM framework

AC - Creating a TPRM framework: OC - Changes in TPRM requirements initiated by DNB
AC - Creating a TPRM framework: OC - Creating intern supplier register
AC - Creating a TPRM framework: OC - Departments do not know from one another what infrastructures they have
AC - Creating a TPRM framework: OC - Do not wish to publisize TPRM frameworks due to competitive advantage
AC - Creating a TPRM framework: OC - Doesn't know how long setting up a framework takes
AC - Creating a TPRM framework: OC - Formulate who your third-parties are
AC - Creating a TPRM framework: OC - One risk framework needed for all third parties per organization
AC - Creating a TPRM framework: OC - TPRM framework is situation dependent
AC - Creating a TPRM framework: OC - TPRM increases operational performance
AC - Creating a TPRM framework: OC - TPRM leads to more risk perception
AC - Demanding regulations
AC - Demanding regulations: OC - Plural regulatory demands
AC - Demanding regulations: OC - Prioritizing due to insecurities regulation
AC - Demanding regulations: OC - Prioritizing how to allocate resources to comply with regulations
AC - Demanding regulations: OC - Regulatory overload
AC - Direct cooperation
AC - Direct cooperation: OC - Cooperation could be achieved in a closed setting without sharing too much of details
AC - Direct cooperation: OC - Disadvantage cooperation
AC - Direct cooperation: OC - Don't know if there is an disadvantage to cooperation, but there is no willingness
AC - Direct cooperation: OC - In other sectors organizations could cooperate to achieve higher results and still do not do this
AC - Direct cooperation: OC - No cooperation due to not wanting information sharing
AC - Direct cooperation: OC - Organizations would not like to discuss their IT landscape in detail
AC - Direct cooperation: OC - Organize how to tackle problems together

AC - Direct cooperation: OC - Similar organizations have similar third parties
AC - Direct cooperation: OC - Thinks competitors do not want to cooperate
AC - Direct cooperation: OC - Thinks organizations do not want to cooperate
AC - Direct cooperation: OC - Would cooperation be beneficial?
AC - DORA
AC - DORA: OC - Cyber is an important component of the DORA
AC - DORA: OC - Did not know the DORA
AC - DORA: OC - DORA brings opportunities for organization A
AC - DORA: OC - DORA is nested in current organizational processes
AC - DORA: OC - DORA is nested, this brings complexity to find a one size fits all solution
AC - DORA: OC - Few parties are worrying about the DORA right now
AC - DORA: OC - Impact of regulation is not well analyzed
AC - DORA: OC - Prognosed impact of DORA
AC - DORA: OC - Prognosed regulations will not be enforced directly
AC - DORA: OC - Question on DORA specifics
AC - DORA: OC - Regulations are fairly broad and need more tacit requirements
AC - DORA: OC - Regulators should have organized this in discussion with industry
AC - DORA: OC - Regulatory change in telecom industry that resembles the DORA
AC - DORA: OC - Similarities FSI and Telecom markets
AC - DORA: OC - With the entrance of the DORA this could help a lot of organizations
AC - Independence
AC - Independence: OC - Company A is independent
AC - Independence: OC - Organization A has played previous roles in this before
AC - Independence: OC - Organization A wanted to develop the requirements but failed due to timeconstraint
AC - Independence: OC - Organizations send confidential info to organization A and organization A processes this
AC - Independence: OC - Processed real confidential information for the industry
AC - IT in FSI
AC - IT in FSI: OC - An attack on the financial system would be a problem for all of us



AC - IT in FSI: OC - IT differentiating factor for organizations
AC - IT in FSI: OC - IT is component of competitive advantage
AC - IT in FSI: OC - IT is component of organization's competitive advantage
AC - Landscaping
AC - Landscaping: OC - Landscaping is an iterative process
AC - Landscaping: OC - Organizational design is different for some organizations
AC - Landscaping: OC - Organizing organizational landscape
AC - Landscaping: OC - The IT services used can be compared with a house's foundation
AC - Landscaping: OC - Total overview of vendors by looking at transactions
AC - Privacy affects cooperation
AC - Privacy affects cooperation: OC - Privacy affects willingness to share information
AC - Privacy affects cooperation: OC - Privacy is demanded by stakeholders
AC - Regulatory implementations
AC - Regulatory implementations: OC - Central organization in organization A on how to tackle the DORA
AC - Regulatory implementations: OC - Creating abstract plan to deal with regulatory implementations
AC - Regulatory implementations: OC - Regulation's implementations are postponed due to the amount of changes
AC - Regulatory implementations: OC - Still too little known about the DORA before organizations will start implementing
AC - Response to regulations
AC - Response to regulations: OC - Acting on regulatory changes
AC - Response to regulations: OC - Causius planning in pre-phases of regulatory implementation
AC - Response to regulations: OC - Everyone is waiting and then reacting to the implementation guidelines of the DORA
AC - Response to regulations: OC - How are we becoming compliant with regulations
AC - Response to regulations: OC - Influence is exerted on regulations
AC - Responsibility
AC - Responsibility: OC - Not always known whose responsibility it is

AC - Responsibility: OC - Responsibilities miscommunication
AC - Responsibility: OC - Responsibilities vendor
AC - Responsibility: OC - Responsibility for controls
AC - Results of cooperation through independence
AC - Results of cooperation through independence: OC - Organization A should have process already in hand
AC - Results of cooperation through independence: OC - We would then establish a framework
AC - Results of cooperation through independence: OC - What is the added benefit for facilitating this cooperation
AC - Results of cooperation through independence: OC - When Deloitte makes an applicable framework the intention of cooperation is already achieved
AC - Risk management
AC - Risk management: OC - Donnot know if third-parties are a component of these risk matrix
AC - Risk management: OC - Guidelines standardized controls
AC - Risk management: OC - Organizations have a risk matrix
AC - Risk management: OC - Standardized controls
AC - Segmental cooperation
AC - Segmental cooperation: OC - Agenda point are formed out of necessity
AC - Segmental cooperation: OC - Cooperation of insurance organizations
AC - Segmental cooperation: OC - Cooperation of insurers to defend their interests
AC - Segmental cooperation: OC - Cooperation to tackle challenges together
AC - Segmental cooperation: OC - Input has to come from insurers
AC - Segmental cooperation: OC - Insurance organizations determine themselves point for the agenda
AC - Segmental cooperation: OC - Insurancers are the agenda setters here
AC - Third-party risks
AC - Third-party risks: OC - Did not really think about third party risks
AC - Third-party risks: OC - Difficult to identify all third-parties
AC - Third-party risks: OC - Digital threads are increasing for organizations
AC - Third-party risks: OC - More third parties increase complexity of risk framework
AC - Third-party risks: OC - No TPRM assignments yet

AC - Third-party risks: OC - Not known what third parties are used
AC - Third-party risks: OC - Organizations lost grip over third-parties
AC - Third-party risks: OC - Probably has had some interference, but has mainly worked on internal projects
AC - Third-party risks: OC - Think digital threads will grow rapidly
AC - Third-party risks: OC - Third party risks were mentioned sometimes
AC - Third-party risks: OC - Third-party risk caused by no overview
AC - Third-party risks: OC - Third-party risks caused by paying for a vendor that does not do anything for you
Q: Interview questions
Q: Interview questions: Q: Can you give a reason for this feeling?
Q: Interview questions: Q: Disadvantages cooperation
Q: Interview questions: Q: Do you think Company A can play a role in this?
Q: Interview questions: Q: Have you spoken a client about third party risks
Q: Interview questions: Q: So organizations would not be interested in sharing information?
Q: Interview questions: Q: Would cooperation ease compliance with the DORA?
SC - Control
SC - Cooperation
SC - Cooperation: OC - Cooperation achieved through which cartel formation is avoided
SC - Cooperation: OC - Cooperation makes compliance with DORA easier
SC - Cooperation: OC - Cooperation makes compliance with DORA easier - reason
SC - Cooperation: OC - Cooperation would have improved the process of implementation
SC - Cooperation: OC - Cooperation would help implementation
SC - Cooperation: OC - Designing this regulation in cooperation would take too long
SC - Cooperation: OC - For cooperation there is no time
SC - Regulations
SC - Regulations: OC - Trend in regulations to become centralized
SC - Risks

All (141) quotations

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 **1:1 ¶ 2 in Interview 1**

Zie je dus dat bedrijf meerdere derde partijen gebruiken en dan het liefst heb je als bedrijf dus één in risico framework

---

 **1:2 ¶ 2 in Interview 1**

hoe meer partijen je gebruikt hoe complexe je framework in elkaar komt

---

 **1:3 ¶ 2 in Interview 1**

je dus niet weet wie nou precies waarvoor verantwoordelijk is

---

 **1:5 ¶ 2 in Interview 1**

dus je hebt een IT audit en het bedrijf is voor bepaalde controles verantwoordelijk

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 **1:6 ¶ 2, Prop: Responsibilities vendor in Interview 1**

leverancier van die applicatie bepaalde verantwoordelijkheden

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 **1:7 ¶ 2 in Interview 1**

de ene kant deze partijen denkt dat ze verantwoordelijk zijn heeft en aan de andere kant zegt de serviceprovider zegt dat de klant de voor't risico verantwoorden

---

 **1:8 ¶ 6 in Interview 1**

Het is vaak wel dat je bepaalde standaard controles wel hanteert. Ja dan op IT gebied, hé

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 **1:9 ¶ 6 in Interview 1**

Daar zijn wel bepaalde richtlijnen van

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### **1:10 ¶ 6 in Interview 1**

maar de essentie is vaak wel: Hetzelfde

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### **1:12 ¶ 7 in Interview 1**

Als je kijkt naar de derde partijen waar een een, een, een bank of een pensioenfonds mee en ga in zee gaat, zou een concurrent met een soortgelijke partij in de zee kunnen gaan.

---



### **1:13 ¶ 8 in Interview 1**

Ja, ik denk wel, zeker als je weer op het gebied een IT heb, je natuurlijk bepaalde aanbieders van applicaties je hebt eigenlijk dat avas wat, financiële software ontwikkeld

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### **1:14 ¶ 9 in Interview 1**

Zou het zeg maar makkelijker worden gemaakt op het moment dat dus deze twee banken bijvoorbeeld samen zouden kunnen gaan werken om uiteindelijk naar een gezamenlijk framework te gaan bewegen?

---



### **1:15 ¶ 10 in Interview 1**

Ja, denk ik, dat denk ik wel

---



### **1:16 ¶ 10 in Interview 1**

samen aan één groot framework werkt met twee teams nou zal natuurlijk ook gewoon qua tijd levert toch natuurlijk ook een winst op en ik denk ook omdat er toch zitten zullen d'r veel overeenkomst in zijn

---



### **1:17 ¶ 10 in Interview 1**

en heeft zo'n DORA ook een bepaalde standaard waarin, weet je dat toevallig?

---



### **1:18 ¶ 12 in Interview 1**

Ja, ik denk wel dat als je als bedrijf en ja wat we net als zij dat bijvoorbeeld dezelfde services gebruikt en en dat dat daar samenwerking wel wel nut heeft omdat je werkt natuurlijk ene kant wat wat verdeeld en en ook van elkaar van elkaar leert, want elk bedrijf heeft natuurlijk een eigen inzichten daarin.

---



### **1:19 ¶ 13 in Interview 1**

wat zouden anders, zeg maar, de nadelen zijn van samen gaan werken?

---



### **1:20 ¶ 14 in Interview 1**

Ja, ik denk dat het eerste nadeel van samenwerken is de bereidheid voor bedrijven om dat te doen

---



### **1:21 ¶ 14 in Interview 1**

Ik denk toch dat dat al niet veel, zeker dan banken. Want denk IT staat, is ook steeds vaker een onderdeel van de van dat bedrijf

---



### **1:22 ¶ 14 in Interview 1**

Dus dat idee eigenlijk bepaalde dingen die die een bedrijf kan, dat misschien de concurrentie niet kan

---



### **1:23 ¶ 14 in Interview 1**

Dus't is steeds een groter onderdeel van zich het jezelf onderscheiden

---



### **1:24 ¶ 14 in Interview 1**

samenwerken houdt ook in. Dus dat delen van je idee, van je landschap, want dat bedrijf krijgt ook inzit in jouw landschap

---



### **1:25 ¶ 14 in Interview 1**

dat dus bedrijf niet staan te springen om daar ja in samen te werken

---



### **1:26 ¶ 14 in Interview 1**

ook omdat je natuurlijk ook wat voor banken hebt, dan ook wat digitale banken nu, ja, die zijn waarschijnlijk op IT weer anders ingericht. Dan doorsnede banken en misschien is is juist wel het uniek selling-point van

---



### **1:27 ¶ 14 in Interview 1**

ik denk dat niet, dat dat dat samenwerken aan zich weet ik niet of daar dan een nadeel in zit en ik denk dat we ook de bereidheid van samenwerken wat lager ligt

---



### **1:28 ¶ 16 in Interview 1**

ik denk dat dat een bedrijf niet Perse staat te springen om met de grootste concurrent samen te werken

---



### **1:29 ¶ 17 in Interview 1**

Dat er wel meerdere sectoren zijn waarop samenwerken heel handig zou kunnen zijn, maar dat dat gewoon niet niet wordt wordt gedaan vanwege concurrentie.

---



### **1:30 ¶ 18 in Interview 1**

En denk jij dat Deloitte hier desnoods een rol in zou kunnen spelen?

---



### **1:31 ¶ 19 in Interview 1**

Deloitte is als zijnde natuurlijk onafhankelijk

---



### **1:32 ¶ 19 in Interview 1**

Natuurlijk wel vanuit meerdere inzicht daar daar een rol in zou zou kunnen spelen, omdat zij vertrouwelijk met informatie zouden kunnen omgaan



### **1:33 ¶ 19 in Interview 1**

Maar dan zouden ze natuurlijk wel zelf, al het het, het proces in handen moeten hebben

---



### **1:34 ¶ 19 in Interview 1**

De industrie, die wilde een totaal overzicht van wat er nou precies verdiend wordt in de industrie

---



### **1:35 ¶ 19 in Interview 1**

Maar dat is eigenlijk allemaal hele vertrouwelijke informatie van alle bedrijven uit de industrie.

---



### **1:36 ¶ 19 in Interview 1**

Maar die sturen dat dus wel op naar Deloitte en dan Deloitte een keer dat totaaloverzicht omdat die bedrijven wel allemaal behoefte hebben aan dat overzicht

---



### **1:37 ¶ 19 in Interview 1**

maar als ze dus niet het onderling met elkaar willen delen, maar wel het gebruik van de onafhankelijke partij, dat is wel.

---



### **1:39 ¶ 21 in Interview 1**

de ins en outs is voor mij lastig om te zeggen, maar ik denk dat zeker dat dat dat dat vanuit Deloitte wel een goede optie is.

---



### **1:40 ¶ 23 in Interview 1**

zeker ook hoe jij dat natuurlijk schetst en hoe en ook de situatie op dit moment en met met de Dora die d'r aankomt zal natuurlijk wel behoefte behoefte aan zijn.

---



### **1:41 ¶ 24 in Interview 1**



Het verdere plaatje, wat zou slimmer zijn om te doen voor Deloitte. Wanneer we klanten per stuk zouden gaan helpen of wanneer we klanten allemaal samen gaan helpen?

---

 **1:42 ¶ 1, Prop: Eval: Difficult to get clear picture of third parties in Interview 1**

dat het gewoon lastig is om het in beeld te krijgen om voor veel bedrijven om met wie je nou allemaal in zee bent

---

 **2:1 ¶ 1 in Interview 2**

Nog niet gehoord van de DORA

---

 **2:2 ¶ 2 in Interview 2**

Zelf geen opdrachten waar TPRM in voor is gekomen. Verteld dat hij pas net junior manager is en dat dit toch wel een object is dat iets meer in de 'hogere' regionen wordt besproken

---

 **2:3 ¶ 2 in Interview 2**

Iets waar hij dus nog niet veel over na heeft gedacht, hoe de risico's worden veroorzaakt door derde partijen.

---

 **2:4 ¶ 3 in Interview 2**

Suggereert dat concurrentie beding niet de limiterende factor is, want ze willen graag van elkaar leren hoe om te gaan met dit probleem.

---

 **3:1 ¶ 1 in interview 3**

Heb jij ooit een klant gesproken over derde partijen en wat de risico's daar daarvan zijn?

---

 **3:2 ¶ 2 in interview 3**

meer gewoon voorbij gekomen

---



### **3:3 ¶ 2 in interview 3**

voor bedrijven heb je een Risk matrix

---



### **3:4 ¶ 2 in interview 3**

ik weet eigenlijk niet of third-parties daar ook een onderdeel van zijn

---



### **3:5 ¶ 3 in interview 3**

je ziet ook wel steeds meer dat de digitale threats steeds groter worden.

---



### **3:6 ¶ 5 in interview 3**

de digitale threats voor bedrijven aan het toenemen zijn

---



### **3:7 ¶ 5 in interview 3**

En ik denk dat het alleen maar erger word. Want alles word nu natuurlijk gedigitaliseerd

---



### **3:8 ¶ 11 in interview 3**

Het zal de samenwerking dan wel makkelijker maken als je niet de ze echt specifiek info hoeven te geven over de echte derde-partij die ze gebruiken.

---



### **3:9 ¶ 13 in interview 3**

De digitaliseren dat juist privacy ook echt een groter ding word

---



### **3:10 ¶ 13 in interview 3**

ik denk dat zij ook wel tegenover stakeholders, tegenover aandeelhouders, tegenover klanten, bepaalde verplichtingen hebben

---



### **3:11 ¶ 15 in interview 3**

in hoeverre zeg maar denk jij dat het winst op gaat leveren omdat ze maar samen dit te moeten doen, hoeveel tijd zou het uberhaupt kosten om zoiets in elkaar te zetten?

---

 **3:12 ¶ 17 in interview 3**

Ja, ik weet uberhaupt niet hoelang je bezig zou zijn met een framework opzetten

---

 **3:13 ¶ 18 in interview 3**

stel je voor Deloitte maakt een framework hiervoor dan doe je dit eigenlijk al en dan komt het er eigenlijk al goed uit voor een andere partij..

---

 **3:14 ¶ 22 in interview 3**

Maar kijk naar ja, maar kijk van, je ziet ook echt van op leven. ABN of een ING willen dit samen gaan doen? Ik denk haast niet dat ze dat zouden doen.

---

 **3:15 ¶ 23 in interview 3**

Kun je daar misschien ook een reden voor geven voor je gevoel?

---

 **3:16 ¶ 24 in interview 3**

Ja, ik denk gewoon, ze hebben een eigen, een eigen afdelingen daarvoor, ze hebben toch maar ze denken van nou, van ja, oké, wij hebben onze, de processen

---

 **3:17 ¶ 24 in interview 3**

en dan is het component van het geen informatie willen delen van eventueel bedrijfs kritieke processen zegmaar

---

 **3:18 ¶ 24 in interview 3**

Ik zie het niet voor me

---

 **3:19 ¶ 24 in interview 3**

maar ik denk dat als je het via een partij als Deloitte doet, dat dat automatisch. Die zullen wel weer een leading practice hebben.

---



### **3:20 ¶ 26 in interview 3**

Dus volgens jou zouden bedrijven niet geïnteresseerd zijn en de delen van informatie met elkaar?

---



### **3:21 ¶ 27 in interview 3**

Wij zijn dan zouden ze ook niet en informatie delen, maar het is dan echt het opzetten van dat kader.

---



### **3:23 ¶ 33 in interview 3**

Vast wel, maar tot nu toe heb ik nog veel op interne projecten gezeten.

---



### **4:1 ¶ 3 in Interview 4**

Competitive edge komt niet van de systemen die ze gebruiken

---



### **4:2 ¶ 3 in Interview 4**

maar om hoe gaan ze met klanten om gaan

---



### **4:3 ¶ 3 in Interview 4**

Daarom zal het delen van informatie over systemen niet belemmerd worden door een competitive edge die word veroorzaakt door IT systemen

---



### **4:4 ¶ 3 in Interview 4**

Is gewoon een andere manier van inrichten van bedrijfsprocessen.

---



### **4:5 ¶ 4 in Interview 4**

Vaak hebben de afdelingen niet goed van elkaar door welke infrastructuren ze hebben voor het delen van assets en welke vendors ze hiervoor gebruiken

---



#### **4:6 ¶ 4 in Interview 4**

Vaak is er wel ergens een lijstje hiervan, maar veelal kloppen deze niet

---



#### **4:7 ¶ 4 in Interview 4**

wat ervoor kan zorgen dat ze allereerst geen idee hebben waar hun data allemaal doorheen gaat

---



#### **4:8 ¶ 4 in Interview 4**

Maar ook dat ze vendors betalen waar ze geen eens gebruik van maken

---



#### **4:9 ¶ 4 in Interview 4**

Vaak word er nu gevraagd om het landschap van bedrijven in te richten en over het hele bedrijf bekend te krijgen hoe en welke vendors ze gebruiken

---



#### **4:10 ¶ 4 in Interview 4**

Hiervoor zal uiteindelijk een intern supplier register moeten worden opgericht per bedrijf

---



#### **4:11 ¶ 4 in Interview 4**

Dan zouden deze tegenover de vendors waar je rekeningen van krijgt kunnen worden gehouden

---



#### **4:12 ¶ 4 in Interview 4**

En mocht een bedrijf een rekening krijgen van een vendor die niet hiertussen staat, dan kan deze vendor gecontacteerd worden van wat doen jullie nou eigenlijk voor ons en kan deze vendor of in kaart gebracht worden of getermineerd worden



#### **4:13 ¶ 5 in Interview 4**

Waarom het lastig is om al deze systemen in kaart te brengen, als je het bedrijf vergelijkt met een huis is dit eigenlijk de fundering waar het op staat. Het is niet zichtbaar en vaak is er al een aantal jaren overheen gegaan voordat dit in kaart gebracht moet worden. Dus het is lastig om dit allemaal in kaart te brengen, maar wel heel erg belangrijk. Omdat met een goede fundering het huis gezond blijft, en waar je weet dat er een slechte fundering is kan dit op tijd worden vervangen, of gerepareerd.

---



#### **4:14 ¶ 5 in Interview 4**

Dus door een beter zicht te krijgen hierop zullen bedrijven meer risico's kunnen nemen,

---



#### **4:15 ¶ 5 in Interview 4**

maar ook beter kunnen gaan opereren

---



#### **4:16 ¶ 8 in Interview 4**

Ook verandering van regulaties in telecom industrie, hier is op 5 oktober 2021 een nieuwe regulatie genaamd de RVID uitgekomen. Hierdoor worden telecom bedrijven gevraagd om hun derde partijen ook allemaal in kaart te brengen voor 1 oktober 2022.

---



#### **4:18 ¶ 8 in Interview 4**

Nu zou het fijn zijn geweest als de regulators naar de industrie waren gekomen en deze maatregelen zouden worden ontwikkeld in overleg met de bedrijven

---



#### **4:19 ¶ 8 in Interview 4**

Deze maatregelen zijn overigens nog wel redelijk vaag, en moeten nog naar duidelijke requirements worden overgezet, zie figuur 3

---



#### **4:20 ¶ 8 in Interview 4**

Hier zouden de organisaties in gesprek samen implementatie stappen voor kunnen ontwikkelen



#### **4:21 ¶ 8 in Interview 4**

Echter is hier in de telecom industry geen tijd voor

---



#### **4:22 ¶ 8 in Interview 4**

Organisatie A wilde hier een initiatief voor opzetten, echter zijn we te druk bezig met het confirmeren aan de regulaties

---



#### **4:23 ¶ 10 in Interview 4**

Vanuit een proces kant, dus het maken van requirements aan de hand van de standaards zou het fijn zijn geweest om dit in samenspraak te doen met de regulatie instanties

---



#### **4:24 ¶ 10 in Interview 4**

Nu word deze nieuwe regulatie opgelegd zonder echt na te denken over de impact die dit zal hebben over de hele sector

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#### **4:25 ¶ 10 in Interview 4**

Aan de andere kant wanneer dit stapgewijs zou gebeuren zal het resulteren in een process van 10 jaar,

---



#### **4:26 ¶ 10 in Interview 4**

maar het normale gedoogbeleid van Nederland zal er toch wel voor zorgen dat dit uiteindelijk nog wel 5 jaar gedoogd zal worden.

---



#### **5:1 ¶ 2 in Interview 5**

Dus als het financiële systeem aangevallen worden hebben we met zn allen een probleem.

---



#### **5:2 ¶ 3 in Interview 5**

Dus als financiële instelling zou worden aangevallen door cyber attack is al één ding

---



### **5:3 ¶ 3 in Interview 5**

En daarom is het heel goed te gaan formuleren met wie je nou dus in zee en met die en met wie jij je activiteiten aan het organiseren ben

---



### **6:1 ¶ 4 in Interview 6**

Ja, ik denk dat dat misschien een beetje afhangt van de mate van detail waarin je dingen op tafel gaat leggen

---



### **6:2 ¶ 4 in Interview 6**

als je hele IT landschap met al je supplies de hele structuur op tafel gaat leggen, dat de daarvan zoiets hebben van nou, dat is misschien niet heel wenselijk

---



### **6:3 ¶ 4 in Interview 6**

Wat we wat je ziet en je hebt voor de verzekeraars heb je het verbond van verzekeraars en het verbond van verzekeraars is niets anders dan een. Ja, een brancheorganisatie mag je denk ik niet noemen

---



### **6:4 ¶ 4 in Interview 6**

maar het is een beetje een voor de leden, door de leden concept. Dus zij zijn eigenlijk in het leven geroepen om de verzekeraars bij elkaar te brengen en om ook als collectief op te treden en te lobbyen richting bijvoorbeeld de regering. wet en regelgevers, toezichthouders et cetera het verbond faciliteert daarin,

---



### **6:5 ¶ 4 in Interview 6**

de input moet vanuit jullie komen

---



### **6:6 ¶ 4 in Interview 6**

Dus je hebt daarvoor meetings voor de riskmanagers maar ook veel meer voor de operatie, voor meer managementlagen om bepaalde ontwikkeling in de markt en bepaalde uitdagingen waar collectief tegenaangelopen wordt, om dat met elkaar te bespreken





### **6:7 ¶ 4 in Interview 6**

het leuke van dat soort sessies is dat het vaak onder chatham house rules gaat en chatham House rules is eigenlijk niks anders dan alles wat besproken wordt, blijft tussen die muren.

---



### **6:8 ¶ 4 in Interview 6**

D'r worden ook geen notulen van gemaakt, zodat het niet herleidbaar is wie wat heeft gezegd, maar dat t geeft wel de mogelijkheid om gewoon bepaalde problemen op tafel te leggen en te zeggen van Joh wij lopen hier tegenaan, lopen jullie daar ook tegenaan? En is dit inderdaad iets waar we gezamenlijk in zouden kunnen optrekken om een soort verenigd rond te gaan vormen? Of zijn er bijvoorbeeld andere partijen die daar al een hele pragmatische oplossing voor hebben?

---



### **6:9 ¶ 4 in Interview 6**

tuurlijk je kunt. Door riskmanagement goed in te richten, kun je een competitive advantage creëren

---



### **6:10 ¶ 4 in Interview 6**

omdat je dingen veel Slimmer doet, veel efficiënter, wat weer impact heeft op je kosten, baseline en daarmee de pricing van je producten.

---



### **6:11 ¶ 4 in Interview 6**

onder alle druk van wet en regelgeving, dat men vooral op zoek is naar: wat moeten we doen? Hoe kunnen we het organiseren en hoe zorgen we ervoor dat we compliant worden

---



### **6:12 ¶ 4 in Interview 6**

En dat soort generieke uitdagingen waar die partijen tegen aanlopen ja, daar zou je best in zo'n soort setting wel met elkaar over kunnen spreken van hé, hoe vliegen jullie dit dit aan

---



### **6:13 ¶ 5 in Interview 6**

een aantal voorwaarden, dus ook een bijvoorbeeld om kartelvorming en prijsafspraken te voorkomen is. Op het moment dat je getallen noemt mag je voorbeelden geven, maar je mag niet je daadwerkelijke getallen noemen om te voorkomen dat op een gegeven moment vanuit en ik denk vanuit hoe heet die club ook alweer die over dat soort prijsafspraken gaat. Dus zo nou, dat is ook weer zo'n orgaan voor, dat ze niet zeggen van hé, als inflatie 1 procent omhoog gaat, dan passen wij onze prizing en dat iedereen. Denkt oh, als we dat allemaal doen, dan gaan we met ze allen op hetzelfde moment het stapje maken en dan kunnen we onze profit margin vergroten.

---



### **6:14 ¶ 7 in Interview 6**

Omdat er dus voor de leden door de leden wordt gedaan, zijn zij zelf wel heel erg bepalend ook voor de agenda.

---



### **6:15 ¶ 7 in Interview 6**

Maar het is niet dat een externe partij je kan zeggen van nee, wij willen iets over Dora vertellen, ja, dan kun je wel zeggen, maar als zij dan allemaal zeggen van ja, hier hebben we totaal geen behoefte aan, dan komt het gewoon niet op de agenda.

---



### **6:16 ¶ 7 in Interview 6**

Nou, dus, het is ook vaak wel gedreven vanuit een bepaalde noodzaak die op dat moment wordt gezien door de organisaties

---



### **6:17 ¶ 9 in Interview 6**

Nou ja, wat ik wel heb gehoord, is dat weinig partijen zich d'r op dit moment inderdaad druk over maken en dat er nog weinig tractie is

---



### **6:18 ¶ 9 in Interview 6**

Ik denk dat iedereen nog een beetje in de afwachtende fase, want de laatste wat ik er van hoorde, was het nog in een soort consultation phase nou, het was wel al de consultation phase voorbij, maar het was nog niet daadwerkelijk gezegd

---



### **6:19 ¶ 9 in Interview 6**

wat je wel een beetje ziet is dat men vaak nog wel een beetje afwachtend is totdat het echt set in stone is, want dit moeten jullie moeten jullie gaan doen, dat dat ook het moment is dat iedereen pas gaat rennen

---



### **6:20 ¶ 9 in Interview 6**

je ziet in het voortraject dat er vaak wel een beetje wordt op geanticipeerd van: oké, dit komt er op ons af en hier zouden we rekening mee moeten gaan houden,

---



### **6:21 ¶ 9 in Interview 6**

maar ook gelet op alles wat er verder vanuit toezichthouders wordt gevraagd, wat er op ze afkomt ja, dat is gewoon zo veel

---



### **6:22 ¶ 9 in Interview 6**

dus het komt dan vaak ook nog net wat lager op het prioriteitenlijstje omdat het iets van de toekomst is en het is nu nog niet urgent genoeg om de schaarse capaciteit waar ze al mee te maken hebben om die daaraan te alloceren op het moment dat het nog niet moet.

---



### **6:23 ¶ 11 in Interview 6**

Ja, dus dat wordt wel gedaan

---



### **6:24 ¶ 11 in Interview 6**

Dus wat je wat je bijvoorbeeld ziet vanuit verzekeraars, eigenlijk alle grote verzekeraars hebben wel een aparte afdeling of in ieder geval één of twee mensen aangesteld die echt verantwoordelijk zijn voor de politieke lobby

---



### **6:25 ¶ 11 in Interview 6**

Dus je ziet inderdaad wel dat via die weg aan de voorkant vaak al, nou ja, bijvoorbeeld, wat tegengas gegeven wordt, of dat men zich als zo rond gaat organiseren zegt van: ja, dit is echt niet haalbaar, om daar een beetje op te challengen

---



### **6:26 ¶ 11 in Interview 6**

maar niet dat op grootschalige schaal de organisatie zich echt wel heel erg op die implementatie gaat voorbereiden.

---



### **6:27 ¶ 13 in Interview 6**

ik denk twee of drie maanden geleden was er wel rondom Dora ook een call dat werd georganiseerd vanuit de UK waar ze ook heel erg dicht op dit Dora stuk zitten.

---



### **6:28 ¶ 13 in Interview 6**

ik denk dat als je kijkt naar wat is echt de operationele impact van Dora? Dat dat heel erg binnen het cyber domein komt te liggen?

---



### **6:29 ¶ 15 in Interview 6**

Ja, en ik denk dat de Third Party gedeelte, dat zit inderdaad nog wel meer bij ons, maar dat zit met name op, denk ik, op de voorkant van het proces

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### **6:30 ¶ 15 in Interview 6**

Dus het identificeren van je vendors, wat voor contractafspraken heb je gemaakt

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### **6:31 ¶ 17 in Interview 6**

Ja, dat is een beetje iets van de afgelopen tijd, wat je ziet met met veel van dit soort grote trajecten

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### **6:32 ¶ 17 in Interview 6**

en dat is ook een beetje de reden dat het door de partijen zelf vooruit wordt geschoven, omdat ze nog zo'n lijst met dingen hebben, ook met het hele sustainability reporting en alles wat daar vanuit komt.

---



### **6:33 ¶ 17 in Interview 6**

maar er komt zoveel op die partijen af en ze moeten overal overal aan voldoen.

---



### **6:34 ¶ 17 in Interview 6**

En ja, net wat je zegt, dan ben je misschien wel een beetje al een aan de late kant, maar het is echt een kwestie van prioritering wat?

---



### **6:35 ¶ 20 – 21 in Interview 6**

Dus als je ook zei van ja zijn nog maar van vendoren wie betaal ik en gaan kijken van oké, ik betaal hem maar.

00:15:03 Speaker 1: Je hebt geen contract nee

---



### **6:36 ¶ 23 in Interview 6**

Ja, en dat is wel de overeenkomst, een beetje tussen Tmt en fsi, dat beiden best wel redelijk zwaar gereguleerde industrieën zijn. Dus daarin zie je ook nog best wel wat overeenkomsten

---



### **6:37 ¶ 23 in Interview 6**

is eventuele onzekerheid die soms speelt op het moment dat bijvoorbeeld een DORA nog niet definitief is.

---



### **6:38 ¶ 25 in Interview 6**

Dus het is echt die onzekerheid die dat met zich meebrengt ik kan me voorstellen dat dat ook een reden is dat mensen denken of dat organisaties denken van nou ja, we wachten nog maar even af tot dat zeker is en het helemaal uitgekristalliseerd is

---



### **6:39 ¶ 25 in Interview 6**

En dan gaan we gaan we erop acteren

---



### **6:40 ¶ 25 in Interview 6**

oké, kijk, en wat je wel ziet vanuit third party risk management, dat is ook iets waar dnb nu binnen de fsi strakker op aan het aan het focussen is. Dus daar zie je ook wel bewegingen om in ieder geval dat hele proces strakker neer te zetten. Daarmee krijg je ook beter inzicht. Automatisch in: wat zijn je van vendoren wat zijn je contracten? Hoe

---

ziet die uitbesteding d'ruit dus ik denk dat dat wel al een stap in de goeie richting is, wat je ook kunt gebuiken voor Dora.

---



### **6:41 ¶ 32 in Interview 6**

Ja, zeker weten en ik denk dat dat vanuit Deloitte kijk, wat je vaak wel ziet met dit soort nieuwe ontwikkelingen is dat we vanuit Deloitte op een gegeven moment ook zeggen van hé, hier ligt een een opportunity dus we gaan vanuit Deloitte bijvoorbeeld een round table organiseren, specifiek voor dit onderwerp, om hun meer mee te nemen

---



### **6:42 ¶ 32 in Interview 6**

Wat houdt de Dora in? Wat is onze Point of View daarop? Hoe zouden wij dat aanvliegen en vaak is dat dan niet heel concreet als in een heel raamwerk maar wel alvast in vorm van een soort interview van

---



### **6:43 ¶ 32 in Interview 6**

, je wilt net als wat we aan het begin zeiden, een een organisatie wil niet z'n hele it landschap blootleggen wij willen natuurlijk niet het hele implementatieplan bloodleggen

---



### **6:44 ¶ 32 in Interview 6**

vaak hebben we dat ook nog niet al hapklaar omdat het ook heel situatie-afhankelijk is.

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### **6:45 ¶ 32 in Interview 6**

Hoe volwassen is een organisatie al, hoeveel inzicht hebben ze al? Wat voor processen zijn er allemaal ingericht

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### **6:46 ¶ 32 in Interview 6**

Dus vaak zie je ook dat een ja, je kunt misschien een soort hapklaar heel ruim kader definiëren, maar echt een heel gestructureerd, duidelijk framework is er vaak nog niet

---



### **6:47 ¶ 32 in Interview 6**

En wat je denk ik ziet met Dora is dat het heel veel linkjes heeft met reeds bestaande policies en reeds bestaande processen die zijn ingericht, dus bijvoorbeeld je third party risk managementproces maar.

---



### **6:48 ¶ 35 in Interview 6**

En dat, dat brengt ook de complexiteit met zich mee om een soort one size fits all oplossing daarvoor neer te leggen.