



**UNIVERSITY OF TWENTE.**

**MOTIVATING FACTORS FOR INSOURCING DECISION IN A LOGISTICS  
COMPANY**

Lappeenranta–Lahti University of Technology LUT & University of Twente

Master's Degree Programme in Supply Management

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## ABSTRACT

Lappeenranta–Lahti University of Technology LUT & University of Twente  
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### **Motivating Factors for Insourcing Decision in a Logistics Company**

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81 pages, 7 figures, 10 tables, and 2 appendices

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Decisions regarding outsourcing or insourcing play a pivotal role in an organisation's overall performance. Strategic sourcing guides these decisions for companies to gain more competitive advantage. A research gap between insourcing and outsourcing literature has been identified. Gaining insight into the motivating factors driving companies insourcing decisions deepens the understanding of when insourcing increases a company's competitive advantage.

This thesis examines which motivating factors influenced the case company's decision to insource a part of its supply chain. A literature review is conducted to identify motivating factors identified in insourcing research and to see which factors increase competitiveness in the logistics industry. Additionally, enablers and challenges for the insourcing decision will be identified and investigated through RBV and TCE theories. The thesis is a single case study with interviews with managers involved in the insourcing decision.

The results of this study found motivating factors related to concepts of organisational aspect, operational performance, resources, control, and cost. A connection between previously identified motivating factors from literature and new ones was found. Enablers and challenges were related to supply management theories and found that the case company's resources enable competitive advantage, but challenges generate transaction costs. The results indicate that motivating factors for the insourcing decision are interconnected; they stem from various sources and increase competitiveness in the logistics industry.

## TIIVISTELMÄ

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### **Motivaattorit kotiuttamispäätökselle logistiikka yrityksessä**

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Päätökset ulkoistamisesta tai kotiuttamisesta ovat keskeisessä roolissa organisaation kokonaisvaltaisessa suorituskyvyssä. Strateginen hankinta ohjaa näitä päätöksiä yritysten saavuttaessa kilpailuetua. Ulkoistamisen ja kotiuttamisen kirjallisuuden välillä on tunnistettu tutkimusvaje. Kotiuttamispäätöksiin vaikuttavien motivaattoreiden ymmärtäminen syventää käsitystä siitä, milloin kotiuttamien lisää yrityksen kilpailuetua.

Tämä tutkielma tarkastelee, mitkä motivaattorit vaikuttivat kohdeyrityksen päätökseen sisäistää osa toimitusketjustaan. Kirjallisuuskatsaus pyrkii tunnistamaan kotiuttamis-motivaattoreita, jotka ovat tunnistetut kirjallisuudessa, sekä mitkä tekijät vaikuttavat kilpailukykyyn logistiikka alalla. Lisäksi tutkielmassa pyritään tunnistamaan ja tutkimaan mahdollistavia tekijöitä ja haasteita kotiuttamispäätökselle resurssiperustaisen näkemyksen (RBV) ja transaktiokustannusteorian (TCE) viitekehyksien kautta. Tutkimus suoritetaan yksittäisenä tapaustutkimuksena, jossa haastatellaan kotiuttamispäätökseen osallistuneita johtajia.

Tutkimuksen tulokset havaitsivat motivaattoreita liittyen organisaation näkökulman, operatiivisen suorituskyvyn, resurssien, kontrollin ja kustannuksien konsepteihin. Tutkimus havaitsi yhteyden aiemmin tunnistettuihin motivaattoreihin sekä tunnisti uusia motivaattoreita. Mahdollistavat ja haasteelliset tekijät liittyivät toimitusketjuhallinnan teorioihin. Kohdeyrityksen resurssit mahdollistavat kilpailuedun, mutta samalla haasteet synnyttävät transaktiokustannuksia. Tulokset osoittavat, että kotiuttamispäätöksiä motivoivat tekijät ovat keskinäisessä yhteydessä, ne juontavat juurensa monista lähteistä ja lisäävät kilpailukykyä logistiikkateollisuudessa.

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# 1 Introduction

This thesis delves into motivating factors for insourcing. Companies strive to gain competitive advantage over their competitors by structuring their operations most efficiently. Strategic sourcing offers potential options companies can adopt to enhance their processes for maximal competitive advantage (Sisilian & Satir, 2000). Decisions concerning company boundaries – the choice between in-house production and outsourcing to external suppliers – significantly impact a firm's competitive advantage and represent a central focus in strategic sourcing research (Kocabasoglu & Suresh, 2006). Sisilian & Satir (2000) emphasise that decisions regarding outsourcing or insourcing play a pivotal role in an organisation's overall performance. Understanding what motivates companies to insource parts of their operations will increase the understanding of when insourcing would increase company's competitive advantage (Bals, Kirchoff & Foerstl 2016).

The decision-making process regarding whether to make or buy has received substantial attention in academic research. However, there is a lack of understanding of why companies are motivated to insource (Bals et al., 2016). The fundamental principle suggests that a company should opt for internal production when the activity aligns with its core competence and outsourcing when it falls outside this realm (Arnold, 2000). Various procurement theories provide frameworks for assessing the make or buy decision (Shook, Adams, Ketchen & Craighead, 2009). Among the most prevalent frameworks for evaluating such decisions are the Resource-Based View (RBV) and Transaction Cost Economics (TCE) (Gulbrandsen, Sandvik & Haugland, 2009; McIvor, 2009). RBV delves into how a company's resources impact its competitive advantage and whether it possesses the requisite resources to outperform rivals (Barney, 1991). Conversely, TCE scrutinises the transaction costs associated with a particular transaction, subsequently advising whether it should be internally produced or outsourced (Williamson, 2008). These theories provide valuable lenses for organisations to analyse their production strategies and make informed choices between insourcing and outsourcing.



Make or buy decisions made by companies in the past are not static, they can be reversed and should be evaluated continuously (Hartman Ogden & Hazen, 2017). The dynamic nature of make or buy decisions makes them subject to revision and continuous revaluation by companies (Hartman et al., 2017). Lonsdale (1999) highlighted in the late 20th century that most managers were dissatisfied with outsourcing outcomes, yet insourcing remains underrepresented in academic research (Drauz, 2014). While companies contemplate insourcing as a viable option, transitioning towards it is still infrequent (Stentoft, Mikkelsen & Johnsen, 2015). Exploration of insourcing motivations contributes to a comprehensive understanding of its strategic implications and potential impact on competitive positioning. Therefore, insourcing research should receive more emphasis in sourcing research so that managers can be more equipped to make insourcing decisions to increase their competitive advantage.

This study aims to give the case company a fundamental understanding of its insourcing decision. The nuances that influenced the decision can be identified by investigating the insourcing decision retrospectively. Light will be shed on previously understudied areas of insourcing. In addition, motivating factors previously identified in the literature are introduced. This study will be conducted as a single case study to understand the motives behind the specific insourcing decision made by the case company.

## 1.1 Research Gap

Motives for companies to insourcing have received less attention in academic research compared to the amount of research on motives for outsourcing (Drauz, 2014). This finding demonstrates a research gap in the literature regarding insourcing. The amount of academic research on insourcing has varying views. Some say there is still little empirical data on the supposed trend towards insourcing and back shoring. For example, Barbieri & Stentoft (2016) call for more research on this phenomenon. Fratocchi, Mauro, Barbier, Nassimbeni, & Zanoni (2014) identify that insourcing has gained interest in academic research. Still, the magnitude and geographical borders of the phenomenon have not been identified. Bals et al., (2016) note that insourcing started to gain momentum because of difficulties and fluctuations in macroeconomics, political situations and unforeseen costs related to

outsourcing. The underlying motivators of the phenomena would help to see the full scope, but they remain under-researched.

Managers involved in deciding whether to make or buy need to continuously evaluate different factors influencing vertical integration; only by understanding the different factors and their influence can effective supply management decisions be made (Gulbrandsen et al., 2009). This supports the need to identify motivating factors for insourcing decisions, as more knowledge will result in more efficient supply management decisions. An obstacle in performing research regarding insourcing is that information and academic literature regarding companies' insourcing decisions is relatively scant, as companies are understandably reluctant to share information about underperforming outsourcing relationships (Barthélemy & Adsit 2003). Therefore, the amount of information regarding insourcing decisions, especially resulting from failed outsourcing relationships, might be difficult to access. A deep dive into insourcing literature revealed that insourcing is studied much less than outsourcing. Yet the available information and previous research will be sufficient to conduct this study. This case study can help narrow this research gap by providing beneficial insight into why companies insource.

Literature has focused mainly on the manufacturing industry when researching motivators for insourcing and outsourcing (Mantell, Tatikonda & Liao, 2006). The risks associated with outsourcing services differ from risks associated with outsourcing direct materials, influencing the need for different business control (Ellram, Tate & Billington 2008). An inference can be made that, as the risks for outsourcing differ between services and direct materials, the same implication is for insourcing. Ellram, Tate & Petersen (2013) pointed out that the difference in drivers for re-shoring of good suppliers versus service suppliers should be researched. This thesis will focus on services provided by a company for another company, thus narrowing down the research gap.

## 1.2 Research Objectives and Questions

This master thesis will be a case study, looking at an insourcing decision made by the case company. The case company is a large internationally operating LSP (Logistics service

provider), and more specifically, an insourcing decision made in the Air Import department regarding truck transportation. The aim will be to identify which motivating factors influenced the company's decision to switch from buying a service from an outside supplier to producing the service inhouse. The initial problem the case company was experiencing was the underperforming outsourcing contact with an external supplier regarding lead times, information flow reliably, etc. The service quality was not meeting the case company's expectations, thus making the insourcing decision reactive. By looking at both motivating factors identified from literature and interviews, a more comprehensive picture can be formed about the motivating factors for this insourcing decision made in the logistics industry.

The service in question in this master thesis being researched is transporting shipments that are flown into Central Europe and transported by truck to Finland. The department of the case company is the Air Import department; therefore, the service is questions related to the air freight industry, but the service is truck transportation for the rest of the leg in Europe. This is an option the case company offers in addition to direct flights to its customers, as it is a much cheaper and more frequently available option compared to direct flights to Finland. The case company has a business sector that focuses specifically on truck transportation; therefore, the company already possesses the needed resources to operate the service inhouse. A representation of the supply chain and the scope of this thesis is presented in Figure 1.

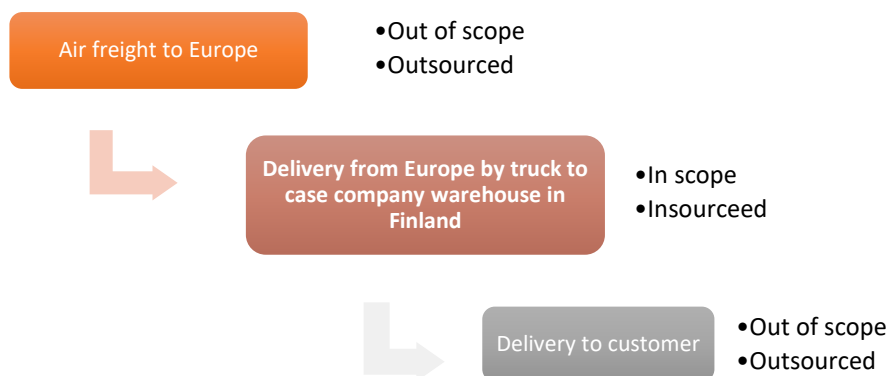


Figure 1. Representation of the scope of study in the air freight supply chain

Motivators for insourcing decisions should be researched because previous research has mainly focused on why companies should outsource. Understanding insourcing decisions will shed light on reasons and situations when companies should insource. Continuous improvement and evaluation of companies' boundaries are needed to remain competitive in the dynamic business industry. By doing more research on the topic of insourcing, companies have more tools to evaluate their operations and identify possibilities for insourcing.

The main research question guiding this master thesis is:

*What factors motivate insourcing decisions in the logistics industry?*

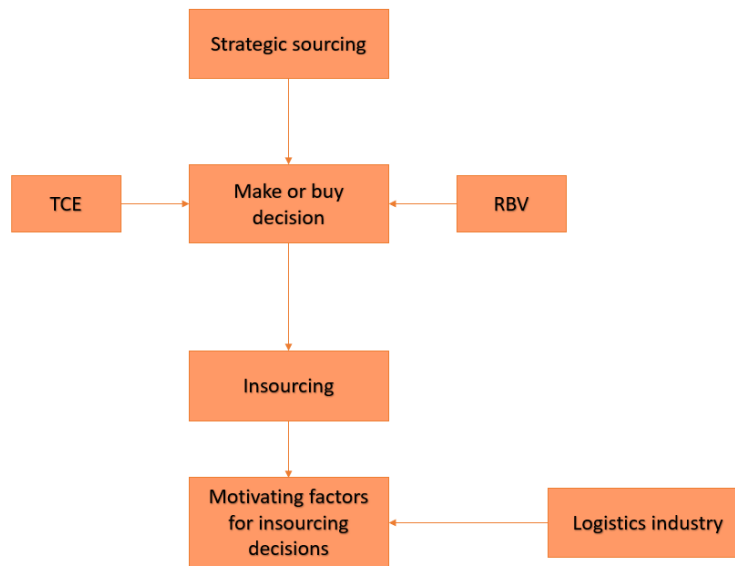
The sub-questions for this master thesis are:

*What enablers influenced the insourcing decision?*

*What challenges influenced the insourcing decision?*

These research questions will be answered with the following conceptual framework, as presented in Figure 2. The conceptual framework will be built around strategic sourcing, focusing on the make or buy decision and, more specifically, insourcing. The motivating factors for make or buy decisions will be examined from the viewpoint of TCE and RBV theories, as financial and resource factors have been identified to influence insourcing decisions. Logistics industry characteristics will be taken into consideration in this study as the case company operates in it.

Figure 2. Conceptual framework



### 1.3 Key Concepts and Definitions

The main ideas of the study are discussed in this section, along with their definitions. These ideas are crucial for the reader to comprehend because they will be extensively and often covered in the study.

*Strategic sourcing* is “ a framework to assist make versus buy decisions by considering the importance of a component in achieving competitive advantage and future opportunities in having the process needed for in-house production.” (Sisilian & Satir, 2000).

*Make or buy* The term “make or buy” demonstrates the decision-making of sourcing decisions; by deciding whether to make or buy, the boundaries of the company are drawn (McIvor, 2005. p.7).

*Transaction cost economics* According to this approach, the characteristics of the transaction decide which type of governance structure—market, hierarchy, or alliance—is the most effective (Williamson, 1981).

*Resource-based view* looks at how the internal setting of the firm and its resources can influence the formation of its sustained competitive advantage (Serrano et al., 2019).

*Insourcing* is defined insourcing is a project of moving processes within a company's boundaries that has previously been performed outside the company's boundaries (Grela & Hofman 2021). This definition does not limit the term insourcing to services that have historically been produced inhouse nor services that are simultaneously purchased from the market (Grela & Hofman, 2021).

#### 1.4 Structure of the Study

The paper is structured as follows. After the introduction, the next chapter will look at the literature on strategic sourcing, make or buy decisions, and how RBV and TCE theories influence decision-making. Moreover, insourcing literature will be introduced, emphasising insourcing definition, motivating factors, enablers, and challenges for insourcing. The methodology this study follows is presented in the third section, after which the results will be reviewed in the fourth section. The fifth chapter will provide a discussion in the form of a summary of the study results as well as theoretical and managerial implications of the study results. Finally, the paper will introduce future research directions and discuss research limitations.

## 2 Sourcing Strategies: Navigating Make or Buy Decisions and Insourcing Dynamics

This section will examine strategic sourcing and its fundamental aspects – the make or buy decision. The impact of RBV and TCE theories on decision-making will be investigated to gain a deeper understanding of the make or buy decision. After which, the focus will be drawn to insourcing. Firstly, a clear definition will be provided, followed by an examination of insourcing theory. Furthermore, motivating factors, enablers, and challenges for insourcing decisions will be explored.

### 2.1 Importance of Strategic Sourcing in Supply Management

Companies face increasing competition in their business environments and increasing customer demands. For companies to meet these requirements, solutions for reducing costs and improving service levels must be found. Companies can manage their costs and maximise their resources by tapping into the possibilities offered by purchasing and supply management (Kocabasoglu & Suresh, 2006). Strategic sourcing is a function of purchasing that can be implemented to succeed in cost reduction and better utilisation of resources (Carter Carter., Monczka, Slaughter, & Swan 2000). Eltantawy & Giunipero (2013) describe how strategic sourcing research has generally been divided into three approaches. The first approach focuses on the make or buy decision, looking at whether the company can gain more competitive advantage by producing the activity in-house or should the company acquire the resource from the market. The second approach focuses on the relationships between the buyer and the supplier and the lasting effect of strategic sourcing on the procurement process. The third approach has a focus on the different dimensions of strategic sourcing. This thesis will focus on the first approach.

Purchasing and supply management are considered strategic functions with which companies can make strategic choices regarding insourcing and outsourcing decisions. By focusing on insourcing and outsourcing decisions, companies can realise an effective purchasing and supply management function (Gulbrandsen et al., 2009). Strategic sourcing

decisions within the purchasing and supply management function should be looked at from the viewpoint of the company's overall strategy and core competence (Brannemo, 2006). Because a company's competitive strategy guides the organisation, any activity that strengthens the competitive advantage must be recognised as vital and should, therefore, be insourced; conversely, any task with little to no bearing on competitive strategy should be outsourced (Sisilian & Satir, 2000).

Competencies that form a company's core competence include skills, knowledge and technologies possessed by a company, with which it builds its success (McIvor, 2005, p. 47). The possessed competence can be the guiding light in which direction the company grows its business; therefore, the core competencies should be nurtured and developed (Hafeez, Zhang & Malak, 2002). When looking into outsourcing decisions, core competence is a significant aspect to consider, as it reflects which internal activities form the company's core competence and should, therefore, be kept inhouse (McIvor, 2005, p. 47).

Strategic sourcing can be looked at through the lens of multiple theoretical perspectives. The origins of strategic sourcing theories can be divided fundamentally to stem from a cost and strategy and strategy perspective (Cáñez, Platts & Probert, 2000). In a more recent article, Medina Serrano, González-Ramírez, Gascó & Llopis (2020) extended the approach from Cáñez et al., (2000) to include four approaches instead of two, stating that the relevance of resource theories has increased in strategic sourcing and the make or buy decisions. The included approaches are a strategic perspective, resource viewpoint, performance and an uncertainty and opportunism viewpoint. Shook et al., (2009) provide an apparent reason why more than one theory should be used when looking at strategic make or buy decisions. They note that when justifying decisions from the perspective of TCE, companies should outsource activities with higher production costs than transaction costs. However, this activity can be a fundamental function providing the company with a competitive advantage, even if it costs more to produce themselves. Using TCE and RBV theories, a clearer picture of strategic sourcing is built for this master thesis.

TCE and RBV are the most commonly used theories to explain the decision-making for the strategic sourcing decision of make or buy (Gulbrandsen et al., 2009; McIvor, 2009). By looking at RBV and TCE, motivating factors influencing insourcing decisions in the logistics



industry can be identified. By combining different concepts, a more valid view of the operability of the theories in practice can be achieved (Gulbrandsen et al., 2009). More specifically, the literature emphasises the complementarity of TCE and RBV to explain outsourcing decisions, as each theoretical perspective cannot justify outsourcing decisions independently (McIvor, 2009; Freytag & Clarke & Evald, 2012). Therefore, both theories are needed to understand all underlying motivators in outsourcing decisions, as TCE can be said to explain the notion of why firms exist. In contrast, RBV looks at why firms' performance differs. This same notion can be applied to insourcing decisions.

## 2.2 Make or Buy Decision at the Foundation of Supply Management

This chapter will look at the theory of the make or buy decision and describe a framework for the make or buy decision. The influence of RBV and TCE theories will be described as TCE and RBV are the most commonly used theories to explain the decision-making for the strategic sourcing decision of make or buy (Gulbrandsen et al., 2009; McIvor, 2009). Strategic sourcing decisions can be viewed from other organisational theories' perspectives. Shook et al.,(2009) gathered a list of different theories that can be used to research strategic sourcing decisions. These theories were institutional theory, resource dependence theory, network theory, systems theory, agency theory, strategic choice theory, sociocognitive theory, and critical theory. However, this thesis will use the RBV and TCE theories because resources and cost are identified to be contributing factors in this insourcing decision.

### 2.2.1 Make or Buy Decisions Determine Company Boundaries

The term “make or buy” demonstrates the decision-making of sourcing decisions; by deciding whether to make or buy, the boundaries of the company are drawn (McIvor, 2005. p.7). A shift has occurred as the make or buy decision has become more central to the business strategy and is not regarded only as an operative function (Nikolarakos & Georgopoulos, 2001). Emphasis on make or buy is placed on the decision-making process, as all make or buy decisions are evaluated from the viewpoint of what is most appropriate for the company (McIvor, 2005. p.7). Deciding which option of the make or buy decision is

best for the company can be regarded as one of the most challenging questions to answer in business strategy (Nikolarakos & Georgopoulos, 2001).

Make or buy decisions is a decision that has been an issue that both academics and practitioners have had to ponder for a long time (Brannemo, 2006). Often, companies do not have the resources to produce everything inhouse; neither is it strategically the most beneficial option. This has resulted in companies needing to identify what they should outsource to external suppliers and what to keep inhouse or insource back (Cáñez et al., 2000). Procurement decisions set the boundaries of a company, more specifically, the make or buy decision. The question of how companies establish their boundaries has gone through ample research, yet this fundamental question in supply management remains to have a clear answer (Parmigiani, 2007). Make or buy decisions should be considered strategic decisions that influence the whole strategy of a company (McIvor Humphreys & McAleer, 1997). Therefore, make or buy decisions should be made with a strategic approach emphasising a long-term plan (Cáñez et al., 2000).

The make or buy decision has gained importance as emphasis has shifted mainly to outsourcing (Kabasele & Suresh, 2006). Companies should consider the possibility of insourcing and outsourcing when making the make or buy decision. Research focusing on the make or buy decision from an accounting perspective has identified that these decisions are usually made without in-depth consideration (Sundquist, Hulthén & Gadde, 2015). The focus of the make or buy decision is usually cost (Brannemo, 2005; Nikolarakos & Georgopoulos, 2001).

A framework was developed by Canez et al., (2000) to illustrate the factors that influence make vs. buy decisions graphically. The framework identifies and includes the essential elements that affect the decision to make or buy, as presented in Figure 3.

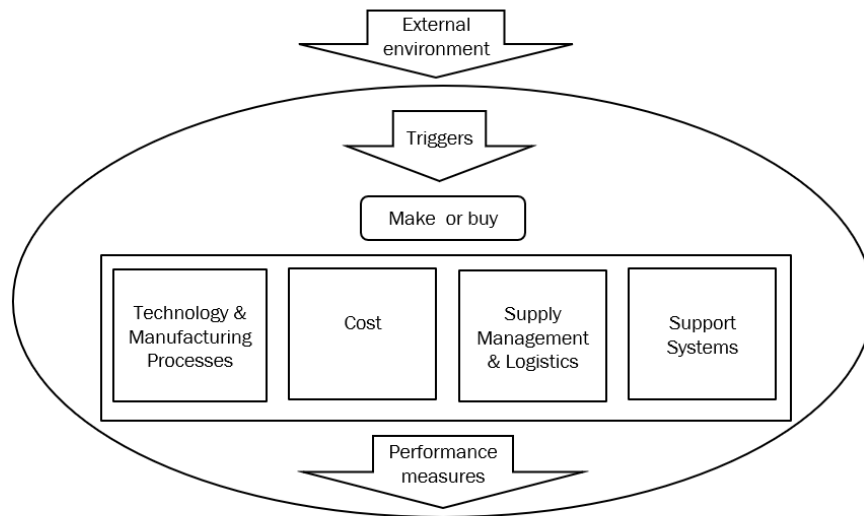


Figure 3. Make or buy framework, adapted from Canez et al., (2000)

The make or buy analysis is initiated by the external environment by the framework; there is a need to assess the current policy due to factors such as competition, supplier availability, and political and social aspects (Cáñez et al., 2000). The triggers for the make-or-buy decision, such as cost reduction, capacity constraints, the desire to improve quality or a shorter time to market, are impacted by these external factors (Cáñez et al., 2000).

The framework created by Canez et al., (2000) identifies four essential business sectors for the make or buy choice. These include the following: Cost, Supply Chain Management and logistics, Technology and Manufacturing Processes, and Support Requirements. There are elements in each of these categories that are pertinent to the make-or-buy choice. These elements serve as criteria for assessing if the triggers' target level achievement has been met. Performance indicators like cost savings, quality, and capacity utilisation are connected to the make or buy decision triggers and extend outward to demonstrate the choice's non-static character and to provide feedback into the surrounding environment. The make or buy framework tries to close the gap in the make or buy literature by capturing the essential aspects of the decision-making process (Canez et al., 2000).

### 2.2.2 RBV Influence on Make or Buy Decision-Making

RBV looks at how the internal setting of the firm and its resources can influence the formation of its sustained competitive advantage (Serrano et al., 2019). The value of resources should be evaluated with the specific environment in which the company operates and the context of its corporate strategy (Talaja, 2012). RBV supports the study of sourcing strategies by looking at which organisational activities overthrow competitors and, thus, should be performed internally. Companies need resources to attain competitive advantage, but not all resources are sources of competitive advantage. The RBV builds on the notion that firm resources are heterogeneous and immobile and can be a source of sustained competitive advantage (Serrano et al., 2019). This theory suggests that a company's unique bundle of resources, which include tangible and intangible assets, can provide a lasting competitive edge if they are valuable, rare, difficult to imitate, and cannot be easily substituted; these characteristics form the VRIN framework (Barney, 1991).

Sustained competitive advantage stems from the strategic resources controlled by a firm not being the same for all companies, and the strategic resources controlled by the company are not interchangeable among companies (Barney, 1991). RBV focuses on identifying how the company's resources influence the formation of sustained competitive advantage. RBV is built around the premise that a company should not outsource an activity that can bring them a competitive advantage (Shook et al., 2009). By looking at the resources that bring possible competitive advantage to a company, companies can identify which parts of their operations should be insourced and which should be outsourced.

The definition of resources must be stated to understand how resources can be the source of sustained competitive advantage. An obstacle in RBV research has been the difficulty of defining resources comprehensively (Wade & Hulland, 2004). Wernerfelt (1984) positions resources as anything that can be regarded as a strength or weakness of a firm. Barney (1991) defines resources in more depth, stating that resources are all assets, capabilities, organisational processes, firm attributes, information, and knowledge the company controls. He classifies resources into three different categories: physical capital resources, human capital resources and organisational capital resources. Resources can further be classified as intangible or tangible. Grant (2001) adds financial, reputation and technological resources.

He continues that intangible resources are challenging to evaluate, but valuation ratios can be used to understand the value and importance of a company's intangible resources. Ultimately, even if these firm attributes possess the previously mentioned VRIN characteristics, they cannot turn into resources if they do not exploit opportunities or neutralise threats in the firm's environment (Barney, 1991).

The VRIN- framework is an essential aspect of the RBV theory. It influences the make or buy decision-making as it indicates if the resources are a source of sustained competitive advantage. If the service under consideration in the make or buy decision possesses these characteristics, it should be made by the company and kept within the company boundaries. The features of the framework are explained below.

### **Valuable**

Barney (1991) notes that to be considered resources, they need to be valuable in the first place; only by being valuable can they be a source of competitive advantage. He continues to specify that valuable resources are needed for the company to implement strategies that improve the company's efficiency and effectiveness. Only with valuable resources can the company exploit opportunities and mitigate threats, which can lead to an increase or decrease in revenue (Barney, 1991). Asset specificity increases the value of the resource in the light of RBV (Poppo & Zenger, 1998). Industry factors influence making resources valuable (Porter, 1991).

### **Rare**

Barney (1991) describes that a company can only implement a value-creating strategy, which results in a competitive advantage when competitors do not use the same plan; for the value-creating strategy to work, the used resources must be rare. He continues that if many companies possess the same resources, the value-creating strategy will fail as all competitors can perform the same strategy, thus losing its value-adding aspect, which would result in sustained competitive advantage.

On the other hand, companies should not dismiss familiar and valuable resources. Companies need common resources that are also valuable to assist with the creation of competitive parity and help to ensure survival (Barney,1989). Resources can be considered rare even if they are in the possession of more than one company. If fewer companies have access to a resource than are required to create ideal competition dynamics, that resource could be a source of competitive advantage (Barney,1989).

### **Inimitable**

Valuable and rare resources will increase the company's possibility for sustained competitive advantage. Still, only when inimitability is added the resources must be out of reach for competitors (Barney, 1991). There are three reasons which, individually or mutually, can explain the inimitability of a resource. These are unique historical conditions, causal ambiguity and social complexity. Companies are essentially historical and social entities. Therefore, their capacity to acquire and exploit some resources depends on their location in the past and present; historical circumstances thus influence the production of resources (Barney, 1991). Causal ambiguity is present when the link between the company's resources and the company's sustained competitive advantage is only imperfectly or not understood at all, which results in competitors not having access to knowledge of which resources to imitate to replicate, as it is unclear to everyone involved (Barney, 1991). Social complexity makes some resources difficult to imitate because they can carry socially complex attributes which make it difficult for the company to influence and manage; for example, relationships between managers, organisational culture and company reputation among suppliers and customers are socially complex and difficult for competitors to imitate (Barney, 1991).

### **Substitutability**

Substitutability is described by Barney (1991) as resources that should be difficult for competitors to replace or replicate with an alternative that provides similar or equal benefits. He demonstrates that for a company to generate a sustained competitive advantage, the resources must be rare, valuable, and inimitable and have no strategically equivalent resource.

### 2.2.3 TCE Influence on the Make or Buy Decision-Making

The foundation of TCE stems from the idea that governance costs explain firm boundaries. Governance costs can be classified as costs resulting from acquiring inputs for operations. These governance costs include searching, negotiating, bargaining, contracting and contract management (Gulbrandsen et al., 2009). Transaction Cost Economics (TCE) is a prominent economic theory developed by Ronald Coase and further expanded upon by Oliver E. Williamson. Stratman (2008) notes that Coase (1937) primarily looked at the fundamental reasoning for firms' existence, whereas Williamson (2008) focused on transaction costs and looked at which characteristics would increase them. TCE facilitates an inquiry into whether it is beneficial for a company to outsource or insource a particular activity (Stratman, 2008). TCE can be used to explore both outsourcing and insourcing decisions (Hartman et al., 2017).

TCE builds around the premise that a company should outsource when the transaction costs from an activity are less when bought than produced (Shook et al., 2009). Stratman (2008) explains how TCE's influence on sourcing decisions becomes prominent and how cost is not the only factor to consider. He explains that when companies require a unit that requires specialised production, the generally cited method of acquiring the said unit is by using markets. However, he continues that this is the cornerstone of TCE as it also emphasises certain environmental conditions that may influence the cost of doing market-based exchanges. When environmental conditions increase the transaction costs, the methods for acquiring the unit switch to hierarchy (Stratman, 2008).

There are different sources for transaction costs that determine firm boundaries. The sources of transaction costs can be related to asset specificity, opportunism, bounded rationality, uncertainty, frequency, and information asymmetry. Bounded rationality describes the inability of humans to understand all possible decisions and their complexities fully. This limits managers' decision-making, as bounded rationality influences their cognitive limitations (McIvor, 2009). The goal of decision-makers is to select the most feasible governance structure to minimise transaction costs. Opportunistic behaviour is evident when decision-makers put their self-interest first and try to plot themselves the best deal (McIvor,

2009). Firm boundaries cannot be explained without opportunism and can exist within and outside the firm's boundaries (Gulbrandsen et al., 2009).

Asset specificity determines the customisation level attached to the transaction. High asset specificity refers to aa costs where the value becomes insignificant and detached from the investment. The different forms of asset specificity are physical asset specificity, human asset specificity and site specificity, continuing to non-specific, idiosyncratic, or mixed asset specificity (McIvor, 2009). Asset specificity is the most critical characteristic from the viewpoint of TCE (Gulbrandsen et al., 2009). Uncertainty nor frequency can alone explain the reasoning for hierarchical governance (McIvor, 2009).

Governance structures describe the various arrangements for managing economic activities. TCE identifies three primary governance structures: market, hybrid, and hierarchical. Market governance is the control of economic exchanges through open markets and pricing mechanisms (Arnold, 2000). Arms-length partnerships, where parties are independent and rely on market forces to enforce agreements, are characteristics of market governance. It is suitable for transactions with moderate uncertainty and low asset specificity (McIvor, 2009). Hybrid governance uses contracts and vertical integration to blend market and hierarchical features. When explicit coordination and control are needed for some transaction components, but full integration is not required, hybrid governance is used (Arnold, 2000). Hybrid governance optimises transactions with moderate to high asset specificity and uncertainty. Integrating economic operations within a single company or organisation is called hierarchical governance (Arnold, 2000). Centralised decision-making, power structures, and internal coordination systems characterise hierarchies. Hierarchical governance is appropriate for transactions with high asset specificity and unpredictability because it offers better control and reduces opportunistic conduct (McIvor, 2009).

### 2.3 Holistic Examination of Insourcing

The following section will look at different terms influencing insourcing theory. An attempt is made to clarify insourcing by differentiating between additional terms used in the



literature. Moreover, a comprehensive literature review of insourcing is presented, emphasising insourcing motivators, enablers, and challenges.

### 2.3.1 Defining the Concept of Insourcing

Companies need to decide whether they wish to keep control of a service, e.g., make, or to delegate the realisation of a service to an external party, e.g., buy. Strategic business decisions made by companies, including the determinants of ownership and location, have been given multiple names. These strategic business decisions can be called outsourcing, offshoring, insourcing, reshoring, and back shoring (Kandil, Battaïa, & Hammami, 2020). The previously mentioned definitions of insourcing, reshoring and back shoring are most commonly used to describe insourcing, but other definitions have also been identified in the literature. Therefore, it can be said that insourcing is a phenomenon with a large variety of definitions, which all hold slightly different meanings. Standard standardised definitions for varied sourcing strategies should be established (Kandil et al., 2020). Therefore, a clear distinction between and for each definition is addressed.

*Insourcing.* There is an abundant number of definitions for insourcing in academic literature. Grella & Hifman (2021) investigated the theoretical background of insourcing, evaluated different definitions, and concluded on an adapted definition. This master thesis will use this definition as the most recent and comprehensive. Grella & Hofman (2021) define insourcing as a project of moving processes within a company's boundaries that has previously been performed outside the company's boundaries. This definition does not limit the term insourcing to services that have historically been produced inhouse nor services that are simultaneously purchased from the market (Grella & Hifman, 2021). McIvor (2010, p.227) supports this definition, stating that insourcing is "the use of internal business functions to deliver products or services that external vendors could provide." *Back shoring* can be seen as a closely related concept to insourcing. An essential distinction between insourcing and back shoring stems from back shoring not implying a change in ownership but in the location of its in-house activity (Stentoft et al., 2015). *Reshoring* is also identified as a decision regarding only the location change, excluding the subject of who is performing the relocation; therefore, it can be said that back shoring and reshoring can be used interchangeably (Bals et al., 2016). *Vertical integration* is defined as the share of in-house

production of a company in the total value creation related to a final product (Drauz, 2014). McIvor (2005, p. 41) notes that the opposite sides of sourcing decisions are vertical integration or outsourcing, stating that vertical integration is equivalent to insourcing. The literature sometimes expresses vertical integration and organisational boundary decisions as insourcing and outsourcing (Gulbrandsen et al., 2009). *Outsourcing* is defined as the movement of internal activities outside the company (Ellram et al., 2008). *Offshoring* is regarded as the action of location production outside the same region as the company's headquarters (Ellram, Tate & Petersen, 2013). *Nearshoring* is regarded as the action of locating production within the same region as the company's headquarters (Ellram et al., 2013).

### 2.3.2 Insourcing Decision-Making

The boundaries set by companies lie at the fundamental level of any organisation (Poppo & Zenger, 1998). This notion demonstrates how deciding whether a company should produce a service or product inhouse using their resources or contract an external party to produce the service or product for them, impacts organisational boundaries (Cabral, Bertrand & Maia, 2014). Insourcing is the activity of changing to inhouse production of a product or service, which could be provided by an external supplier (McIvor, 2010. p.227).

Literature has suggested that there has been a shift in mindset regarding previous outsourcing decisions amongst managers, as companies have withdrawn from their outsourcing decisions and decided to insource (Ellram, 2013; McIvor, 2013). Decisions regarding insourcing and outsourcing come from a continuous process in which the company assesses variables that affect sourcing decisions to create the most effective operations (Gulbrandse et al., 2009). To identify the motives for insourcing, companies need to evaluate their decision-making (Drauz, 2014). Factors influencing insourcing decisions and the importance of the factors are poorly understood, resulting in companies not making the steps towards insourcing (Hartman et al., 2017; Bals et al., 2016). Effective purchasing and supply management, for both purchasing managers and other parties involved in the company's make or buy decisions, depends on the knowledge of the key factors that influence these choices (Gulbrandse et al., 2009).

The make or buy decision is one of the most fundamental decisions in supply management research. As products and services become more complex, the resources and capabilities within the company might not be sufficient to produce products or services that meet customer demands; therefore, companies have outsourced to tap into supplier resources and capabilities to increase the complexity of their products (McIvor, 2009). Outsourcing and insourcing decisions should be considered complementary to each other; by combining outsourcing and insourcing decisions, companies are more prepared to meet increasing customer demand (Staples, 2013). Still, the decision to outsource to suppliers should be well-argued, and the possibility to insource made known and researched. By looking at the motivating factors for insourcing, companies are more aware of the situations in which insourcing can be preferred.

Focus on the importance of core competence has made companies outsource increasing amounts of their non-core competence production to suppliers in low-cost countries, enabling them to focus on their core competence (Stentoft, Mikkelsen, & Johnsen 2015). Outsourcing has played a crucial role in strategic sourcing decisions made by companies since the early 1990s (Bals et al., 2016). Given the maturity of the outsourcing market, there are signs of an increase in the number of clients debating whether to re-tender or insource an outsourced agreement that is not meeting expectations (Deloitte, 2013).

Motivators for insourcing can stem from the failures of outsourcing; however, the decision to insource is not always a result of a failed outsourcing venture but can be a step into a more strategic direction (Bals et al., 2016). Most companies still choose to fix failed deals by either renegotiating with the incumbent provider or re-tendering the work; therefore, insourcing should be considered a feasible option when the business case on business drivers makes sense (Deloitte, 2013). Signs of reconsideration of outsourcing decisions to low-cost countries and its financial implications have started to emerge (Stentoft et al., 2015). Insourcing as a method for companies to correct their operations is gaining more importance (Staples, 2013). Information regarding the motivators and possibilities of insourcing should be addressed and shared with companies to support the strategic option of insourcing.

### 2.3.3 Motivating Factors for Insourcing

Motivating factors for insourcing have been generally divided into strategic and operational categories (Stentoft et al., 2015). Strategic drivers include core competence, quality, and overall strategy, whereas operational drivers include unexpected costs and low wages (Stentoft et al., 2015). Insourcing can also be decided by reactive and proactive approaches, where reactive measures are taken as a result of a failed outsourcing decision, or proactive measures see insourcing as a strategic shift (Bals et al., 2016). However, Hartman et al. (2017) found that outsourcing decisions are more often proactive, whereas insourcing decisions tend to be more reactive. Outsourcing literature has identified two different approaches to outsourcing. Either companies are looking to maintain the company's competitive position or outsource to gain access to a new source of competitive advantage (McIvor, 2005. p.9). As the aforementioned are determined to be approaches for companies to change company boundaries, they can also be regarded as approaches to why companies would change company boundaries in the other direction.

Motivators for insourcing decisions described in the literature stem from varying fields. Quality and monetary aspects are most often represented in the motivators, but the motivators encompass a larger field. For example, Stentoft et al., (2015) identified lead time issues and quality as the most influential drivers for companies' insourcing decisions. Grella & Hofman (2021) noted that cost savings and quality improvements have been identified as the most frequent motivators for insourcing. But on a more strategic level, Drauz (2014) identified underutilised capacity as a significant motivator for insourcing decisions. Arnold (2000) stated that reconsidering outsourcing decisions can also be initiated by the increased dependency on suppliers' abilities resulting from increased outsourcing. Lastly, the viewpoint of where the motivating factors stem from has also been subject to investigation in literature as demonstrated by Hartman et al., (2017), who found that most insourcing decisions are triggered by a specific external event and not caused by a change in the internal environment.

When asset specificity is high, the possibility for opportunistic behaviour increases. The threat of opportunistic behaviour introduces the notion of a preferred governance solution equipped to safeguard the specific assets contractually; insourcing can provide the needed

governance support to combat opportunistic behaviour from suppliers (Poppo & Zenger, 1998). When the service is produced inhouse, the threat of opportunistic behaviours from suppliers is eliminated. Once the service is produced inhouse, the company can minimise its customers' fears of opportunistic behaviours by implementing proactive improvements in their operations (Wallenburg, 2009). The impact of the SARS-CoV-2 virus highlighted the importance of a clear and transparent supply chain, where efficient management plays a crucial role. Insourcing could be a solution to combat obstacles caused by the pandemic (Grela & Hofman, 2021).

Sundquist et al., (2015) point out that the benefits of outsourcing have received unjustified support. Outsourcing has become a victim of its success (Cohen & Young, 2006). Without precise specifications and statements of what is required from an outsourcing agreement, the probability of dissatisfaction increases. The effort needed to manage outsourcing risks and complexity has been identified to be misevaluated in companies (Ellram et al., 2013). Therefore, as time progresses and companies have more experience with outsourcing, the possibility of moving production of materials and services inhouse should be re-evaluated.

Outsourcing can be regarded as a reverse strategy of insourcing; therefore, the hurdles for outsourcing can be considered as motivators for insourcing (Kandil et al., 2020). Moreover, Drauz (2014) noted that motives against outsourcing are motives for insourcing. Another justification for the usability of outsourcing literature in the research of insourcing is given by Hartman et al. (2017), noting that insourcing research can credibly benefit from the extensive outsourcing literature and concluding that factors influencing outsourcing and insourcing decisions are similar as they both focus on minimising cost, improving quality, and increasing productivity.

Insourcing has received much less attention in the literature compared to outsourcing and is still regarded as an emerging research topic (Fratocchi et al., 2014). An extensive literature review was performed to identify motivators from relevant literature. The motivating factors selected for this table were evaluated with a few restrictions. The selected motivators were explicitly mentioned as motivating factors for insourcing decisions. Although the literature has pointed to the direction that motives against outsourcing can act as motives for insourcing (Drauz, 2014). By focusing only on motivators specifically looked at from an

insourcing perspective, the credibility of the motivators is increased. This delimitation resulted in fewer identified motivating factors compared to a scenario where motivators against outsourcing would have been added. The motivating factors identified from academic literature in the literature review are displayed in Table 1.

Table 1. Insourcing motivating factors identified from the literature

<b>Motivator</b>	<b>Reference</b>
Underutilised capacity	Drauz (2014); Hartman, Ogden, & Hazen (2017)
Lead time	Stentoft, Mikkelsen, & Johnsen (2015)
Quality	Stentoft, Mikkelsen, & Johnsen (2015); Adenäuer, Hoffmann, & Kayser (2008); Hartman, Ogden, & Hazen (2017); Grela & Hofman (2021); Wong (2008); Bogнар & Kotlarsky (2012)
Loss of know-how from outsourcing	Drauz (2014); Adenäuer, Hoffmann, & Kayser (2008); Hoecht & Trott (2006); Kakabadse & Kakabadse (2000); Lonsdale & Cox (1998)
Higher flexibility	Drauz (2014); Adenäuer, Hoffmann, & Kayser (2008)
Lower dependency	Adenäuer, Hoffmann, & Kayser (2008); Arnold (2000); Kumar & Eickhoff (2005)
Core competence	Adenäuer, Hoffmann, & Kayser (2008); Sundquist, Hulthén, Gadde (2015)
Overall cost saving	Hartman, Ogden, & Hazen (2017); Grela & Hofman (2021); Wong (2008)
Unexpected or high costs from outsourcing	Drauz (2014); Bergin, Feenstra & Hanson (2011); Jennings (2002); Kremic, Tukul & Rom (2006); Fratocchi, Di Mauro, Barbieri, Nassimbeni & Zaroni (2014); Kinkel & Maloca (2009); Pisano & Shih (2012); Stanczyk, Cataldo, Blome & Busse (2017); Wong (2008); Bogнар & Kotlarsky (2012)
Losing control over business process	Kumar & Eickhoff (2005); Hartman, Ogden, Wirthlin, & Hazen (2017); Wong (2008); Bogнар & Kotlarsky (2012)
Lower need for relationship management	Sundquist, Hulthén, Gadde (2015)
Changes in strategy	Richardson (1996); Wong (2008); Law (2017)
Economies of scale	Stentoft, Mikkelsen, & Johnsen (2015) ; Drauz (2014)
Expiring outsourced contracts	Bals, Kirchoff & Foerstl, K. (2016)

### 2.3.4 Enablers of Insourcing

If a company thinks of integrating a particular activity, it should assess its ability to carry out that activity given its current knowledge, experience, and skills. If it can't, the firm's capabilities don't provide a competitive edge, and other businesses can carry out this job more effectively (Gulbrandsen et al., 2009). Possessing suitable knowledge, experience, and skills will enable the insourcing decision, making the transition more efficient and effective.

Innovations which could be performed inhouse can enable the decision to insource a specific business process. Barbieri & Stentoft (2016) state that insourcing decisions or reshoring is closely related to supply chain innovations. They continue to describe how making radical or incremental changes in supply chains can be seen as innovations, as they modify the structure and process of the supply chain, ultimately creating value for all stakeholders (Barbieri & Stentoft 2016). Innovation in supply chains, especially for LSPs, has been identified as a way to differentiate themselves from competitors (Wallenburg, 2009). Insourcing, in general, has also been identified as a diversification strategy (Harrigan, 1984). When decisions impact the supply chain, managers are encouraged to keep in mind the long-term implications of their decisions and not focus only on quick fixes (Hartman et al., 2017).

Outsourcing activities have transitioned from encompassing only supporting activities to including fundamental business activities and playing an influential role in the competitive position of a company and its profitability (McIvor, 2005. p. 6). By insourcing, businesses can expand in a path that is strongly tied to their core competencies, businesses frequently grow in areas where their current expertise can be used to take advantage of fresh value-generating techniques (Gulbrandsen et al., 2009). Globalisation, information technology advancements, public sector reforms and increasing customer demands have increased the need for companies to be more adaptable and respond to market demands (McIvor, 2005. p. 6). By looking at the company's core competence, the company can enable the insourcing decision by seeing how they can grow in fundamental business areas that are influential in their competitive position.



### 2.3.5 Challenges for Insourcing

Companies can be faced with challenges when it comes to insourcing. The process for making an insourcing decision should be planned out properly so that the possible challenges are identified. Stentoft et al., (2015) identified that lack of resources, hasty insourcing process, and lack of necessary foundation for decisions about the insourcing process are the three main challenges companies face. Harrigan (1984) looked at the disadvantages of vertical integration, i.e., insourcing and identified topics from internal cost and competitive danger. They describe disadvantages related to internal costs, such as the possible need for extra costs resulting from coordinating insourcing, negative results from insourcing if the company is poorly organised, and synergies within the firm are not created to compensate for extra costs. Competitive danger disadvantages were described as mobility and exit barriers, can link underperforming departments together, loss of access to suppliers' information, overrated possible synergies within the company and hasty integration from managers before finding the best suitable way.

After identifying the possibility of insourcing, companies must assess whether they can implement the insourcing decision in their operations (Bals et al., 2016). If the company has not prepared and implemented a strategy it will follow in the future, the decision of whether to insource or outsource should not be considered, as making the wrong decision can have extensive negative implications (Brannemo, 2006). Insourcing decisions cannot be easily reverted; thorough consideration is needed to avoid possible negative results. Jennings (2002) emphasises how product and supply market evaluation and technological changes can influence markets in the long run; therefore, a long-term perspective must be included in the decision assessment.

Opportunities for strategic improvement by changing the sourcing strategy might be missed if the advantages of insourcing are not recognised. Managers need to be able to identify these opportunities and consider insourcing as a viable option (Harrigan,1984). Companies might be eager to switch to insourcing in some parts of their operations, but it is important to remember to evaluate their ability to manage the outcomes of the decision (Bals et al., 2016).

## 3 Research Methodology

It is important to carefully plan a research methodology before conducting a study. Choosing a suitable research approach is fundamental to the success of the research, as not all research methods are suitable for all research types. The goal of this master thesis is to identify motivating factors in the insourcing decision made by the case company operating in the logistics industry. A qualitative case study approach was chosen to look at the main research question, and qualitative content analysis was chosen to analyse the study results.

### 3.1 Research Design

Qualitative research is used to describe and explain the event; its foundation is built on creating and comprehending the meaning of the event (Fossey, Harvey, Mcdermott & Davidson, 2002). A case study is a suitable research approach when the researcher has little control over the events, and the focus is on a contemporary phenomenon (Farquhar, 2012). Decisions regarding the make or buy process in the case company are done internally by managerial level staff; therefore, it can be said that the author has no control over the make or buy decision. Moreover, the decision made by the case company was made recently and therefore classifies as a contemporary phenomenon.

This case study is explorative in nature, as the main goal is to identify motivating factors for insourcing decisions focusing on the logistics and supply management theory. Ellram (1996) classified different research methods for research in the logistics industry and pointed out that a qualitative case study is an appropriate methodology for logistics research with an exploration objective. Kähkönen (2011) also supports the notion of qualitative case study methodology being a useful and suitable research method for purchasing and supply management research. He continues that the case study method is a method that can provide rich and meaningful data, which can be seen as critical in the field of supply relationship management.

## 3.2 Data Collection

Both primary and secondary data will be used for this case study. By triangulating the evidence with the use of several different sources of data, the research findings will gain validity as the phenomenon is investigated from several different perspectives (Farquhar, 2012). In case studies, literature is used to understand and theorise the situation (Farquhar, 2012). Supply management literature is used to support the findings of this case study. Literature supports the research design of a case study, but a literature review also provides the foundation for research by building on existing theory and identifying the research gap from which research questions and strategy can be drawn (Kähkönen, 2011). An extensive literature review with a combination of supply management theory will provide a foundation that supports the case study methodology to analyse the motivating factors for companies in insourcing decisions. Combining a case study with interviews creates a scenario where more in-depth reasoning for the underlying reasons and the backdrop of the case can be gathered (Kähkönen, 2011). The main unit of analysis will be interviews conducted with managers in the case company. These managers were chosen based on their intensive participation and knowledge in the research insourcing decision. The number of managers involved in the decision-making was only two. Therefore, the number of interviews will be limited to two. The number of interviews is not extensive; however, other employees in the case company were not included in the decision-making process. Including additional participants would skew the interview results, as the amount of their knowledge on the insourcing decision is limited. There is no set number of interviews that must be completed in order to guarantee the study's trustworthiness, to conduct trustworthy qualitative research, the interviews must be in-depth and thorough enough (Fossey et al., 2002).

### 3.2.1 Primary Data

For this study, a semi-structured interview method was chosen since it allowed the conversation to flow more naturally. Additionally, it gives the interviewer more freedom to rearrange the questions or talk about new subjects throughout the interview (Kallio, Pietilä, Johnson & Kangasniemi, 2016). In order to convey and interpret the question that arises from the phenomenon, semi-structured interviews are recognised as appropriate (Saunders

Lewis & Thornhill, 2009). According to Kallio et al., (2016), interview questions should be broken up into themes with follow-up inquiries, and the topics must be logically organised and advance through the primary ideas of the research topic. The interviews were conducted during June 2023 through Microsoft Teams software and were recorded and transcribed to ensure data retention and later analysis. The interviews were conducted in Finnish, as it is the mother tongue of all participants. Details of the interview are presented in Table 2.

Table 2. Details of interviews

<b>Interviewee</b>	<b>Interviewee's position</b>	<b>Length of interviews</b>
Interviewee 1	Director, Air Freight	58 min
Interviewee 2	Manager, Air Import	1 h 38 min

### 3.2.2 Secondary Data

To increase the study's validity with triangulation, secondary data from the logistics industry will be examined. The data being used is collected by someone else for the purpose of other than this research. The secondary data was selected for this research as they build on the understanding of the case study results. Secondary data were gathered from the Logistic Performance Index provided by the World Bank and from a study by the European Commission analysing the EU logistics sector to support the development of EU strategy for freight transport logistics. Data regarding the levels of insourcing and outsourcing per marker segment in the logistics industry is provided to visualise the level of insourcing in the logistics industry.

### 3.3 Data Analysis

Findings from the interviews will be analysed using qualitative content analysis method. Using text and other qualitative data to draw conclusions is a systematic and objective

research technique known as qualitative content analysis (Krippendorff, 2018, p. 24–25). Qualitative content analysis aims to produce a meaning for qualitative material-based categories resulting from coding frames (Schreier, 2012, p.1). The advantages of qualitative content analysis stem from its systematic and repeatable characteristics; because conclusions are generated from large data sets, qualitative content analysis can also be considered a data reduction approach (Stemler, 2000).

Both inductive and deductive methods can be used to conduct qualitative content analysis. Both approaches adhere to the same procedure, which entails planning, organising, and reporting outcomes. In the phase of preparation, appropriate data gathering for the qualitative content analysis is done (Elo, Kääriäinen, Kanste, Pölkki, Utriainen & Kyngäs, 2014). A deductive approach involves gathering all relevant data and coding it to fit with corresponding categories established in advance based on theory, whereas an inductive approach involves open coding, creating categories and abstractions based on the content (Elo & Kyngäs, 2008). This difference between the two approaches is realised in the organisation phase (Polit & Beck 2012, 80). This master thesis will follow an inductive approach to analyse interview data.

The number of interviews for this master thesis will be limited to two. Only two managers were involved in the decision-making process, and therefore, they are the ones who have the most knowledge on the topic. If the number of interviews were increased to have more interviews, the validity of the results would be compromised, as other employees in the company do not possess the same amount of knowledge regarding the insourcing decision. The low number of interviews may influence the level of practical contribution for other companies, but not the findings of this single case study. Thus, it must be noted that the results of this study are representable only for this single case study and can only be generalised in a limited capacity for all insourcing decisions made by other companies or companies operating in other industries.

## 4 Study Results: Motivating Factors for Insourcing Decision in a Logistics Company

The results from this study will be presented in this chapter. Firstly, an introduction to the logistics industry is provided to gain a deeper understanding of the industry in which the case company operates. After this, the chapters are divided so that the main research question of motivating factors will be gone through first, after which the sub-questions relating to enablers and challenges will be discussed.

After analysing the interviews, a set of concepts were identified. These concepts are the organisational aspect, operational performance, resources, control, and cost. These concepts will be used to categorise the results in tables. Previous literature will be used to build on the findings of motivating factors for insourcing decision for the case company by connecting the identified motivating factors for insourcing decisions identified from the literature to the identified motivating factors for insourcing from the interviews.

An introduction to the decision-making process will be introduced so that the reader is presented with a comprehensive insight into this single case study. This will be done by describing the decision-making process for the insourcing decision in Figure 4.

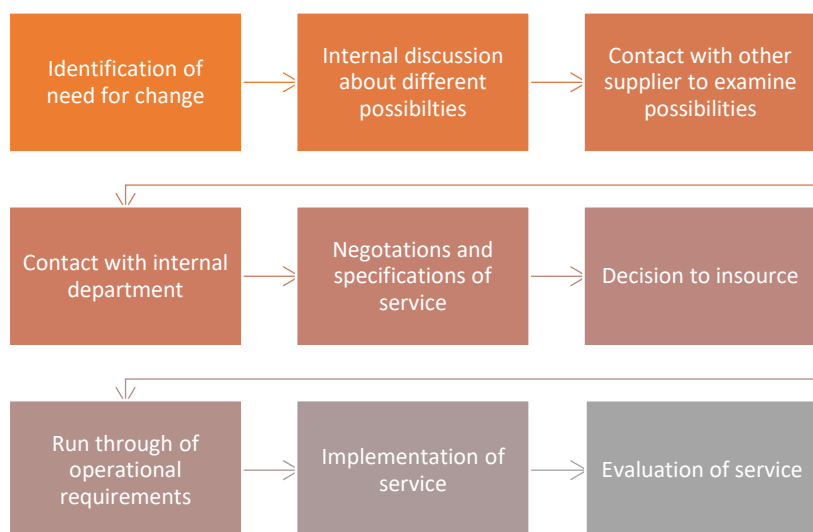


Figure 4. Decision-making process flow in the single case study

The case company had previously outsourced the service of truck transportation from central Europe to Finland to an external supplier. The quality of the service was not meeting the standards the case company wished for. This triggered the consideration for a change in this supply chain, making the decision to insource reactive.

#### 4.1 Air Freight Industry and Levels of Insourcing

The air freight industry faces many challenges focusing on demand, such as global economic shifts, oil price fluctuations, uncertainty in security, trade protection and environmental guidelines (Merkert, Van de Voorde, & de Wit, 2017; Debbage & Debbage, 2021). Therefore, it is important for companies to innovate their processes by adding value to their products, ensuring that the products meet evolving customer demands. By innovation and reconsideration of company boundaries, companies attempt to remain competitive (Merkert et al., 2017). The competitive advantage of LSPs (Logistics service providers) is generated from performing logistics services for customers, meeting requirements and exceeding expectations in a cost-effective manner, with better service than they could perform inhouse (Deepen, Goldsby, Knemeyer, & Wallenburg, 2008). Logistics services and their performance play an influential role in the overall performance of a firm, even when outsourced (Stank, Goldsby, Vickery & Savitskie, 2003). A LSP's performance will influence the supply company's performance; therefore, the LSP should focus on organising their operations in the most efficient way to benefit themselves and their customers.

LSPs (Logistics Service Providers) are crucial for international market growth, with companies relying on outsourced logistics services. Conversely, LSPs have enabled the internationalisation of manufacturing production (Zhu, Lean & Ying, 2002). Air freight's overall economic impact surpasses its volume, with the global value of air shipments being 35% and volume only 1% (Shepherd, Shingal & Raj, 2016). Although air cargo has a large economic impact, it tends to have low profit margins (Merkert, et al. 2017). A survey found that almost all companies (92%) use LSP services, and LSPs are involved in almost 75% of all international shipments (Murphy, Daley & Dalenberg, 1991). The supply chain of air freight consists of three main players. These players are the shipper, the freight forwarder, and the carriers. The shipper wishes the item to be delivered to a said point, and the freight

forwarder arranges all required intermediate steps from the door-to-door, such as customs clearance, and the carrier is responsible for the airport-to-airport transportation. The case company for this master thesis is a freight forwarding company. Therefore, the emphasis will be on this section of the logistics industry.

A freight forwarder acts as a middleman between shippers and carriers. To make shipments more effective and affordable, freight forwarders typically combine the goods of several shippers into large quantities of freight before booking cargo space with the carriers, and the freight forwarder has a say in the choice of shipping route, opting for the most suitable and financially sound option (Chu, 2014). In this case study, this notion is demonstrated as the decision of the freight forwarder to give customers a cheaper option of booking air transportation to Central Europe and organising further delivery to Finland instead of only providing a much more expensive option of direct flight to Finland. Freight forwarders offer a wide range of services to satisfy the diverse needs of customers and enterprises, assembling seamless door-to-door services from the shipper to the consignee by air, sea, and land (Chu, 2014). Providing the truck transportation inhouse increases the seamlessness of door-to-door service.

To gain perspective on the logistics industry and how common insourcing and outsourcing is, a figure depicting these levels by market value for different segments is presented with an emphasis especially on air freight, less than truckload and contract logistics. The case company is a contract logistics company. Customers make contracts with the case company to operate their logistics requirements. However, as is researched in this master thesis, contract logistics companies also outsource services. The department handles air freight shipments and compliments their services by including the possibility of truck transportation to give customers a cheaper option. Therefore, from the below chart, we can see the general level of in and outsourcing in contract logistics, but also more specifically the services related to this research which are air freight and less than truck load. The department from the case company being researched is the air import department.

Figure 5 presents the levels of segments of the logistics industry being in and outsourced in in Finland. As for the case company, air freight is mostly outsourced as it requires significant investments to acquire and operate air freight. Once the freight is offloaded from the plane



it is included in the less than truckload segment, as the individual shipments are usually more than 30kg and less than two or three tonnes. If the shipment would be less than 30kg, the economically more viable option would be to transport it by courier service. If the shipment would be more than two to three tonnes, it would be economically more feasible to transport by sea. Because the freight being transported are individual shipments, the segment will be less than a truckload, even if they add up to a full truckload. The less than truckload shipment is outsourced 91% and insourced 9%. Here is where a difference to the market norm can be found in regard to the case company’s insourcing decision.

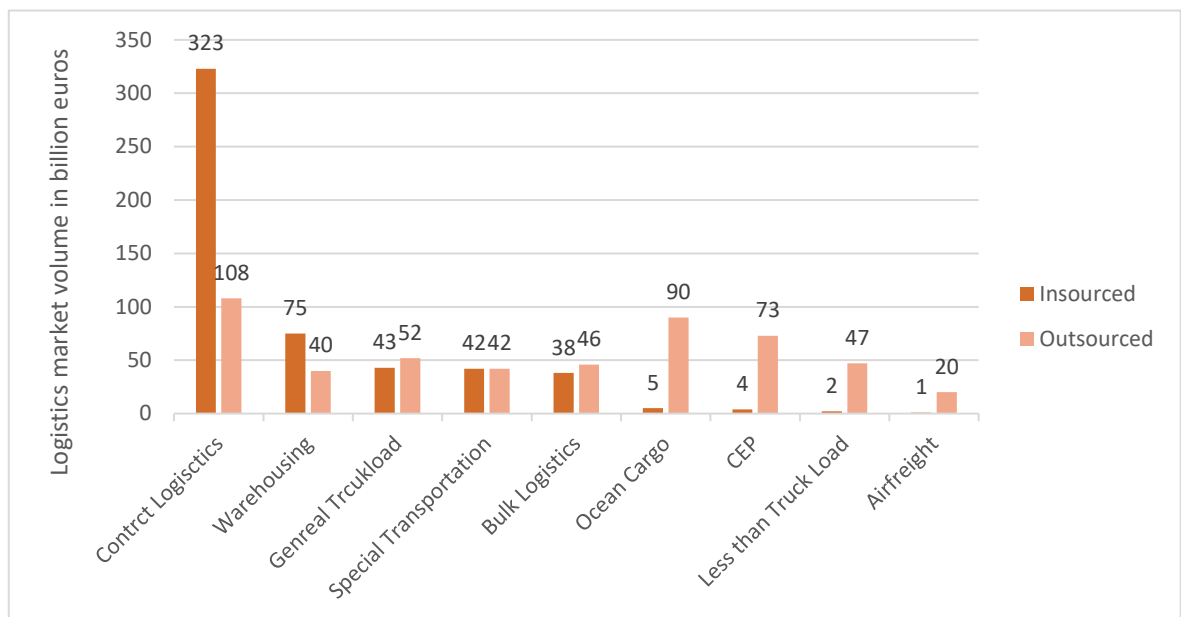


Figure 5. Breakdown of logistics market value by insourced and outsourced segments in 2016 Europe 2016 (Statista, 2023)

The case company is deciding to counter the logistics industry. However, this doesn’t necessarily mean that the decision to insource is wrong. The case company can outperform their competitors by differentiating themselves from competitors with above-average service. When control of this part of the supply chain is brought back to the case company, they influence the service's operational performance and cost structure more. With insourcing, the case company can gain more competitive advantage, benefiting their operations and customers.

## 4.2 Motivating Factors for Insourcing Decision

On multiple occasions, both interviewees emphasised that the company's organisational structure had an influential role in providing the possibility to make this insourcing decision. Therefore, the organisational aspect was chosen as one of the concepts for analysis. A concrete motivator that came up in the interview referring to the organisational aspect was the aspect of change in strategy. The decision to insource the service in question was regarded as a change in strategy for the department as it is a fundamental change in the department's operational flow to increase the operational performance of the department. The change in strategy changed the organisational aspect of the department. The change in strategy occurred because the company noticed that it could take advantage of economies of scale after it won a few larger tenders in combination with the realisation that the current outsourced truck transportation was not meeting the required standards. The decision to insource modifies the boundaries of the company and can be therefore regarded as a change in strategy. The strategy of the case company includes collaboration between different branches of the company. This notion of collaboration was identified as a motivator for the insourcing decision by one of the interviewees as insourcing received organisational support from the beginning to increase collaboration between different branches, which is also stated in the company's overall strategy.

*"Perhaps we also have this kind of group-level thinking, where we can leverage each other. In fact, it's part of our strategy that if a partner company can provide these services, at least explore those options. It's a strategic standpoint and, of course, an economic one too, that we keep the same money circulating within the group rather than paying it outside the organisation. And, of course, the breadth and capability of the network come into play."*  
*Interviewee 1*

Operational excellence is also mentioned in the company's strategy as something everyone should try to aim towards. The outsourced service was not living up to the standards of operational excellence. Therefore, this mention in the strategy motivated the department to make changes to their company boundaries and insource – in order to increase their operational excellence. Moreover, the decision to insource the service also meant that the money flow from acquiring the service would be kept inside the organisation as the service

is bought from another branch within the same company. The motivator of collaboration also supports this motivator.

Operational performance in general came up in the interviews many times as the reason why the company wanted to insource the service in question. The outsourced service was not meeting the operational performance levels which were hoped for by the department. The increase of operational performance was a motivator for the insourcing decision as better operational performance will increase the company's competitive advantage. The aspects which needed to be improved were overall quality, lead time, reliability, traceability of shipments, and information flow for more accurate information. Interviewee 1 elaborates on how insourcing would increase their operation performance.

*"Well, I mean, that reflects maybe in the quality aspect, that when it's within our own network, it's about control. If there's any deviation, we can easily get answers and inform others. And if there's a deviation, arranging corrective measures can be easier within the organization." Interviewee 1.*

An important aspect which motivated the company to insource the service according to the interviews was the resources which were available in the company. The company had all the resources needed to operate the service, meaning no additional monetary investments were needed. The availability of resources assured that the transition from outsourcing to insourcing would be able to be conducted quickly, without major delays because a resource would still need to be procured. The company was motivated by the fact that once the service was insourced, it could leverage economies of scale with its resources to improve the efficiency and effectiveness of its operations.

*"I would believe that x (case company) has better resources to handle this. Certainly, the size of the companies brings a certain ease to this. We have many resources, much equipment, and various contacts with whom these matters can be discussed. So, that certainly motivates it in a different way." Interviewee 1.*

The resources that the company possesses around the service are also part of the company's core competence. Insourcing a part of a company's core competence is seen as a motivating factor in the insourcing decision. The resources in question were also identified by the interviewee's own experience to be better compared to the average freight forwarding

company. Therefore, the capability and capacity of the case company's resources were a motivating factor. Managers and operational staff's knowledge and capabilities were also mentioned as a motivating factor in the insourcing decision as the knowledge and capabilities ensure that the company is able to operate the service themselves in an efficient manner.

As the previous outsourcing contract took away control from the company on how the business process is handled, the notion of gaining control from insourcing acted as a motivator.

*"The idea originated from the desire to essentially have a direct influence on the production or the service we provide. That is, if you outsource it to someone else, naturally you have requirements and preferences, and you communicate those to the service provider. But sometimes it can be a bit more challenging actually to achieve the desired service level. So, if you produce it yourself, you can have a concrete impact on processes, personnel, and the entire setup."  
Interviewee 2*

The company wanted to have the control to make decisions about the shipment based on their own experience. By having control and influence over the business process the company is able to improve their operational performance, which is identified as one of the main concepts from the interviews. The power to make decisions on the margins of the shipment costs is a concrete way in which control over the business process can be used once control is gained back after insourcing. This can be done by determining how many trucks will depart based on the number of shipments coming in and leveraging economies of scale. By having control over the business process, the company can be certain that its shipments will receive priority and be handled as smoothly as possible. On the contrary, when a business process is outsourced, getting priority handling for your company's shipments is uncertain and challenging as the information flow is not transparent.

Cost was identified as the last concept for motivating factors from the interviews. The interviewees empathised that operational performance was a bigger motivator in the insourcing process. The end goal was to increase the operational performance of the service and if the insourcing decision had only brought cost savings, it would not have sufficed as a

big enough motivator to change company boundaries. However, cost still acted as a motivator as the insourcing decision would bring cost savings for the company.

*"The reasons why it was necessary to improve the quality or consider this localization were not solely about cost. It was also about the fact that even if it had been inexpensive, if it still didn't match the service level that customers expect, then it's still a failed product. Quality has to be there." Interviewee 2.*

Results of the motivating factors identified from the interviews are presented in Table 3. The connection between the motivating factors identified from the interviews and their linkage to motivating factors identified from the literature are also presented. By combining the results from the literature review and the interviews, the results of this case study are clearly presented as new and old findings will be differentiated. Sections with a reference from the literature on the same line are connected and identified from previous literature. The lines which do not have a reference are new discoveries from the interviews.

Table 3. Motivating factors identified from interviews connected to the literature

Concept	Motivator	Literature
Organisational aspect	Change in strategy	Richardson (1996); Wong (2008); Law (2017)
	Collaboration part of company strategy	
	Operational excellence part of company strategy	
	Flow of money kept within the organisation	
Operational performance	Lead time	Stentoft, Mikkelsen, & Johnsen (2015)
	Quality	Stentoft, Mikkelsen, & Johnsen (2015); Adenäuer, Hoffmann, & Kayser (2008); Hartman, Ogden, & Hazen (2017); Wong (2008); Bognar & Kotlarsky (2012)
	Need for change due to underperforming outsourcing / Unexpected costs from outsourcing	Drauz (2014); Bergin, Feenstra & Hanson (2011); Jennings (2002); Kremic, Tukul & Rom (2006); Fratocchi, Di Mauro, Barbieri, Nassimbeni & Zanoni (2014); Kinkel & Maloca (2009); Pisano & Shih (2012); Stanczyk, Cataldo, Blome & Busse (2017); Wong (2008); Bognar & Kotlarsky (2012)
	Higher flexibility	Drauz (2014); Adenäuer, Hoffmann, & Kayser (2008)
	Traceability of shipments	
	Reliability	
	More influence in case of disruptions	
	Efficient and accurate information flow about shipments	
Resources	Economies of scale	Stentoft, Mikkelsen, & Johnsen (2015); Daruz (2014)
	Core competence	Adenäuer, Hoffmann, & Kayser (2008); Sundquist, Hulthén, Gadde (2015)
	Capacity and capability of resources	
	Resources available in house	
	Above average resources compared to smaller competitors	
	Knowledgeable operational staff	
	Systems	
Control	Gaining control over business process	Kumar & Eickhoff (2005); Hartman, Ogden, Wirthlin, & Hazen (2017); Wong (2008); Bognar & Kotlarsky (2012)
	Lower dependency on supplier	Drauz (2014); Adenäuer, Hoffmann, & Kayser (2008); Arnold (2000); Kumar & Eickhoff (2005)
	Influence on marginal cost of shipments	
	Own operation has priority	
Cost	Cost savings	Hartman, Ogden, & Hazen (2017); Grela & Hofman (2021) Wong (2008)

The interviewees were asked to rank motivating factors influencing their insourcing decision from motivating factors which were identified from the literature. The ranking was to be put in the order of importance for their insourcing decision in question. The motivators ranked in the top five are from each concept identified from the interviews. Representation of the results is presented Table 4.

Table 4. Top five most important insourcing motivators by interviews

Interview 1		Interview 2	
1	Core competence	1	Quality
2	Overall cost saving	2	Lead time
3	Higher flexibility	3	Higher flexibility
4	Quality	4	Gaining control over business process
5	Changes in strategy	5	Economies of scale

In the interviews, an important distinction came across about the interconnectedness of the motivating factors. The interviewees had to take a moment to put the motivating factors into an order, because they felt that the motivating factors influenced each other and were linked to their success. For example, in interview two the interviewee mentioned that quality is influenced by the rest of the five motivating factors. Explaining how lead time and higher flexibility increase quality, achieved by gaining control over business process whilst gaining control over business process opens the door for economies of scale.

### 4.3 Enablers for Insourcing Decision

For the organisational aspect concept, multiple enablers were identified from the interviews. It was stated that the organisation structure of the company enables the company to make department-specific changes and decisions. This is supported by the independence of the departments from the top management for approvals for decisions, in this case, the decision to insource.

*“Our organisational structure is such that it enables department-specific changes and decision-making. So, we don't need to ask for permission from the CEO or some regional manager, but we can agree among the flight control as it were, on these kinds of commercial and operational changes.” Interviewee 2*

Efficient information flow within the company was also identified as an enabler as it makes the setting up of operations easier and quicker. The interviewees concluded that without the support of the organisational structure, the insourcing process would have taken much longer and would have required much more effort. Therefore, the notion from the RBV theory is implementable here as it states that an organisation can increase the company's competitive advantage as it supports the resources and capabilities of the company to deliver value.

The availability of resources that were possessed by the company already before the insourcing decision was identified as one significant enabler. No additional investments were needed because the company already had the resources available for operating the service when resources are already possessed by the company the change of company boundaries to insourcing will be more efficient and straightforward.

*“In this case, so there was no need to invest in any equipment, personnel, or systems as such.” Interviewee 2*

The resources that enabled the company to make the insourcing decision were stated as not only physical resources such as trucks and systems but also managers' and operational staff's capabilities. These resources are valuable for the company and enable the company to exploit opportunities and neutralise threats as they will improve operational performance and thus customer satisfaction and financial outcomes. The same notion is displayed in the RBV theory, grounding the link to RBV.

In the concept of control, a few enablers were identified. A current enabler that was identified from the interview relates to the flight over ban above Russia, resulting from the war in Ukraine. As the ban forces airlines to make longer routes to avoid Russia, the importance of a hub in Central Europe increases. Direct flights from Asia to Finland have become more expensive and infrequent because the flight must deviate from the route and fly past Russia, which means more fuel is required, forcing the amount of shipments to be decreased as



amount of fuel increases. This raises the number of shipments routed through Central Europe. As a result, the number of shipments being transported from central Europe to Finland by truck increases, enabling a higher volume for the truck transport and increasing control in the industry.

*"As the aircraft is heavier, the significance of Central-Europe in air freight also increases. This further supports the reduction of uncertainty because those shipments must be routed through there (Central-Europe) anyway."  
Interviewee 2.*

Additionally, the geographical location of Finland acts as an enabler for insourcing decision as the number of operators who work on the central Europe Finland axis is limited. This increases the case company's control within the industry.

Interviewee 1 described both Finland's geographical location and the fact that the case company has exports from Finland being enablers.

*"If you have, for example, an import load to Finland, but as a Central European operator, you don't have any exports from Finland, that would mean you would drive back empty. That necessity would then be reflected in the import prices, which would either make it more costly or undermine its competitiveness. In that sense, yes, Finland's geographical location does limit those suppliers." Interviewee 2*

In order to distribute shipments all the way to Finland, the operator has to have other shipments in the same direction for the route to be financially viable. The case company has import and export shipments to and from central Europe, enabling this route to increase the company's competitiveness. Moreover, the interviewees pointed out that after they insourced the service, they had more control over the whole cost structure of the service. Meaning, that they could optimize the number of trucks departing. Because of the uncertainty of the airfreight industry, this influence on the cost structure of the service is especially important. This enabler adds value to the service, which relates to the notion of value from the RBV theory. The enablers are presented in Table 5.

Table 5. Enablers for insourcing decision

Concept	Enablers
Organisational aspect	Organisational structure makes department-specific changes and decisions easier
	Independence from top management approvals for decision-making
	Efficient information flow within company
Operational performance	Accurate and relevant information easily available
	Resources increase operational performance quality
Resources	Needed resources capabilities and capacity is available inhouse
	Better resources than most of competitors
	Managers' capabilities
	Operational staffs' capabilities
Control	Russia flight over ban increases trucking from central Europe to Finland
	Low number of companies operating Central Europe Finland axis
Cost	Company has export from Finland which lowers cost for import shipments
	More influence on cost strategy

#### 4.4 Challenges in Insourcing Decision

The interviewees described challenges related to the organisational aspect faced in the insourcing decision. The focus of the risks on this concept stemmed from the facts that the risk was borne by the company itself as a result of the insourcing decision. The decision to bear the risk of producing the service inhouse opened the possibility to influence the execution of the service. However, the decision brought risks that the company did not have to consider the financial risk when the service was outsourced.

*"As a challenge in that decision, of course, it's the financial aspect, that when we insource it, we naturally carried or took on the risk related to the financial side as well. Like, if there's a partially filled truck and we're still paying the fixed price for it, then it's deducted from our end." Interviewee 2*

These risks included the service's overall success, which was dependent on the performance. Additionally, in the organisational aspect concept, the interviewees noted that the business sectors which handle the trucking and air import services are different. The separation creates some cultural differences between the two sectors, and therefore the operability of

the two sectors had differences. This challenge had to be overcome at the beginning of the insourcing process to make sure that there was a mutual understanding of how to operate the service.

Operational performance was a concept which received much attention during the discussion of challenges. The main finding circled around the aspect of uncertainty in the operation of the service and how it can be influenced by special characteristics of the logistics industry. For example, the frequency and quantity levels of the shipments are difficult to estimate as there is no set number of shipments customers need to buy during a period.

*"The main challenge, and of course, if you consider it in terms of operational activities, is that when it comes to material flows, unfortunately, they are not consistent." Interviewee 2*

Decisions on how many trucks are booked are based on the realised shipments, but the final information about the number of shipments coming is available only when the flight departs. An estimation can be made beforehand based on planned shipments. However, the unpredictability of the airfreight industry impacts the uncertainty of the service. The certainty of a shipment departing with Finland as its final destination is made certain only when the plane has departed with the shipments on board. If shipments are unable to depart from the origin and the estimated time of arrival changes, the number of shipments planned on the truck changes. The combination of the lack of a set number of shipments and the uncertainty of the airfreight makes it difficult to predict the number of trucks that should be scheduled to depart.

The topic of information was also discussed which relates to operational performance in the results. As was stated previously, the two business sectors which handle trucking and air import are separate and they have not joined forces previously to operate in the same way where collaboration is extensive. This resulted in a challenge of information flow at the beginning of the insourcing process because there hadn't been a connection beforehand. This challenge was tackled in the early stages, however, the capability to define and convey requirements for the operation of the service was identified as a challenge. The reason for this was that the two business sectors both operate in the logistics industry, however, the

characteristics of both sectors are quite different. For the air import sector, timelines and schedules are extremely important, and deviating from them can be very costly. Other parties involved in the supply chain require tight schedules and charge for delays based on hours. Additionally, air freight is the most expensive mode of transport. The reason most customers choose air freight is speed. If there are transportation delays, air freight's added value is lost. Therefore, delays must be eliminated. In the trucking sector of the company, schedules and timelines are respected and important, but the importance and the repercussions of delays is lesser. This aspect was described why Interviewee 1.

*"Their understanding of our needs might not have been very clear, especially how critical these schedules are for these shipments. We were kind of on the same page as others, even though we wanted special attention for these, that it's relatively sensitive and they need to go smoothly without any setbacks and such. But maybe that was a challenge initially. Still, I believe we managed to clarify it quickly and convey to them that any deviations must be reported very promptly." Interviewee 1.*

Clearly defined guidelines of what is needed from the trucking service is important, only with clear guidelines to which the service should try to reach, can the service improve the overall offering and competitive advantage of the company.

Looking at challenges resulting from the decision to insource the service, the unpredictability of performing the service and the correct levels of resources required for it generate a challenge of bounded rationality. It is difficult for managers and operational staff to decide on the correct level of resources they should possess and have in operation due to the unpredictability of material flow. These challenges were not present when the service was outsourced as these decisions were made by the company the service was outsourced to. Moreover, one interviewee mentioned that the resource package could be moved to another provider without hurting the added value of the service. From this, an interpretation can be made that the resources do not hold high levels of asset specificity. Therefore, the service is considered relatively easy to replicate by competitors as the resources used do not hold many undisclosed or secret resources. By making investments smaller LSP companies can imitate the service, or larger LSPs might be able to imitate the service without substantial investment. One factor influencing the imitability of the service is the frequency and amount

of the shipments which holds an important position in the profitability of the service. If competitors were able to gather the same levels of shipments, the service could be imitated and operated profitably. The challenges are presented in Table 6.

Table 6. Challenges for insourcing decision

Concept	Challenges
Organisational aspect	Monetary risk is borne by the company itself
	Cultural differences between business sectors
Operational performance	Uncertainty in frequency
	Information flow obstacles when changing operations
	Difficulty to specifically convey what is needed for this service
	Difficult to predict number of needed resources
Control	Relatively easy to replicate
	Frequency not controllable
	Asset specificity not high
Cost	Extra costs from possible empty trucks

## 5 Discussions

The aim of this master thesis was to understand the underlying motivating factors which guided the case company's decision to insource a part of their supply chain. The service in question was previously outsourced to an external supplier, and after considerations of the underperforming relationship, the case company decided to insource the service. Therefore, the decision to insource was reactive, which follows Hartman et al. (2017) findings of that insourcing decisions tend to be more reactive, whereas outsourcing decisions tend to be more often proactive. By evaluating insourcing and outsourcing decisions, companies can realize an effective purchasing and supply management function (Gulbrandsen et al., 2009). This is important because purchasing and supply management can provide companies with different approaches to manage their costs and maximise their resources (Kocabasoglu & Suresh, 2006).

Five main concepts were identified from the conducted interviews. The diversity of motivating factors and the diversity of concepts in which they were placed, demonstrated the complexity and extent of the insourcing decision. The identified concepts which were used to categorise the findings for each research question were organisational aspect, operational performance, resources, control, and cost. This finding aligns with Stentoft et al., (2015) stating that motivators for insourcing decisions are generally divided into strategic and operational categories. Motivating factors examine why the company wants to insource whereas enablers demonstrate how the case company already needed resources to carry out insourcing. Challenges look at which hurdles the company faces when making the insourcing decisions. By investigating the results from a theoretical perspective, a discussion between the study's empirical results and theory will be formed to gain a more comprehensive understanding of the decision.

### 5.1 Motivating Factors are Interconnected and Diverse

This case study brought new perspectives on what motivated the case company to insource. Connections to the conducted literature review were identified, however, new motivators

which were not found in the literature were also identified. The results demonstrated how motivating factors for insourcing decisions stem from different perspectives and are often interconnected. This finding indicates that a single motivating factor cannot be named in this insourcing decision, because one motivator will build on another motivator. Emphasis was placed on the service's operational performance, which consisted of multiple motivating factors. By making the insourcing decision, the case company saw that the resources they possessed and changes which would happen in their operations as a result of insourcing, would increase in their operational performance and lead to a higher competitive advantage for the company.

The diversity of motivating factors identified from the interviews demonstrates the complexity of insourcing decision-making. The decision to insource affects many aspects of the case company's operations and strategy, building on the complexity. The identified motivating factors followed the same categorisation as stated by Stentoft et al., (2015) as strategic and operational. The diversity of motivating factors additionally demonstrated the magnitude of possibilities the company held for insourcing the service. As Gulbrandsen et al., (2009) indicated, companies usually grow in areas where they have current expertise and are strongly tied to their core competencies, with this premise they can take advantage of fresh value-generating techniques. The identified motivating factors showed that the case company possessed expertise in parts of its core competence. Therefore, it can be concluded that it made strategic sense for the case company to insource the service because they could take advantage of fresh value-generating techniques.

Literature has stated that companies often focus on cost when conducting make or buy decisions (Brannemo, 2006; Nikolarakos & Georgopoulos, 2001). However, the results of this case study show that cost was not the main motivating factor for the insourcing decision. Even if an external supplier had been a less expensive choice but the service quality sub-optimal, it would have not been chosen. Therefore, the results lean more towards the findings of Grela & Hofman (2021) who noted that cost savings and quality improvements have been identified as the most frequent motivators for insourcing as quality improvements were empathised more than cost savings, but cost savings were included in the results. By increasing the overall operational performance, the total cost ownership would decrease and

therefore insourcing would be the preferred option. As stated by (Stentoft et al., 2015), the hidden costs of outsourcing are becoming evident for companies, resulting in more emphasis being placed on the total cost of ownership, which motivates companies to insource.

The viewpoint of the logistics industry in this research brings more significant insight specifically for insourcing decisions made in the logistics industry. The identified motivating factors included findings which have been as stated motivating factors for insourcing decisions in other fields as the literature review did not have a limitation on industry. By comparing the findings for motivating factors from the interviews and research on what increases competitiveness in the logistics industry an inference can be made that the motivating factors for the insourcing decision have similarities to aspects that increase competitiveness in the logistics industry.

In order to justify the importance of a change in the boundaries of a firm and the decision to insource a part of the supply chain, the most important factors influencing customers' choice of freight forwarder should be identified. The competitive advantage of LSPs is generated from performing logistics services for customers, meeting requirements and exceeding expectations in a cost-effective manner (Deepen et al., 2008). By identifying what increases the competitiveness of companies in the industry, the motivating factors in this case study are more easily supported. The factors influencing the competitiveness of companies in the logistics industry are presented by looking at academic literature as well as logistics performance index components. This connection is demonstrated in Figure 6, how the motivating factors identified from this study are connected to competitiveness in the logistics industry.



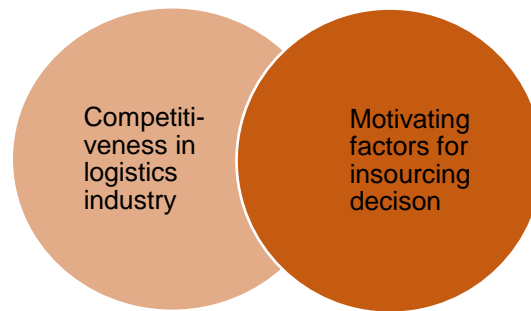


Figure 6. Relation between case company insourcing motivating factors and competitiveness in the logistics industry

Academic literature has examined which characterises influence customers' choice of freight forwarder for air freight transportation. According to Voss, Page, Keller & Ozment, (2006), the three most crucial factors for customers to take into account when choosing the freight forwarder to convey their goods are security, resilience, and cost reduction. Matear and Gray (1993) stated that freight forwarder timing and price features are significant variables for customers when making their decision regarding freight services when it comes to the selection of freight forwarding services. He continues that performance and schedule are significant factors when choosing maritime transport services, while a combination of schedule and space is significant when choosing air transport services. According to Murphy and Daley (1997), while choosing an international freight forwarder, shippers should consider the forwarder's experience, dependability of service, capacity for providing pertinent information, company reputation, and financial standing.

Logistics companies should take these requirements into consideration when deciding whether to insource or outsource a service - with which option can they best meet customers' requirements. By combining the findings of this case study and factors influencing freight forwarder selection identified from the literature, the motivating factors for this case study can be understood more comprehensively especially for the logistics industry, resulting in more valid answers to the main research question. All factors influencing freight forwarder selection are identified to be influenced by the motivating factors gathered from interviews. Combining selection criteria increases the data triangulation of the case findings. The results of this are presented in Table 7.

Table 7. Factors influencing freight forwarder selection and relation to motivating factors

Reference	Factors influencing freight forwarder choice	Motivating factors identified from interviews
Voss et al., (2006)	Security	Gaining control over business process
	Equipment availability	Resources available in house, economies of scale
	Cost	Cost savings, economies of scale
Matear and Gray (1993)	Schedule	Reliability, lead time, traceability of shipments, higher flexibility, Efficient and accurate information flow about shipments
	Space	Economies of scale
	Frequency	Economies of scale
	Price	Cost savings, economies of scale
Murphy and Daley (1997)	Expertise	Knowledgeable operational staff
	Reliability	Operational excellence part of company strategy
	Company reputation	Own operation has priority, Gaining control over business process
	Capacity for providing pertinent information	Efficient and accurate information flow about shipments
	Personal attention	Knowledgeable operational staff, Gaining control over business process
	Reasonable prices	Cost savings, economies of scale
	Financial standing of company	Gaining control over business process

The above table demonstrates the selection criteria customers look at when selecting freight forwarders. With this information, the case company can look at what they should focus on in their operations and see if insourcing can bring them the advantage, and as a result, motivate them to insource. To continue the perspective of looking at what has been identified as possibilities to increase competitiveness the World Bank Logistics Performance Index (LPI) is introduced (Arvis, Saslavsky, Ojala, Shepherd, Busch & Raj, 2014). The LPI was developed as an interactive benchmarking tool to assist nations in identifying the opportunities and difficulties they have in their performance on trade logistics and what they can do to enhance their performance. These components demonstrate how competitiveness is generated in the logistics industry. The index components were selected according to current theoretical and empirical research, as well as the practical knowledge of logistics experts engaged in international freight forwarding (Arvis et al., 2014). Table 8 shows the

components used in the index and how the motivating factors identified from the interview connect to them.

Table 8. LPI components linked to motivating factors

<b>LPI Component</b>	<b>Motivating factors identified from interviews</b>
Efficiency of customs and border clearance	<ul style="list-style-type: none"> <li>• Knowledgeable operational staff</li> <li>• Efficient and accurate information flow about shipments</li> </ul>
Quality of trade and transport infrastructure	<ul style="list-style-type: none"> <li>• Knowledgeable operational staff,</li> <li>• Core competence</li> <li>• Above average resources compared to smaller competitors</li> <li>• Capacity and capability</li> </ul>
Ease of arranging competitively priced shipments	<ul style="list-style-type: none"> <li>• Gaining control over business process; Influence on marginal cost of shipments</li> </ul>
Competence and quality of logistics services—trucking, forwarding, and customs brokerage	<ul style="list-style-type: none"> <li>• Core competence</li> <li>• Above average resources compared to smaller competitors</li> <li>• Quality</li> </ul>
Ability to track and trace consignments	<ul style="list-style-type: none"> <li>• Efficient and accurate information flow about shipments</li> <li>• Traceability of shipments</li> </ul>
Frequency with which shipments reach consignees within scheduled or expected delivery times	<ul style="list-style-type: none"> <li>• Lead time</li> <li>• Lower dependency on supplier</li> <li>• More influence in case of disruptions</li> <li>• Reliability</li> </ul>

The six components used in the index came up in the interviews as motivating factors for the case company to insource the service. A postulation can be made that insourcing these components would increase, thus increasing the competitiveness of the case company in its industry. In 2023 Finland was listed as number two on the LPI, with only Singapore taking the lead (World Bank, 2023). Figure 7 displays the development of Finland's index from 2008 to 2022.

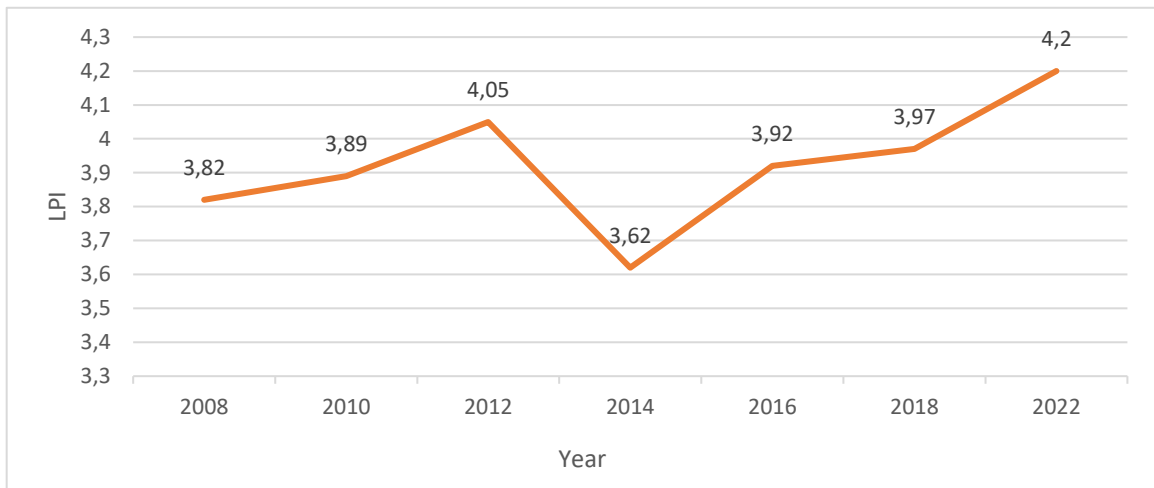


Figure 7. Logistics Performance Index development Finland (World Bank, 2023)

Finland was 15<sup>th</sup> in 2008, 11<sup>th</sup> in 2010, 3<sup>rd</sup> in 2012, 24<sup>th</sup> in 2014, 15<sup>th</sup> in 2016 and 10<sup>th</sup> in 2018 (World Bank, 2023). Finland's positioning on the ranking has fluctuated over the years. From the current positioning of being the second highest ranking country in the world, an inference can be made that the competition between LPS in Finland is high and in order to outperform competitors their operations need to be carefully planned. To increase their competitiveness, LSPs can look at the index components to see how they can improve their operations.

Finland had 13,353 LSPs in 2011, placing 13<sup>th</sup> in the number of LPS per country in Europe. Additionally, Finland had the smallest number of changes in the number of LSPs per country between the years 2008-2011, compared to other EU countries (European Commission, Ecorys, Fraunhofer, TCI, Prognos & AUEB-RC/TRANSLOG, 2015), which means that not many companies stopped their operations or entered the market. The case company places among the biggest LSPs operating in Finland. Because of the confidentiality of the case company in this thesis, the exact positioning of the case company cannot be discussed.

From the interviews, it became evident that the case company is aware of its positioning within the industry and acknowledges that they have advantages over its smaller competitors which will enable its performance. For example, they can take advantage of economies of scale more easily and their capacity and capability with their resources exceeds their competitors. However, just because the case company is among the largest companies

operating in Finland, it still needs to look at the industry and external factors which might affect their competitiveness.

To remain competitive, a continuing assessment of the most suitable governance mechanisms is required. As is identified in this research, the insourcing motivating factors are related to characteristics which have been identified to increase competitiveness in the logistics industry. By insourcing, the case company can narrow down the potential differences they have with competitors which have an impact on the ranking of Finland and be among the companies which are influencing the position of Finland.

## 5.2 Resources Enable Competitive Advantage

This discussion chapter will go through the enablers of the insourcing decision. The enablers will be demonstrated through the lens of RBV to support the findings and their connection to supply management theory which will help to validate the findings. By looking at the enablers from the viewpoint of RBV, an evaluation of the company's resources and their effect as a resource bundle on the insourcing decision can be made.

In RBV, competitive advantage is achieved when a firm's bundle of resources is rare, valuable, difficult to imitate, and non-substitutable (Barney, 1991). This means that the combination of resources a firm possesses can be more powerful than individual resources alone. Firms strategically blend different resources to create a competitive edge greater than the sum of its parts. The concept of bundling resources in the RBV theory emphasises the holistic nature of strategic management. It's not just about possessing a single resource in isolation; it's about how a firm combines, leverages, and integrates its resources to create a sustainable competitive advantage in the marketplace. This approach allows companies to differentiate themselves and achieve long-term success by making it harder for competitors to replicate their entire bundle of resources.

RBV takes a protective stance regarding outsourcing and states that companies should not outsource activities that directly influence the creation of competitive advantage and value-adding mechanisms (Shook et al., 2009). By looking at the enablers from the viewpoint of

RBV we can identify how the enablers can bring the case company more competitive advantage. The resources have characteristic of being non-substitutable, as presented in the organisation aspect concept, the structure of an organisation is non-substantial. It is an enabler for the case company, but it cannot be substituted to any other company, therefore, it will increase the competitive advantage of the case company. Some of the enablers are identified to be valuable for the company. By increasing value for the company, the resources also increase competitive advantage. The enablers which have been identified as being rare benefit the company by being a resource that competitors cannot possess because of its rareness. Therefore, possessing the rare resources gives them a competitive advantage over their competitors. Lastly, the enablers which have been identified as inimitable, are resources which the case company possesses, but competitors do not know how to produce the resource. The imitability of the resource can often be unknown to the company that possesses the resource, but it still generates a competitive advantage because competitors do not know how to imitate it. Table 9 demonstrates the impact of RBV on the insourcing enablers identified from the interviews.

Table 9. Impact of RBV on insourcing enablers

Concept	Enablers	Impact of RBV
Organisational aspect	Organisational structure makes department-specific changes and decisions easier	Non-substitutability
	Independence from top management approvals for decision-making	Non-substitutability
	Efficient information flow within company	Non-substitutability
Operational performance	Accurate and relevant information easily available	Value
	Resources increase operational performance quality	Value
Resources	Needed resources capabilities and capacity is available inhouse	Value
	Better resources than most of competitors	Rare & Imitability
	Managers' capabilities	Value
	Operational staffs' capabilities	Value
Control	Russia flight over ban increases trucking from central Europe to Finland	Rare
	Low number of companies operating Central Europe Finland axis	Rare
	Company has export from Finland which lowers cost for import shipments	Rare & Imitability
Cost	More influence on cost strategy	Value

Based on examining the impact of RBV on enablers identified from the case study, an inference can be made that the resource bundle used for the service holds characteristics for each characteristic from the VRIN framework. This means that the resource bundle can be seen to increase the company's competitive advantage and should therefore be insourced.

### 5.3 Challenges Increase Transaction Costs

The motivators will be evaluated through the lens of TCE to support and get more depth to the findings and their connection to supply management theory and validate the findings. Transaction cost determines whether to insource or outsource company operations, if transaction costs are higher when service is outsourced, the company should insource and vice versa. Different transaction cost factors influence when transaction costs are generated. Table 10 presents the impact of TCE theory on challenges in insourcing identified from the interviews.

Table 10. Impact of TCE on insourcing challenges

Concept	Challenges	Impact of TCE
Organisational aspect	Financial risk is borne by the company itself	Uncertainty
	Cultural differences between business sectors	Information asymmetry
Operational performance	Uncertainty in frequency	Uncertainty/ Frequency
	Information flow obstacles when changing operations	Information asymmetry
	Difficulty to specifically convey what is needed for this service	Information asymmetry
	Difficult to predict number of needed resources	Bounded rationality
	Asset specificity not high	Asset specificity
Control	Relatively easy to replicate	Asset specificity
	Frequency not controllable	Frequency
Cost	Extra costs from possible empty trucks	Uncertainty/ Frequency

The challenges were identified to represent uncertainty, frequency, information asymmetry and bounded rationality from the TCE theory. By insourcing the service, the case company has to face uncertainty in its operation. Uncertainty and frequency of shipments and the cost

which can result from not having a match with quantity and resources described the challenges the case company has to withstand. Information asymmetry adds to this challenge as the transaction costs resulting from uncertainty could be mitigated by accurate information, but information asymmetry increases the transaction costs. Moreover, the service is identified to hold low levels of asset specificity as the interviewees answered that they believed the service could be quite easily replicated by competitors. This is a challenge for the case company as there is a possibility of replication by competitors. However, from the number of enablers and motivators identified, the case company has better resources which creates competitive advantage to overcome competitors, even if the service has low asset specificity. Low asset specificity still generates transaction costs but does not sway the total costs when looking at the bigger picture. Lastly, bounded rationality demonstrates the difficulty to make the right decision regarding the operations of the service. When the service was outsourced the case company did not have to make the decision, but once the service is insourced bounded rationality generates transaction cost for the case company. Uncertainty, information asymmetry and frequency influence bounded rationality as they make decision-making more complex, demonstrating the interconnectedness of insourcing decision-making.

In the TCE theory, the company should opt for the governance mechanism which generates the least amount of transaction costs. By identifying these challenges and looking at how they generate transaction costs, the case company can be more aware specifically of the challenges of insourcing.



## 6 Conclusion

For companies to remain competitive they need to evaluate their boundaries by understanding which governance mechanism brings them the most competitive advantage. Research has focused on why companies want to outsource; however, less research is placed on why companies want to insource. This study aimed to narrow this research gap by investigating the motivating factors for an insourcing decision made by the case company in the logistics industry. To increase the understanding of the motivating factors, an investigation of challenges and enablers for the insourcing decision was added. A literature review was conducted to gain insight into previously identified motivating factors for insourcing. Moreover, these findings were connected to motivating factors gathered from case study interviews. Additionally, the identified motivating factors were connected to characteristics that have been identified to increase competitiveness in the logistics industry. Using a single case study to answer the research questions worked as the scope of the study was defined to include the insourcing decision made by the case company.

The findings of this study demonstrated the complexity and interconnectedness of motivating factors for insourcing decisions. More motivating factors were identified from the interviews than from the literature review. The motivating factors were categorised into five concepts: organisational aspect, operational performance, resources, control, and cost. The diversity and scope of the identified motivating factors show how the decision to insource is complex and holds many nuances. The connection between the motivating factors and characteristics for competitiveness in the logistics industry increased understanding of why insourcing was beneficial for the case company specifically in the logistics industry. In addition, this shows how companies should insource in the logistics industry if they hold similar resources and capabilities as the case company. By looking at the enablers and challenges from the perspective of RBV and TCE, the case company can better evaluate in the future if their resources or chosen governance mechanism increase their competitive advantage or increase transaction costs.

## 6.1 Theoretical Implications

This study aimed to narrow the gap between research conducted on insourcing compared to the vast amount of research conducted on outsourcing. By answering the research question of this thesis, a contribution was made to narrow down the research gap for insourcing. A link to previously identified motivating factors was established as well as new motivating factors were found that haven't been mentioned in the literature previously. The findings increase the existing knowledge of insourcing in the supply management literature and build on research specifically for the logistics industry. In the dynamic business environment, it is beneficial for companies to have access to research on different possibilities that they could implement to increase their competitiveness.

The conceptual framework of this study assisted the research in understanding the nuances of insourcing motivators. Strategic sourcing provided the foundation on which to build the research. The study builds on the notion that RBV and TCE are the most commonly used theories to understand the intricate dynamics of insourcing and outsourcing decisions within an organisational context. The theories assisted in gaining a more profound comprehension of the study results and finding a connection to the broader landscape of supply management research.

## 6.2 Managerial Implications

By identifying the motivating factors for this insourcing decision, the case company gains a better understanding of the implications and future requirements of insourcing. This helps the case company manage the outsourcing better and evaluate other insourcing possibilities within their company. Internal or external factors may influence the operations or strategy of the company. In this situation, the insourcing decision should be reevaluated and investigated if the company still holds the same enablers for the production of the service in house or if the transaction costs from the challenges have increased.

Identifying and connecting motivators, enablers, and challenges to supply management theory makes the case company more prepared to evaluate the service and monitor if

insourcing continues to be the correct choice. Decisions regarding insourcing come from a continuous process in which the people involved in the operations assess variables that affect insourcing to create the most effective operations. Operational staffs' and managers' capabilities enable the company to identify and make the insourcing decision. Without capable staff who have relevant information, the company would not be able to develop its operations and change company boundaries when needed to uphold competitiveness.

This was a single case study looking at the motivating factors in retrospect for the insourcing decision the case company made. However, general implications for companies operating in the logistics industry and in other industries can be drawn to a certain extent. The concepts which were identified from the research can be justified to be concepts which any company should look into, when considering their company boundaries and investigating if insourcing could be a source for an increase in their competitive advantage. The specific motivators might be different for different companies, but the concepts which should be considered for insourcing consideration remains the same.

A managerial checklist is presented in the appendices. The checklist helps managers identify situations where insourcing could be a good fit for them. If most answers to the checklist questions are "yes" the company should consider insourcing as the answers can be considered motivating factors for insourcing. The checklist focuses on the concepts identified in this research. By looking at organisational aspects, operational performance, resources, control, and cost, managers are provided with a comprehensive list that encompasses all areas that should be considered when looking into insourcing. If the manager going through the list recognises that the answers are compatible with their operations, motivators for insourcing can be generated and can result in an increase in their competitive advantage.

### 6.3 Limitations and Future Research

This master thesis was conducted as a single case study, looking at an insourcing decision made by the case company and which factors motivated the company to make the decision. Therefore, it is important to note that the results of this study are applicable only to this

single case study. The results cannot be generalised for the whole logistic industry, or all insourcing decisions made by companies. However, this does not mean this insourcing decision should not be researched. By researching insourcing decisions made by companies, a more comprehensive outlook can be gathered on why companies decide to insource. This study contributes to a relevant research gap because insourcing has received much less attention in academic research than outsourcing. More research in general about insourcing decisions and possibilities with insourcing are recommended as future research direction as the research gap in insourcing should be narrowed down.

Research on insourcing, especially with an emphasis on motivating factors for insourcing decisions in different industries hasn't been researched to a large extent. The motivating factors can be impacted by the different characteristics of different industries. Therefore, to better understand the implications of this research, future studies could address motivating factors in different industries and how they differ to get a more specific understanding of motivating factors in different industries.

Lastly, location is a topic that has received attention in the available literature on insourcing, in terms of companies that have outsourced activities far away from their headquarters and are considering insourcing back to closer proximity to the headquarters. The notion of locations is not included in this master thesis as the service provider from which the service was outsourced operates on the same continent. A more precise location exploration was not deemed necessary.

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## Appendix 1: Interview Questions

1. What made you consider insourcing as a possibility?
2. What were the desired areas for improvement regarding insourcing?
3. Was this decision proactive or reactive? Why?
4. Has this service been handled internally before?
5. Could you outline the insourcing process in broad terms?
6. What was the biggest challenge in the insourcing decision?
7. What was the greatest enabler in the insourcing decision?

### Resource-Based View (RBV)

8. Do you perceive that your company has better resources to manage this service compared to competitors? If yes, why? If not, why?
9. Does your company have historical competitive advantages compared to competitors? What kind?
10. Do you feel that internal relationships within the company and the proficiency of supervisors have a significant impact on resource effectiveness?
11. How easily could competitors replicate the resource package's operation in their company? Do you find this likely?
12. Does the operation of this resource package enable you to execute your strategy better and more efficiently? If yes, how?

### Transaction Cost Economics (TCE)

13. What kind of variation can there be in the frequency of service usage?
14. Is the continuation of service implementation uncertain?
15. Do you believe that if this bundle of resources were transferred to another company, it would retain its value?
16. Are there multiple suppliers in the market from whom you could outsource the service?
17. Are you satisfied with the insourcing decision?
18. From the below table, could you name the five most important motivators that you recognise as driving the insourcing decision? (Table 1. Identified motivating factors from literature)



## Appendix 2: Managerial Checklist

1. Is outsourcing not meeting your expectations?
2. Does your company have the required resources to perform service inhouse?
3. Does your company have the required capabilities to perform service in house?
4. Could your company perform the service better inhouse with available resources and services?
5. Does your company have the organisational structure to make department-specific decisions?
6. Would insourcing decrease costs?
7. Is the service in the realms of core competence?
8. Have you lost control of the process because the service is outsourced?
9. Would it be difficult for competitors to replicate your service once it is insourced?
10. Is the frequency of service usage frequency predictable and mostly constant?