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PASLAUGŲ KOKYBĖS ĮTAKA LOGISTIKOS PASLAUGŲ TEIKĖJŲ KONKURENCINGUMUI SKANDINAVIJOS RINKOJE	**SERVICE QUALITY INFLUENCE ON COMPETITIVNESS OF LOGSTICS SERVICE PROVIDER IN THE SCANDINAVIAN MARKET**

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LIST OF ABBREVIATIONS

1PL – first-party logistics

2PL – second-party logistics

3PL – third-party logistics

4PL – fourth-party logistics

5PL – fifth-party logistics

ECI - Economic Complexity Index

GM – Gronroos model

LPI – Logistics performance index

LSP – Logistics service provider

LSQ – Logistics service quality

PDSQ - physical distribution service quality

RBV – resource-based view

MBV - market-Based View

IT – information technology

CSR – Corporate social responsibility

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INTRODUCTION

Relevance of the topic: Logistics service sector plays an important role in today's economy and has contributed to around 7 % of the gross domestic product (GDP) in the European Union in 2019 (Scheuer, 2020). When detailing the market, it can be seen that Scandinavian countries (Sweden, Finland, Denmark and Norway) have a strong economic presence in the context of European trade and resulting in 756.6 bn Euros in both imports and exports in 2018 (The Observatory of Economic Complexity (OEC), 2019). It is a desirable market, as logistics service providers have reported a revenue of 11.71 bn Euros in 2019 (Armstrong & Associates, 2021) and as Scandinavia is a welcoming market, plenty opportunities for logistics service providers from other EU countries are presented. Because of this, undoubtedly there is a huge number of logistics service providers which results in immense competition as well as enormous potential (Bajec et al., 2015; Gupta et al., 2018). At the same time, clients are looking for new, better alternatives for existing providers, that can meet their ever-growing demands at the lowest possible cost. Consequently, business have to continuously be aware of customer expectations and being able to adjust to meet them (Meidutė-Kavaliauskienė et al., 2020). This becomes both an opportunity and a threat for a logistics service provider, to either obtain new customers, increase the number partnerships or to lose the existing ones to competitors. That is why, service quality is capturing more significance as a critical factor and a tool for logistics service provider to gain and sustain competitiveness (Gupta et al., 2018; Kahnali & Esmaeili, 2015; Meidutė-Kavaliauskienė et al., 2020; Talib et al., 2011; Thai, 2013).

Exploration of the topic: There is no doubt that service quality in logistics sector is an important issue, as many aspects of it have been already analysed by many researchers. Logistics service quality aspects like: dimensions and indicators (Kahnali & Esmaeili, 2015), innovation development (Pedrosa, 2012), consumers perception (Restuputri et al., 2020), quality management and sustainability (Gupta et al., 2018), total quality management and service quality (Talib et al., 2011), effects quality management on the logistics service quality (Kersten & Koch, 2010), logistics service quality and incorporation of information technology (Bienstock et al., 2008), consumer loyalty (Huma et al., 2020; Saura et al., 2008).

On the topic of logistics service quality, many approaches have been made by academics and researchers, although they all focus on different markets and industries, such as Freight Forwarding companies in Serbia (Kilibarda et al., 2012, 2016), lubricant oil logistics in Brazil (Fernandes et al., 2018), logistics companies in Lithuania (Meidutė-Kavaliauskienė et al., 2014), e-commerce logistics in Singapore (Restuputri et al., 2021; Thai, 2013), online supermarkets logistics in Greece (Mitropoulou & Tsoulfas, 2021), second-party logistics company in Serbia (Vasiljević et al., 2018), logistics firms in Pakistan (Huma et al., 2020), pharmaceutical logistics in Taiwan (Chen et al., 2020). For that reason, conclusions of their research show that different models, variables, factors are being used in measuring service quality of a logistics service provider and in most cases, it is stated in their limitations, that results of these studies might not fit the context of other markets and industries. As there are no other specific studies on service quality influence on the competitiveness (or any other aspects) of logistics service providers acting in Scandinavia as a market, further research is needed.

Research problem: lack of research has been done on service quality influence on the competitiveness of a logistics service provider in the market of Scandinavia.

Aim of the master thesis is: to determine how service quality influence the competitiveness of a logistics service provider acting in a Scandinavian market.

Objectives:

1. To theoretically investigate the concept competitiveness and service quality in the context of logistics sector;
2. To theoretically investigate the characteristics of logistics service providers in the Scandinavian context.
3. Based on literature, choose a framework for research on the influence of logistics service quality on competitiveness of logistics service provider;
4. To establish research methodology for analysing influence service quality and competitiveness of logistics service provider;
5. To refine a research model for logistics service quality which is applicable to the context of logistics service provider operating in the Scandinavian market;
6. Based on the findings of the study, provide suggestions, insights and work restrictions on the impact of service quality influence on competitiveness of the logistics service providers operating in Scandinavian market.

1. COMPETITIVENESS AND SERVICE QUALITY IN LOGISTICS

1.1. Competitive advantage

The concept of competitive advantage is a major focus in business and literature, which involves making and implementing strategic decisions to achieve the goals of an organization. In the business world, competitiveness refers to the ability of a company to effectively compete with other companies in the same industry or market. A competitive strategy is a plan that a company develops to maintain or improve its competitive position relative to its competitors. This can include things like identifying the target market, differentiating the company's products or services from those of its competitors, and implementing marketing and sales strategies to attract and retain customers (Abdul et al., 2019; Arslan, 2020; Bhawsar & Chattopadhyay, 2015; Květoň & Horák, 2018; Liu & Atuahene-Gima, 2018; Martinović, 2015; Sun & Pang, 2017; Thomas, 2020). There are many different approaches to developing a competitive strategy, and the most effective one will depend on the specific circumstances of the company and its competitors. Strategy involves continuously aligning the organization with its environment and is concerned with defining organizational performance, variables of strategic choice, and competitive advantage. Strategic choice involves determining which markets to participate in and how to position the organization within those markets (Assensoh-Kodua, 2019; El-Kassar & Singh, 2019; Gunasekaran et al., 2017; Liu & Atuahene-Gima, 2018; Thomas, 2020; Zhao et al., 2019). An organization can gain a competitive advantage by possessing or acquiring certain traits or by taking certain actions that allow it to outperform its competitors. The study of theories related to competitive advantage has been a significant focus of the management community for several decades. The two most popular theory, used in various studies to assess service quality competitiveness is the Resource-Based View (RBV) and Marke-Based View (MBV) (Harvey et al., 2013; Hinterhuber, 2013; Liu & Atuahene-Gima, 2018; Mellat-Parast & Spillan, 2014; Soh et al., 2015; Wong et al., 2016).

The resource-based view of the firm is a theory that focuses on the internal resources and capabilities of a firm as the primary drivers, which are unique, including its human resources, create its distinctive identity and can give it a competitive advantage (Assensoh-Kodua, 2019; Aziz et al., 2015; Harvey et al., 2013; Karia et al., 2015; Karia & Wong, 2013; Vasiljević et al., 2018; Yew Wong & Karia, 2010). According to this perspective, an organization must focus on its internal resources and capabilities as the primary source of strength to survive and thrive in a competitive business environment. The RBV suggests that organizations must balance the exploitation of existing resources with the development of new ones in order to achieve a competitive advantage that is difficult to imitate. Resources can include both existing and new resources that enhance an organization's capabilities. The pursuit of new resources may involve

alliance formation and performance, rather than the other way around (Assensoh-Kodua, 2019; Aziz et al., 2015; Yew Wong & Karia, 2010).

The Market-Based View (MBV) of strategy suggests that external market orientation and industry factors are the main determinants of a company's performance. This view is supported by theories such as Bain's Structure-Conduct-Performance framework and Porter's five forces model (Harvey et al., 2013; Jardim-Gonçalves et al., 2015.; Soh et al., 2015; Wong et al., 2016). According to MBV, a firm's value is based on its unique set of activities or its distinctive approach to similar activities compared to its competitors. This view holds that a company's profitability or performance is solely determined by the competitive dynamics and structure of the industry in which it operates (Arslan, 2020; Assensoh-Kodua, 2019; Zhao et al., 2019).

Furthermore, competitiveness can be achieved by several generic strategies that a business can use. Cost leadership strategy is often used and based on achieving operational efficiency in order to reduce costs and become the lowest-cost producer in an industry (Banker et al., 2014; Harvey et al., 2013; Soh et al., 2015). However, if the sources of operational efficiency can be easily copied or replaced by newer, better sources, the competitive advantage gained through this strategy may be temporary and not result in long-term sustained profitability (Liu & Atuahene-Gima, 2018; López-Cabarcos et al., 2015; Nimtrakoon & Tayles, 2015). To maintain a superior level of profitability over time, a company must continually improve its operational efficiency at a faster rate than its competitors. However, the rapid diffusion of best practices makes it easy for competitors to imitate management techniques and practices, resulting in the comparative cost advantages dissipating over time (López-Cabarcos et al., 2015; Soh et al., 2015; Zehir et al., 2015). Additionally, achieving cost efficiency through process improvements and technological hardware is unlikely to create a lasting competitive advantage, especially if it is developed by suppliers and sold on the open market. Economies and diseconomies of scale and organization learning within a company can also be sources of cost advantage, but these are typically not protected from duplication and may not result in a sustained advantage (Auzair & Langfield-Smith, 2005; Syapsan, 2019).

In contrast to a cost leadership strategy, a differentiation strategy is more likely to result in a sustained competitive advantage because it involves creating unique products or services that customers value and that are difficult for competitors to imitate (Harvey et al., 2013; Liu & Atuahene-Gima, 2018; Soh et al., 2015). A differentiation strategy often relies on firm-specific and product-specific innovations and marketing efforts that take a long time for competitors to replicate, such as those developed through research and development. This allows a company to build technological capabilities that can be a significant source of sustained competitive advantage

(Banker et al., 2014; Soh et al., 2015; Syapsan, 2019; Zehir et al., 2015). In addition, a focus on producing high-quality products can have a significant impact on sales, particularly in mature industries or those with a high cost of poor performance. Differentiation strategies may also involve customizing products for customers, which can create close relationships and a good reputation that is difficult for competitors to duplicate. Providing high levels of service and support, as well as building customer loyalty through strong relationships, can also contribute to a differentiation strategy and lead to sustained financial performance (Auzair & Langfield-Smith, 2005; Liu & Atuahene-Gima, 2018; López-Cabarcos et al., 2015; Nimtrakoon & Tayles, 2015; Syapsan, 2019; Zehir et al., 2015). In contrast, a cost leadership strategy that focuses on operational efficiency and economies of scale may not provide a durable advantage because these sources can be easily imitated by competitors.

In conclusion, the concept of competitive advantage is a key focus in many companies' strategies and involves making decisions and actions that allow an organization to outperform its competitors. Theories such as the Resource-Based View (RBV) and Market-Based View (MBV) have been widely studied in the management community and offer different perspectives on how organizations can gain a competitive advantage. The RBV emphasizes the importance of internal resources and capabilities, while the MBV highlights external market orientation and industry factors as key determinants of performance. Generic strategies, such as cost leadership and differentiation, can also be used by businesses to gain a competitive advantage. However, it is important for organizations to continuously monitor and adapt their strategies in order to maintain a competitive edge and achieve sustained success in a constantly changing business environment.

1.2. Competitiveness in Logistics service sector

Competitiveness in the context of a language service provider refers to the ability of the company to effectively compete with other LSPs in the same market. This can be achieved by offering a competitive service offering that is better than that of the competition, either by providing the same benefits at a lower cost or by offering additional benefits (Aziz et al., 2015; Harvey et al., 2013; Karia et al., 2015; Karia & Wong, 2013; Yew Wong & Karia, 2010). According to the resource-based view of the firm, a competitive advantage can be obtained by implementing a strategy that is not currently being used by other firms in the industry, which are valuable, rare, inimitable and non-substitutable are the determinants of a firm performance which can help the LSP reduce costs, capitalize on market opportunities, and mitigate competitive threats. A company that is able to achieve a competitive advantage will be able to outperform its rivals in the market (Assensoh-Kodua, 2019; Vasiljević et al., 2018). A competitive advantage is a factor that allows a company to be more appealing to customers than its competitors, and it is a

key factor in a company's success. Competitive advantage can be relative, as it is determined in the context of the market. When LSP has a competitive advantage, it means that the LSP has something that its competitors do not have, or that it does something better or differently than its competitors. A competitive advantage can be achieved by creating value for customers through unique capabilities or by differentiating the LSP's offerings from those of its competitors. Having a competitive advantage allows a company to gain and maintain a dominant position in the market (Assensoh-Kodua, 2019; Aziz et al., 2015; Karia et al., 2015; Karia & Wong, 2013; Yew Wong & Karia, 2010). Hence

The resource-based view suggests that a firm's performance is influenced by its tangible resources (such as facilities, technology and equipment), intangible resources (such as expertise, relationships with suppliers), and capabilities (such as organizational routines). These resources and capabilities can either reduce a firm's costs or differentiate its services, leading to a temporary competitive advantage (Karia et al., 2015; Karia & Wong, 2013; Vasiljević et al., 2018). However, for this advantage to be sustainable, the resources and capabilities must be difficult to imitate or substitute. (Harvey et al., 2013; Karia et al., 2015). Therefore, the resource-based view is relevant to the study of LSP because LSPs rely on various resources in order to provide services such as delivery, warehousing, and transportation. That is why, it is important to examine the tangible and intangible resources and capabilities of LSPs from an RBV perspective in order to understand their performance (Harvey et al., 2013; Karia et al., 2015; Vasiljević et al., 2018).

In conclusion, competitiveness in the logistics industry refers to the ability of a company to effectively compete with other LSPs in the same market. This can be achieved through strategies that differentiate the company's service offering or create value for customers through unique capabilities. The resource-based view suggests that a company's performance is influenced by its tangible and intangible resources and capabilities, which can lead to a temporary competitive advantage if they are valuable, rare, inimitable, and non-substitutable. However, for this advantage to be sustainable, the resources and capabilities must also be difficult to imitate or substitute. Therefore, it is important for LSPs to examine their resources and capabilities from an RBV perspective in order to understand their competitiveness and performance in the market.

1.3. Service quality concept and measuring tools

In order to determine the competitiveness of a business, firstly, service quality has to be understood and measured. Service quality has been a widely acknowledged and studied topic by scholars and researchers within the academic world for the last few decades and has been identified as a key factor in building the competitive advantage of a business (Clow & Vorhies, 1993; Koyuncu et al., 2014; Kusumadewi & Karyono, 2019; Mehmood Warraich et al., 2013; Sajeewa

Wijetunge, 2016). That is why, it is immensely important to measure service quality accurately and use the correct tools to find out what kind of influence it has on a company and its competitive standpoint in a specific market (Calabrese & Scoglio, 2012; Cronin & Taylor, 1992; Fatima & Razzaque, 2014; Gronroos, 1984; Kang & James, 2004; Martínez & Martínez, 2010; Ostrom et al., 2015; Prakasha & Mohanty, 2013; Parasuraman et al., 1988; Lassar et al., 2015).

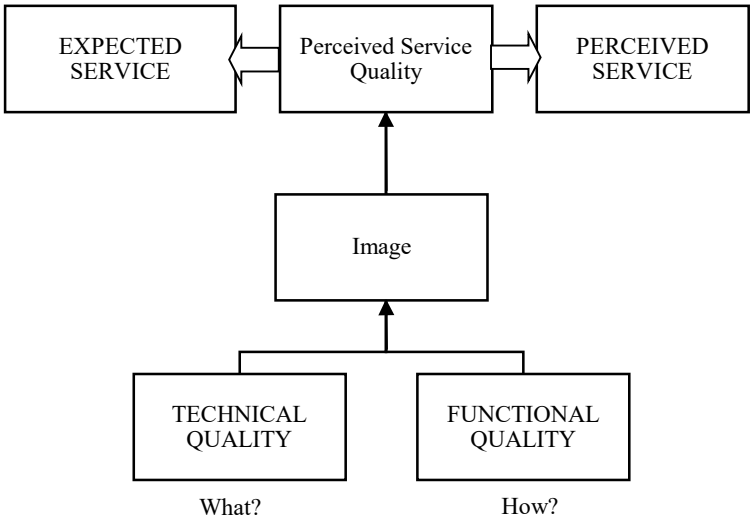
The need to study and measure service quality first emerged from the shift of focus from the product, to the focus on the service itself and the relationship between the customer and the business. (Ghotbabadi et al., 2015). A most popular definition of service quality was developed by the same scholars, who first began to recognize it to be an essential part of the business success and have believed that service quality is the outcome between consumers expectations and perceived performance (Parasuraman et al., 1988) or performance only (Cronin & Taylor, 1992). This service quality analysis also included the results of the process itself by which the service was delivered. (Parasuraman et al., 1988). Researchers work show that service quality is recognized to be a crucial part of the business success and is determined to be the result of consumers expectations and actual performance (Cronin & Taylor, 1992; Gronroos, 1984; Lassar et al., 2015; Ostrom et al., 2015). It has direct impact on financial and non-financial performance, as well as competitive advantage of the business (Bienstock et al., 2008b; Cronin & Taylor, 1992; Rahman et al., 2012).

In order to understand and measure service quality, several models have been proposed and widely tested in applied research (Calabrese & Scoglio, 2012; Fatima & Razzaque, 2014; Kang & James, 2004; Martínez & Martínez, 2010). Gronroos (1984) developed the first service quality model called the Nordic model and later on, other researchers have followed and proposed their own conceptualizations, for instance, the most popular ones: SERVQUAL (Parasuraman et al., 1988) and SERVFERF (Cronin & Taylor, 1992). Martinez and Martinez (2010) note that as these models were developed, all of them shared a familiar characteristic: they all present a multidimensional service quality conceptualization that it is inherently connected to the measurement of consumer quality perceptions. Thus, the service quality models offer a structure for understanding what service quality is, as well as how to measure it in each proposed conceptualization. Although these models are widely used to this day, academics suggest to take into consideration the context and industry of the study, in order to choose the most efficient and accurate model (Adil et al., 2013; Ghotbabadi et al., 2015; Martínez & Martínez, 2010; Rodrigues et al., 2011).

Gronroos (1984) was the first one that developed a service quality model, which includes technical quality, functional quality and company image to explain the service quality of a business

(Kang & James, 2004; Martínez & Martínez, 2010; Rahman et al., 2012). Technical quality defines the outcome of the service performance or what the customer receives in the service encounter. Functional quality relates to the subjective perception of how the service is delivered and defines customers' perceptions of the interactions that take place during service delivery. Corporate image creates favourable view towards the business and can be taken as a variable that moderates the relationships between quality dimensions (technical and functional) and perceived quality. As if the service provider has already a positive image in the mind of a consumer, slight mistakes can be excused, but if a mistake happens often, then the image itself can be harmed. If the image of a business is already negative, then the smallest errors can be enhanced in the mind of the consumer (Martínez & Martínez, 2010). Gronroos (1984) proposes that the quality of service is dependent on expected service and perceived service, as seen in Figure 1. Expected service quality is formed of variables such as traditional marketing activities (advertising, field selling, public relations, pricing) and external influences (traditions, ideology and word of mouth). Perceived quality is the result of consumer's view of the many service dimensions, part of which are technical and part of which are functional in nature.

Figure 1 Gronroos' Model (GM)



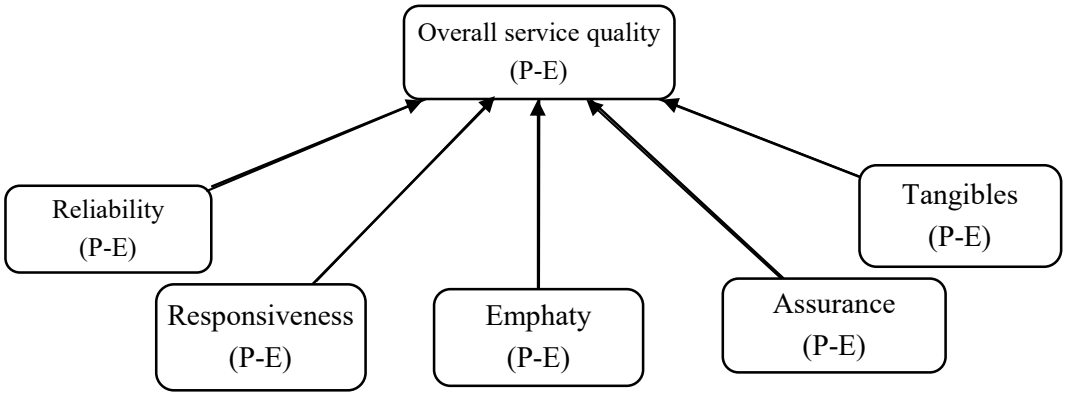
Source: Gronroos (1984)

Although, Gronroos (1984) in his study only measures service quality through performance scores only after recognizing the difficulties in making independent measurements of customer's expectations. Also, this model lacks explanation for measuring technical and functional quality (Ghotbabadi et al., 2015; Zaibaf et al., 2013).

Most widely used and researched model to measure service quality is SERVQUAL model, which was proposed by Parasuraman et al. (1985, 1988) to measure service quality. (Adil et al.,

2013; Kang & James, 2004; W. H. Lee & Cheng, 2018; Martínez & Martínez, 2010). The reason to its popularity comes from the fact that this model is adapted and tested in different industries, such as health care, banking, telecommunications, hospitality, education. e-commerce, as well as in logistics (Adil et al., 2013; Calabrese & Scoglio, 2012; Kilibarda et al., 2016; Mitropoulou & Tsoulfas, 2021; Rahman et al., 2012; Rodrigues et al., 2011; Roslan et al., 2015; Uppal et al., 2018). The model is based on disconfirmation paradigm, which breaks down service quality into five dimensions: tangibles, responsiveness, assurance, reliability and empathy. These five dimensions were attained from the 10 overlapping dimensions, which Parasuraman et al. (1985) marked as essential to service quality by exploratory research. Dimensions of service quality are correlated, and they form the overall service quality perception (Figure 2) (Kang & James, 2004; Martínez & Martínez, 2010). As the previous analysed GM model, SERVQUAL also represent service quality as the gap between customers' expectations (E) for service offered and customers perceptions (P) of the service received. However, there are a number of variables that cause variations in consumer expectations.

Figure 2 SERVQUAL model



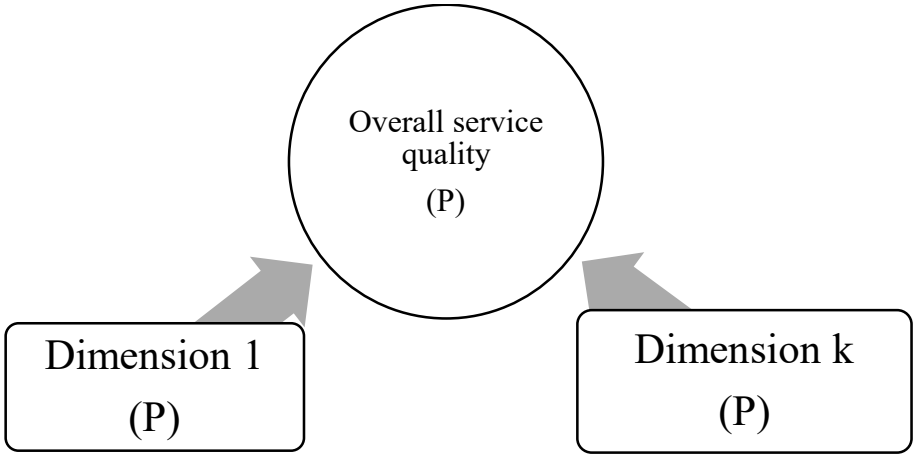
Source: Parasuraman et al. (1985)

The difference between GM and SERVQUAL is that SERVQUAL clearly depicts the relationship between quality dimensions and expectations (Adil et al., 2013; Kang & James, 2004; Lee & Cheng, 2018; Martínez & Martínez, 2010; Uppal et al., 2018). Although, as SERVQUAL is the model being most widely used by academics, it was also widely criticized for its weakness, just like GM model, as they both measure the same experience dimension, which final results can be jeopardized by not independently measured customers' expectations. Different studies have reported different dimensions for expectations, perceptions and gap scores thus questioning the five dimensions of SERVQUAL and sometimes lack the validity of the model, as well the need to

adapt this model to an industry specific characteristic, in order for it to work (Adil et al., 2013; Kang & James, 2004).

SERVPERF model was introduced by Cronin and Taylor in 1992. This model was based on SERVQUAL model, but used performance as the only measurement for service quality (Adil et al., 2013; Ghotbabadi et al., 2015; Leong et al., 2015; Martínez & Martínez, 2010; Rahman et al., 2012; Rasyida et al., n.d.; Rodrigues et al., 2011; Torres Fragoso & Luna Espinoza, 2017). They argued that SERVPERF model is more acceptable and precise than SERVQUAL, as the conceptual basis of the SERVQUAL scale is confusing the service satisfaction (Ghotbabadi et al., 2015; Torres Fragoso & Luna Espinoza, 2017). SERVPERF tends to be more effective as items to be measured were reduced by half, comparing to SERVQUAL and is more efficient in measuring the true consumers perceived service quality (Adil et al., 2013; Rahman et al., 2012). Cronin and Taylor (1992) argue that to measure service quality one must measure the performance (perceived service) only (Figure 3), instead of measured through the differences between expectations and performance (Ghotbabadi et al., 2015; Torres Fragoso & Luna Espinoza, 2017). To measure the performance (P) of service quality, the same dimensions from SERVQUAL model are used: reliability, tangibles, responsiveness, assurance and empathy (Brady & Cronin, 2001; Leong et al., 2015; Martínez & Martínez, 2010; Rasyida et al., 2016).

Figure 3 SERVPERF model



Source: Cronin and Taylor (1992)

Studies were made to compare the two models and discussions were on which of these is the more efficient, more superior and could be better applied to a given context (Adil et al., 2013; Leong et al., 2015; Rodrigues et al., 2011). For some contexts, SERVPERF performed better due to result accuracy, arguing that expected quality can trigger discrepancies in final results (Rasyida et al., 2016). Other results of these studies show that SERVQUAL and SERVPERF differ

remarkably in their outcomes and it is suggested to apply a hybrid model of the two, for a better service quality measurement (Rodrigues et al., 2011). Although, this model was not tested in the context of logistics service providers, and academics choose SERVQUAL model due to the fact that the gap between perceived service and expected service is necessary (Bienstock et al., 1997, 2008a; Mentzer et al., 2001; Rafiq & Jaafar, 2007).

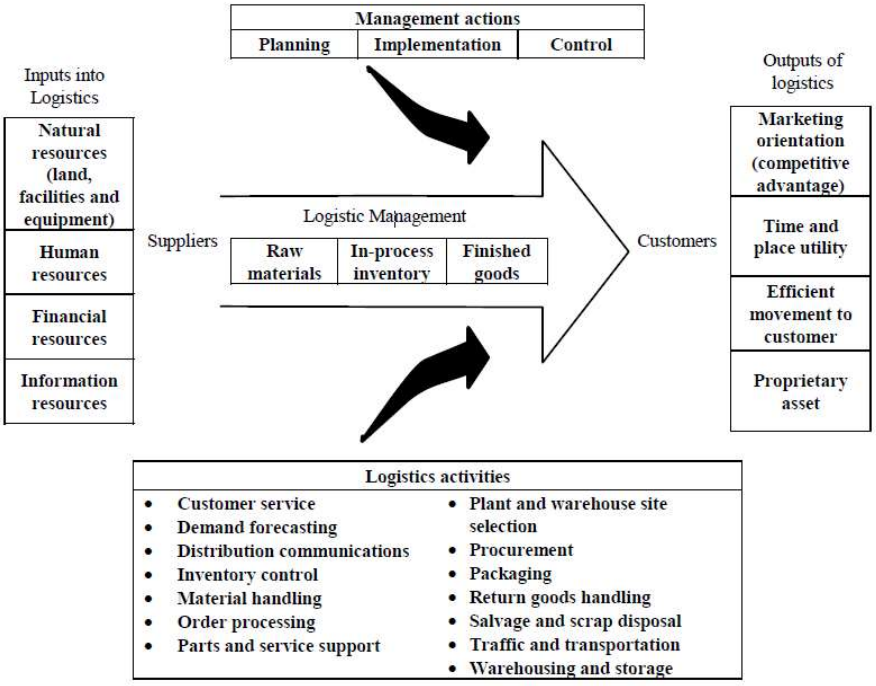
We may conclude that the model developed by Gronroos (1984) was one of the first models of its kind and many authors have used it in their work throughout the years, as well, applied Gronroos (1984) ides in order to develop their own models. But this model does have its limitations, as the creator of the model himself fails to independently measure the customers' expectations, as well as researchers noted the lack of explanation for measuring functional and technical quality and thus it leads to the model being prone to limitations for any future research. SERVQUAL model has many similarities to the GM model, as they both analyse the gap between perceived and experienced service dimensions, resulting in overall service quality (perceived service quality in GM's model). Hence the model is different in a way that it clearly depicts the relationship between the quality dimensions and expectations, rather than in GM model. Nevertheless, according to the creators of this model (Parasuraman et al. 1988), it provides a solid backbone for research, but it has to be adapted to industry specific characteristics in order to provide solid and trustworthy results. SERVPERF model is an acceptable tool which can be applied to various fields of industry. It is concluded that it provides advantages on efficiency and in some cases can produce more accurate results, but considering literature on logistics services, academics prefer the use of SERVQUAL model due to the measurement of gap between perceived service and expected service, thus giving more information on service quality in context of logistics.

1.4. Logistics service context

Over the past decades, the extent of logistics services grew from simple businesses, that are buying and selling in the same location, known as First Party Logistics (1PL) to providing solutions for the entire supply chain, Fifth Party Logistics (5PL) (Erkan, 2014; Kersten & Koch, 2010; Vasiliauskas & Jakubauskas, 2007). Figure 4 show us how the process of logistics service, from suppliers to end customers work. These services can vary depending on the type of logistics service provider and its part in the supply chain. These logistics activities are performed by own resources or outsourced to logistics service providers (Abbasi & Nilsson, 2016; Alkhatib, Darlington, & Nguyen, 2015; Alkhatib, Darlington, Yang, et al., 2015; Centobelli et al., 2017; Evangelista et al., 2018). Literature provides a more in-depth understanding of each of these

segments of logistics providers. Depending on the types of logistic services a company provides, they can be segmented in these categories from 1PL to 5 PL providers.

Figure 4 Components of logistics process



Source: (Erkan, 2014)

1PL providers usually refers to a business or individual, that has their own resources: cargo, freight and can transport them from point A to point B. In this case, there is no middlemen involved in this process. For instance, it could be the shipper, who stores goods in own warehouse and uses own fleet to distribute it to customers, a consignee uses his own fleet to pick up the goods from the suppliers (Kersten & Koch, 2010; Vasiliauskas & Jakubauskas, 2007). The influence of globalization, trend in outsourcing and offshoring of production led to development of 2PL providers. 2PL provider is defined as a "commodity capacity provider" (Mathauer & Hofmann, 2019; Oláh et al., 2018; Vega & Roussat, 2015) and usually handles one particular area of the supply chain, such as transporting goods from supplier to the consignee or provide warehousing, but not the transportation. In many cases, 2PL provider as a resource, is subcontracted by 3PL logistics providers (Selviaridis & Spring, 2007). 2PL logistic providers face low returns, with high levels of asset intensity (Vasiliauskas & Jakubauskas, 2007).

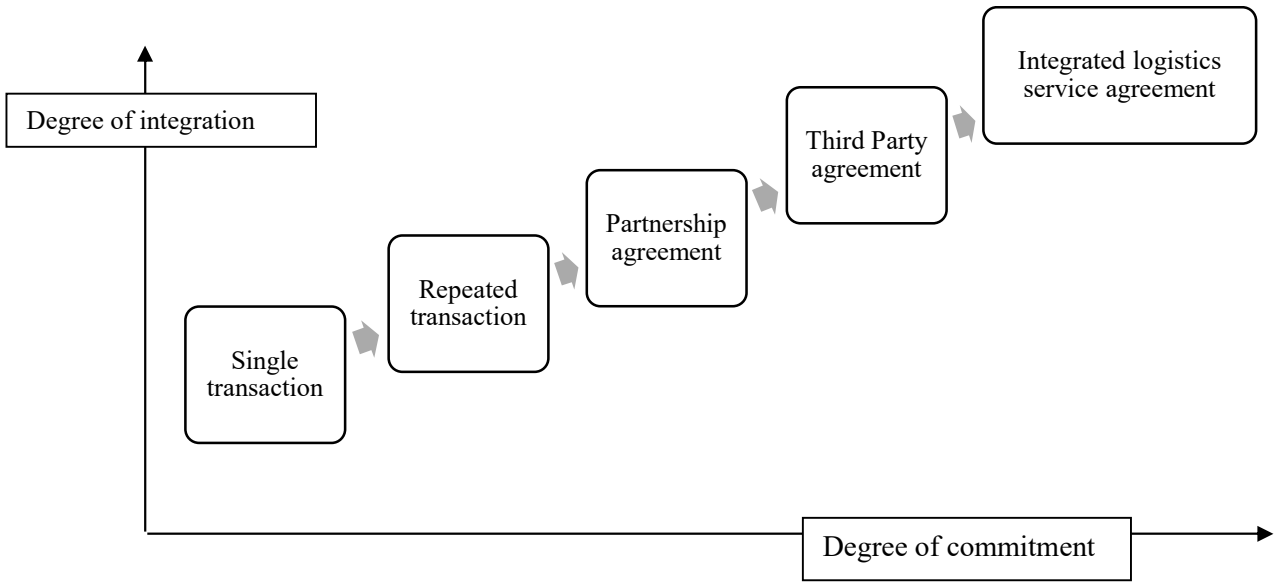
As the demand for one-stop solutions grew, some 2PL providers have developed into 3PL providers, by providing entire bundles of coordinated logistics services and resources, and not only by implementing asset ownership, but by implementing subcontracted assets as well (Kersten & Koch, 2010; Vasiliauskas & Jakubauskas, 2007). As 3PL providers do own some assets, such

as key distribution centres in strategic locations or road transport fleet, to cover any resource issues, most of their resources are outsourced by 2PLs. If a logistics company can integrate themselves as a 3PL provider, they get closer to the business and can become more of a partner than one of suppliers. Based on the customers perspective, it is harder to change the 3PL provider than a 2PL (Vasiliauskas & Jakubauskas, 2007). Freight forwarding or contract logistics usually fall into this definition of a 3PL provider. Apart from transportation and delivery, the typical activities of 3PL providers also include additional services, that could be warehousing, terminal operations, customs management, supply chain management, etc.. Often it includes supply chain IT systems, delivery tracking. 3PL usually are low on own assets but get high returns in profit (Mathauer & Hofmann, 2019; Oláh et al., 2018; Vasiliauskas & Jakubauskas, 2007).

To take a step into the logistic service management, 4PL provider is a non-asset-based company, that provide logistics consulting services, fully manage, design and build supply chains and act as a neutral agent (Erkan, 2014; Kersten & Koch, 2010). Main role of 4PL's is to contract numerous 2PL and 3PL providers and their resources, assemble and manage end-to-end solutions for the customers. With its full overview on the supply chain of the costumer, adding logistics and IT capabilities, 4PL provider can offer a high value-added consultative service for the customer. High quality and return are expected for these 4PL (Evangelista et al., 2017; Vasiliauskas & Jakubauskas, 2007). There has been a new approach to the logistic concept and it can be defined as 5PL. The main focus is to provide overall logistics solutions for the entire supply chain. The idea of 5PL is to develop a respective logistics network, by improving the supply chain relationships based on common collaborative performance measurement framework, to attain close, collaborative and well-coordinated network relationships to achieve a competitive advantage (Erkan, 2014; Vasiliauskas & Jakubauskas, 2007).

To better understand the relationship between the customer and LSP, a continuous scale has been developed by Skjoett-Larsen (2000), that show the process of going from single transaction, which are usually provided by 1PL and 2PL providers to integrated service agreements, which are usually made by 3PL, 4PL and 5PL providers (Figure 5). This scale gives us a better view of these relationships in the logistics sector. Left part of the scale focuses on the single transaction and corresponds to the traditional relationship between buyer and seller. These agreements are normally short term and informal. Usually, the price is the main leverage. Moving up the scale, agreements become more formalized and the mutual obligation increases. The three forms of cooperation on the right side of the scale may be viewed as forms of strategic alliances (Alkhatib, Darlington, Yang, et al., 2015; Skjoett-Larsen, 2000).

Figure 5 Relationship between the customer and LSP. A continuous scale



Source: (Skjoett-Larsen, 2000)

Partnership agreements try to maintain independence, while simultaneously collaborating to develop a more efficient system. Usually, customer will keep the planning and management functions internally and externalize the logistics functions, while the LSP will make standard solutions depending the customers' requirements. Third party agreements are more formalized and obligatory than partnership agreements. Logistics services are more integrated to fit the needs of a specific customer (Alkhatib, Darlington, & Nguyen, 2015; Alkhatib, Darlington, Yang, et al., 2015; Evangelista et al., 2018). These agreements sometimes require certain investments to be made to innovations, equipment or employee training, so the requirements of the customer would be met. This cooperation is founded on mutual trust and understanding, where information is exchanged freely. Integrated service agreements are the most extensive means of cooperation. They are both formal an have mutual obligations. The service provider to take over the whole or some larger parts of the logistics process, including management and control of logistics activities, facility management or personnel administration. The logistics service provider will offer a tailored made solution, depending on the requirements of the customer and typically include a number of value-added services. Apart from that, IT integration between the parties often occur, as well as internal operation teams will be established (Skjoett-Larsen, 2000). This type of cooperation brings not only competitive advantage, but sustained competitive advantage, as per RBV theory

In conclusion, literature suggests that logistics sector has more than a few different types of service providers and each of these has their own list of usual activities and resources, but they are not limited to them. Development of value-added services can happen with business growth and expansion, thus leading to higher profits. Apart from that, each party logistics providers are

integrated in the above party, up until the 5PL provider and deliver subcontracted services. The context of every type of logistics provider has to be taken into account, when determining the dimensions and factors to apply them in a service quality model, as well as certain expectations of the customer have to be taken into account, while measuring different types of logistics service providers.

1.5. Logistics service quality model and dimensions

More than a few approaches have been made to measure LSQ, of which most popular are based on SERVQUAL (Banomyong & Supatn, 2011; Mitropoulou & Tsoulfas, 2021; Roslan et al., 2015; Vasiljević et al., 2018), SERVPERF (Jari et al., 2010; Kilibarda et al., 2016; Silva et al., 2020) and LSQ concept by Mentzer et al., (2001) (Bienstock et al., 2008; Giovanis et al., 2013; Murfield et al., 2017; Rafiq & Jaafar, 2007; Saura et al., 2008; Thai, 2013; Yumurtacı Hüseyinoğlu et al., 2018). All these authors agree, that there is not one universal way to measure service quality in the logistics sector, due to its different types of logistics service providers (Vasiliauskas & Jakubauskas, 2007), dimensions for each one (Kersten & Koch, 2010) as well as country differences (Gupta et al., 2018; Kilibarda et al., 2016; Limbourg et al., 2016; Mathong et al., 2020; Phuong Vu et al., 2020; Thai, 2013).

Researchers and academics have been putting a great deal of effort to the topic of measuring logistics service quality (LSQ). (Bienstock et al., 2008; Huma et al., 2020; Kilibarda et al., 2016; Mentzer et al., 1999, 2001; Murfield et al., 2017; Phuong Vu et al., 2020; Rafiq & Jaafar, 2007; Restuputri et al., 2020; Saura et al., 2008; Sohn et al., 2017; Thai, 2013a; Vasiljević et al., 2018). It is to their understanding, that high quality logistics service efficiency and excellence are the key to competitiveness of a business (Kilibarda et al., 2012, 2016; Saura et al., 2008; Thai, 2013). In order to choose and apply a LSQ model, determine its dimensions and sector/country specifics, we have to analyse the literature on the approaches of measuring logistics service quality, that has been made by logistics and supply chain academics, who conducted more than a few studies on the topic (Jari et al., 2010; Mentzer et al., 2001; Phuong Vu et al., 2020; Rafiq & Jaafar, 2007). These academics have applied the conceptual service quality model of Parasuramanet al. (1985) for LSQ, where the difference (gap) between expected service and perceived service is affected by other four operational "gaps". As analysed before, Parasuramanet al. (1985) established five dimensions of service quality: tangibility, reliability, responsiveness, assurance and empathy. Other approaches have been made by Bienstock et al., (1997) in the development of LSQ and its conceptualization. Bienstock et al., (1997) argued that delivery service quality consists of customer service quality and physical distribution service quality. In order to develop a valid and reliable scale for measuring physical distribution service quality

(PDSQ), Bienstock et al., (1997) integrated the logistics and marketing service quality research. As part of the development, this model was also based on the SERVQUAL concept and dimensions were replicated for the context of logistics service quality.

Although, Bienstock et al., (2008) notes that some difficulties were faced while applying SERVQUAL to an industrial service context, as it was based on the relative importance of technical outcome versus functional process dimensions play in the divergent nature of consumer versus industrial service transaction. Technical outcome quality assesses if the service delivers the main outcome that is promised, while functional process quality addresses the process of service delivery (Gronroos, 1984; Parasuraman et al., 1988). The dimensions of SERVQUAL are oriented towards the functional process aspects of service quality and logistics service may differ drastically from many of the services investigated previously in marketing service quality researches, with consideration on who, what and where receives the service, as well as the nature of interaction (Bienstock et al., 2008; Jari et al., 2010; Kilibarda et al., 2016; Phuong Vu et al., 2020; Thai, 2013). When SERVQUAL approach is applied to specific service industries, the functional process dimensions might not accurately address the content validity of the service construct, meaning, that in the logistics service context, where the service provider and customer are physically separated, and services are focused on the products, and not the people, Bienstock et al., (1997) note that the suitable technical outcome dimensions have to be developed and assessed, in order to provide valid and accurate service quality measurement instrument. Based on these arguments, physical distribution and logistics service quality literature, Bienstock et al., (1997) develops and confirms a 15-component scale of the value-added elements of time, place and form, which contain three technical outcome dimensions of PDSQ: timeliness, availability and condition.

A further development was made by Mentzer et al., (2001) on conceptualizing LSQ as a broader construct, while using Bienstock et al., (1997) PDSQ technical outcome dimensions, as well as additional dimensions of functional process dimensions, Mentzer et al. (2001) conceptualized LSQ as a process in order to better understand of how logistics service customers form their perception of LSQ and overall satisfaction on logistics services. These logistics services are directly and indirectly affecting customers perception of logistics process quality (Bienstock et al., 2008; Jari et al., 2010; Kilibarda et al., 2016; Phuong Vu et al., 2020; Thai, 2013). Qualitative research of Mentzer et al., (2001) suggests 25 items scale for the nine LSQ dimensions and three items for satisfaction. The nine service quality dimensions:

1. **Personnel contact quality** is referred as the customer orientation of the supplier's logistics contact people. Mentzer et al., (2001) highlights the customer care, that personnel have to be knowledgeable, empathize with customers situation and help them to resolve their problems. It is argued that in most service encounters, quality perceptions are formed during these interactions. Likewise, the persecution of service quality is tied to the service process, which involves personnel contact, that directly results in service outcome. That is why, personnel contact quality is major aspects of business-customer interference.
2. **Order release** is associated with product availability. As an example, from the study, DLA can release certain order sizes. Customers should be the most satisfied when they are able to obtain the quantities they desire. The importance of product availability has long been realized as a key component of logistics excellence.
3. **Information quality** is focused on perceptions of the information provided to the customer by the supplier on its products. If the information is provided and of appropriate quality, customer should be able to decide in terms of this information.
4. **Ordering procedures** focuses on the efficiency and effectiveness of the procedures that a supplier provides. It is important that ordering would be most efficient and easy to use for the customer.
5. **Order accuracy** focuses on how accurate the service was provided the customer's order. This means to receive an order in full, for the price agreed and without any deviations from the original order.
6. **Order conditions** refers to number of damages to the order itself. If the order is received damaged, claims will have to be handled, damages compensated, as well as overall service quality can be impacted in a negative way.
7. **Order quality** refers to how well the products received work. This includes how well they conform to product specifications and customers' needs. Whereas order accuracy addresses the complete set of products in the order (i.e., the accuracy of the kinds and quantities of the products in the order) and order condition addresses damage levels of those items due to handling, order quality addresses manufacturing of products.
8. **Order discrepancy** refers to handling of any discrepancies in orders after they arrive. If the order is not accurate or in poor condition (damaged), they seek corrections from the service provider, and the perception of how well the correction or claim has been handled, thus having direct impact to the service quality.

9. **Timeliness** refers to the delivery time, if the customer's order arrives when promised. To a broader perspective, timeliness refers to the length of time between the when the order has been placed and receipt.

Nevertheless, limitations noticed in the Mentzer et al., (2001) LSQ model. Firstly, Mentzer et al., (2001) model is based on solely inbound logistics and that became an issue. Furthermore, several measures, that were associated with technical quality of scale (order quality, order release quantities, order accuracy) happen to be less suitable for outbound logistics. That is why, the diversity of LSP across different industries can cause technical quality measures to be not fully generalized, for instance, when 3PL providers customize their services to a specific industry or customer. Although, functional quality measures (personnel contact quality, ordering procedures, order discrepancy handling, information quality) were regarded as superb for measuring logistics service quality. Another weakness was presented, that in the LSQ model, all dimensions occur at the same time, they depend on others. Such a formulation ignores service quality processes, that is, the sequential or 'temporal ordering" of dimensions (Rafiq & Jaafar, 2007a; Thai, 2013). Finally, the Mentzer et al., (2001) tool to measure service quality was tested in the US market, and the tool was limited to that market alone. To avoid these limitations, Rafiq & Jaafar, (2007) have suggestions, that their model goes beyond the US market and displays more generalized approach. The same nine dimensions were used as in Mentzer et al. (2001) tool, and have reclassified order quality, order conditions, order accuracy, order release quantities and timeliness as technical quality, while personnel contact quality, information quality, ordering procedure and order discrepancy handling were re-classified as functional quality, as well, several scale items have been redefined.

In conclusion, there are several approaches to measuring logistics service quality (LSQ), including SERVQUAL, SERVPERF, and the LSQ concept by Mentzer et al. (2001). While all of these approaches have been used in various studies, there is no universal way to measure LSQ due to the different types of logistics service providers, dimensions for each provider, and country differences. Researchers and academics have identified the importance of high-quality logistics service in terms of competitiveness for businesses. The SERVQUAL approach, which measures the gap between expected service and perceived service using the dimensions of tangibility, reliability, responsiveness, assurance, and empathy, has been widely used in the field of LSQ. However, it may not accurately address the content validity of the service construct in the logistics industry, where technical outcome quality and functional process quality may both be important. The LSQ concept by Mentzer et al. (2001) takes into account both technical outcome quality and functional process quality, but it may not be suitable for all types of logistics service providers. In

conclusion, it is important to carefully consider the specific context and needs of an organization when choosing a model for measuring LSQ.

1.6. Scandinavian market context

Scandinavia refers to the countries of Denmark, Norway, Sweden and Finland. These countries are known for their strong economies, high standard of living, and well-developed business infrastructure. Factors, such as GDP, GDP per capita, imports, exports and economy complexity (according to the Economic Complexity Index), show that Scandinavia is a powerful market in consuming and producing, due to value in product exports (total € 393.8 bn) and imports (total € 362.8 bn) (The Observatory of Economic Complexity (OEC), 2019), thus providing many opportunities for logistics service providers to act both on inbound, outbound and domestic transportation flows (Table 1). As it is a strong economy, it attracts many businesses and the same time many competitors to the market.

Table 1 Scandinavian country financial factors and rankings.

Country	GDP rank world	GDP per capita world	Economic Complexity Index (ECI)	Product		Service	
				Exports	Imports	Exports	Imports
Sweden	24	14	1.64	€ 139.2 bn	€ 133.7 bn	€ 5.3 bn	€ 5.2 bn
Denmark	37	10	1.07	€ 92.5 bn	€ 87 bn	€ 94.2 bn	€ 83 bn
Finland	43	16	1.53	€ 66.1 bn	€ 63.5 bn	€ 24.4 bn	€ 24.6 bn
Norway	29	6	0.79	€ 96 bn	€ 78.6 bn	€ 54.2 bn	€ 64.5 bn
			Total	**€ 393.8 bn**	**€ 362.8 bn**	**€ 178.1 bn**	**€ 177.3 bn**

Source: developed by author based on data from Observatory of Economic Complexity (2019)

Furthermore, apart from strong economy, Scandinavian countries place a strong emphasis on sustainability and environmental responsibility in both their personal and business practices. Scandinavia is well-known for its leadership in corporate social responsibility (CSR) and sustainability. As a result, there has been increasing global interest in CSR and sustainability initiatives from this region. Scandinavia is often recognized as a global leader in corporate social responsibility and sustainability (Strand & Freeman, 2015; Vidaver-Cohen & Brønn, 2015; Warner-Søderholm, 2012). Consequently, there has been increasing global interest in CSR and sustainability initiatives from this region. Scandinavian countries and Scandinavian-based companies consistently perform well in CSR and sustainability measurements, such as Global Sustainability Competitiveness Index and Transparency International Corruption Perceptions Index (Strand & Freeman, 2015). As there is ongoing debate about the usefulness of traditional economic measurements in measuring societal well, there is likely to be increasing focus on CSR

and sustainability performance measurements being (Lueg et al., 2015; Strand & Freeman, 2015; Vidaver-Cohen & Brønn, 2015).

The Global Sustainability Competitiveness Index ranks 180 countries based on 189 measurable, quantitative and sustainability-related measurements from credible organizations such as the World Bank and various UN agencies. Highlights and key take-aways from the GSCI 2022 report (The Global Sustainability Competitiveness Index, 2022) show that Scandinavia continues to top the ranking: Sweden is leading the Sustainable Competitiveness Index, followed by all other Scandinavian nations. Only Switzerland on 3rd is breaking in. USA is ranked 30, as it has problematic resource efficiency and social capital areas. The top 30 countries are listed in Table 2.

Table 2 The Global Sustainability Competitiveness Index, 2022

Rank	Country	Score	Rank	Country	Score
1	Sweden	60.668	16	Germany	54.797
2	Finland	59.250	17	Estonia	54.542
3	Switzerland	58.308	18	Lithuania	54.188
4	Denmark	58.134	19	Netherlands	53.934
5	Norway	57.585	20	Croatia	53.390
6	Iceland	57.097	21	Luxembourg	53.265
7	United Kingdom	56.402	22	Italy	52.785
8	France	56.260	23	Slovakia	52.689
9	Slovenia	56.256	24	Canada	52.476
10	Japan	56.170	25	Czech Republic	52.407
11	Austria	55.898	26	New Zealand	52.347
12	South Korea	55.855	27	Belgium	51.741
13	Ireland	55.562	28	Spain	51.735
14	Latvia	55.366	29	Poland	51.222
15	Portugal	54.833	30	USA	51.183

Source: developed by author based on data from The Global Sustainability Competitiveness Index (2022)

Additionally, the Scandinavian countries consistently rank highly on the annual Transparency International Corruption Perceptions Index, indicating low levels of perceived corruption in these countries (see Table 3). The index evaluates the levels of public sector corruption in 180 countries and territories based on the perceptions of experts and businesspeople. The rankings are determined using data from 13 independent sources and a scale that ranges from 0 to 100, with 0 representing high levels of corruption and 100 indicating low levels of corruption. Scandinavian countries rank in the top 6, meaning these companies and employees focus on transparency, equality, following laws and regulations and human rights (Transparency International Corruption Perceptions Index, 2021).

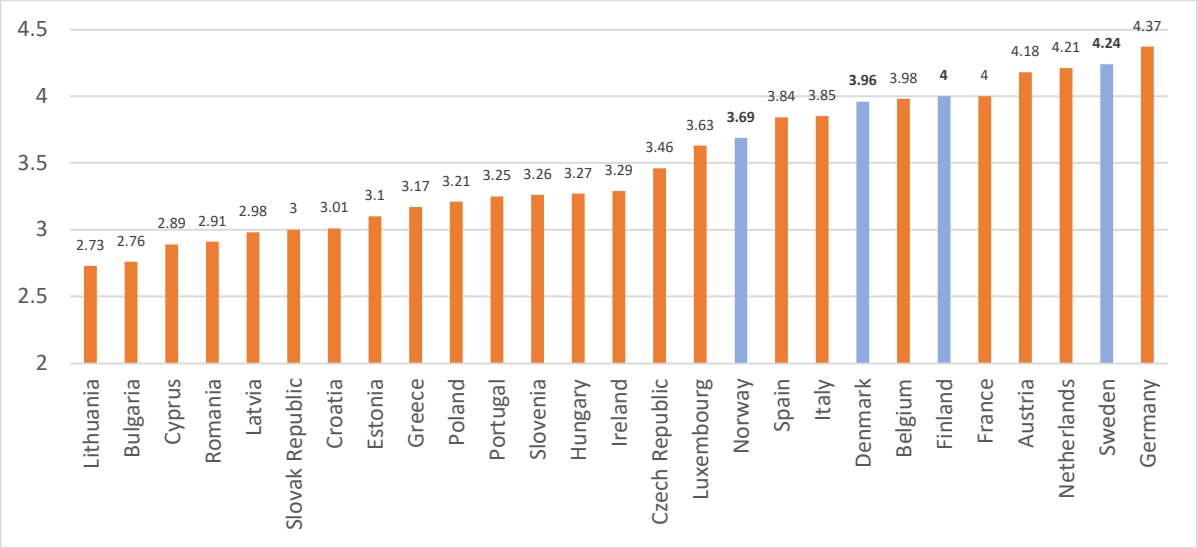
Table 3 Transparency International Corruption Perceptions Index, 2021

Rank	Country	Score	Rank	Country	Score
1	Denmark	88	13	Estonia	74
1	Finland	88	17	Austria	73
1	New Zealand	88	17	Australia	73
4	Norway	85	17	Belgium	73
4	Singapore	85	17	Japan	73
4	Sweden	85	17	Uruguay	73
7	Switzerland	84	22	France	71
8	Netherlands	82	23	Seychelles	70
9	Luxembourg	81	24	United Arab Emirates	69
10	Germany	80	25	Bhutan	68
11	United Kingdom	78	25	Taiwan	68
12	Hong Kong	76	27	Chile	67
13	Canada	74	27	U.S.	67
13	Iceland	74	29	Barbados	65
13	Ireland	74	30	Bahamas	64

Source: developed by author based on data from Transparency International Corruption Perceptions Index (2021)

Logistics Performance Index (LPI) show us that Scandinavian countries are the leaders in the global context of logistics performance and efficiency. LPI is an interactive benchmarking tool created by the World bank to help analyse the logistics performance of countries or areas (World Bank, 2018). The LPI has been adopted by several countries as a key performance indicator in their national transport or logistics strategies. It is also used as a subset of transport or logistics key performance indicators by the European Union, the Association of Southeast Asian Nations, Asia-Pacific Economic Cooperation, and others. Over the past several years, high-income countries, most of which are in Europe, occupied the top 10 positions in the LPI rankings (Figure 6). No surprise, as these countries traditionally have been dominant in the supply chain industry. As individual countries, Denmark, Sweden, Norway and Finland consistently rank very highly on aggregate performance criteria in all well-known competitiveness indices. Sweden is ranked number 2 globally, just behind Germany. Denmark ranked 8th, Finland ranked 10th and Norway ranked 20th.

Figure 6 European LPI rankings



Source: developed by author based on data from World Bank, 2018

These countries have been viewed as engines of economic growth, and because of their high population density, they have offered logistical efficiencies in the movement and distribution of goods. It is measured on six key dimensions: customs performance, infrastructure quality, ease of arranging shipments, logistics services quality, consignments tracking and tracing and timeliness of shipments (World Bank, 2018). As logistics performance index is developed to provide a worldwide general benchmark for the logistics industry and for logistics users, data gathered from Scandinavian countries would be a valid and accurate benchmark for measuring service quality and results could even be applied for global logistics practices.

In conclusion, Scandinavia is a strong market in terms of both economic performance and sustainability initiatives. The countries of Denmark, Finland, Norway, and Sweden consistently rank highly in indices measuring GDP, GDP per capita, imports, exports, and sustainability. The region is known for its focus on corporate social responsibility and sustainability, and there is increasing global interest in these initiatives. In terms of logistics performance, Scandinavian countries are among the global leaders, with high scores on the Logistics Performance Index and well-developed transportation infrastructure. Overall, Scandinavia presents many opportunities for logistics service providers due to its strong economy and emphasis on sustainability and thus having immense competition, so businesses have to properly understand the market, businesses and people.

2. RESEARCH ON SERVICE QUALITY INFLUENCE ON COMPETITIVENESS OF LOGISTICS SERVICE PROVIDER OPERATING IN THE SCANDINAVIAN MARKET

2.1. Research methodology

Literature review suggest us that to some extent, service quality is considered to have influence on companies' competitiveness (Fernandes et al., 2018; Jari et al., 2010; Kusumadewi & Karyono, 2019; Sajeewa Wijetunge, 2016; Sun & Pang, 2017). RBV theory suggests that service quality can be a strategic approach by the use of companies internal resources and capabilities of a firm as the primary drivers, which can be unique, including its human resources, create its distinctive identity, such as high LSQ and can give it a competitive advantage (Assensoh-Kodua, 2019; Aziz et al., 2015; Harvey et al., 2013; Karia et al., 2015; Karia & Wong, 2013; Vasiljević et al., 2018; Yew Wong & Karia, 2010). Although, positive influence was concluded by many scholars, limitations of their work suggest that markets and industries can differ, thus results of other studies might not be applicable for the context of Scandinavia and the logistics sector. Apart from that, competitiveness can arise from various factors and strategic approaches, some are market specific, some are industry specific and few researchers have concluded any unified factors of competitiveness from the perspective of logistics companies. That is why, research will be made on the influence of service quality on the competitiveness of a logistics service provider in the Scandinavian market.

To achieve the best results, qualitative research design will be conducted to confirm the logistics service dimensions that are relevant to our study of logistics service providers, who are operating in the Scandinavian market, as dimensions from other studies have been limited to specific markets and sectors. Further qualitative research methods will be used in our study, in order to find the service quality influence on the competitiveness of logistics service provider operating in the Scandinavian market.

Purpose of the research to determine how LSQ influence competitiveness of a logistics service provider operating in the Scandinavian market.

Research question:

RQ1. How do customers perceive and evaluate the LSQ dimensions of LSP in the Scandinavian market?

RQ2. How does LSQ impact the competitiveness of LSP in the Scandinavian market?

RQ3. What strategies do LSP in the Scandinavian market use to gain and maintain competitive advantage?

Research objectives:

- To select and justify the research design.
- To form the most appropriate data collection instrument.
- To define how the data collected will be analysed.
- To analyse the data collected from the experts in the field of logistics in the Scandinavian market.
- To create a model for assessment of LSQ influence on competitiveness of LSP operating in the Scandinavian market.

Research model in order to develop a research model, variables have to be selected. Two main variables have been defined for our model:

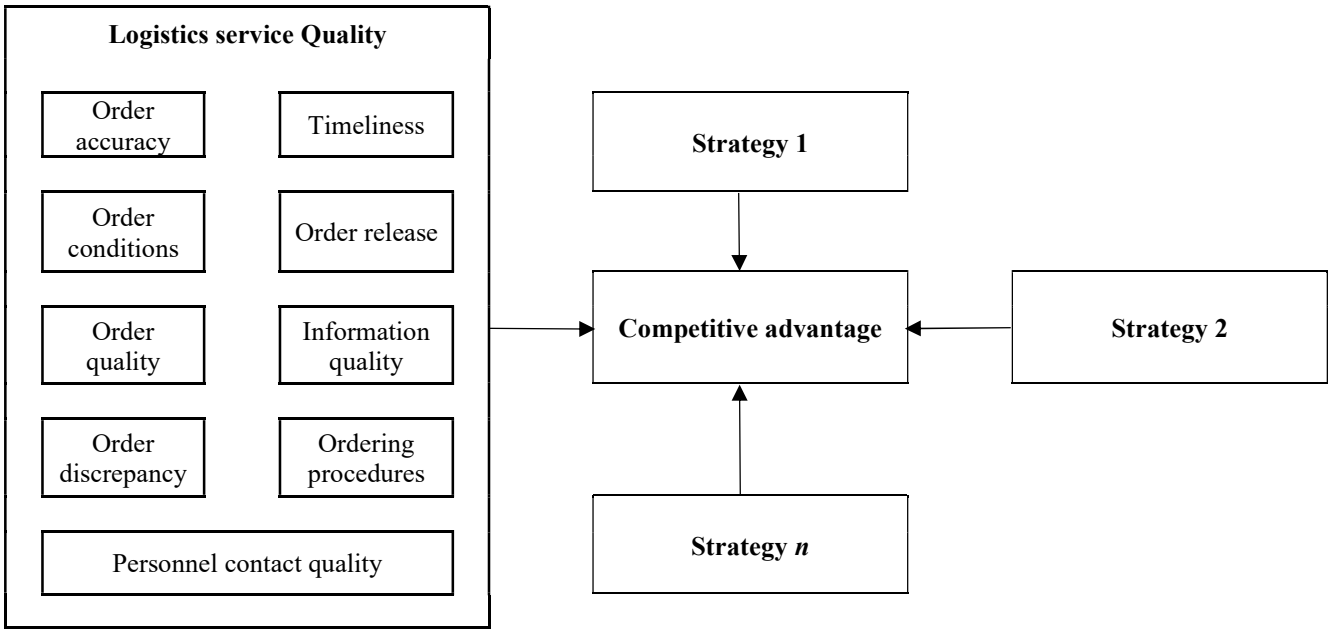
Independent variable – logistics service quality (LSQ). In literature review, service quality is noted as one the factors that impact competitiveness of a company (Meidutė-Kavaliauskienė et al., 2014; Sajeewa Wijetunge, 2016; Saura et al., 2008; Thai, 2013). In our study, we use the same principle of service quality and adapt it to the logistics sector of Scandinavian market. As previously analysed, most accurate and globalised concept for logistics service quality will be the one which Rafiq and Jaafar (2007) has developed on the basis of LSQ model by Mentzer et al. (2001). Logistics service quality is combined these dimensions: personnel contact quality, order release, information quality, ordering procedures, order accuracy, order conditions, order quality, order discrepancy, timeliness. This particular model is the basis of our research methodology, with few developments of its dimensions as it has to be refined for the LSP operating in the Scandinavian market.

Independent variable – LSP strategy. The theory on competitive advantage suggest that different view and development of strategy provides competitive advantage to a business. It involves identifying the target market, differentiating the company's products or services from those of its competitors, and implementing marketing and sales strategies to attract and retain customers (Auzair & Langfield-Smith, 2005; Banker et al., 2014; Evangelista et al., 2017; Harvey et al., 2013; Soh et al., 2015; Zehir et al., 2015). The independent variable of strategy can take many forms and the most effective approach will depend on the specific circumstances of the company and its competitors. It involves aligning the organization with its environment and defining organizational performance, variables of strategic choice, and competitive advantage.

*Dependant variable – competitiveness***.** In literature review, we can find various competitiveness factors for specific markets and industries, such as Telecom companies in Pakistan, retailers in Indonesia (Kusumadewi & Karyono, 2019; Sajeewa Wijetunge, 2016; Sun & Pang, 2017). In few cases, service quality was argued to be positively influencing competitiveness of a company (Mehmood Warraich et al., 2013; Sajeewa Wijetunge, 2016; Saura et al., 2008), thus we consider competitiveness to be the dependant variable, and our first part of the research will help us determine the value surrounding it.

Based on the research model and developed research questions, a visual research model has been developed (figure 7).

Figure 7 Research model



Source: developed by author

Methods for data collection:

Semi-structured in-depth interviews with experts in the field of logistics service will be held to refine the dimensions of logistics services quality and other factors, influencing competitiveness of LSP, operating in the Scandinavian market.

This data collection method will be used, as it is assumed that this method provides much more detailed information as compared to other forms of data collection methods like surveys, questionnaire etc. and it enables the researcher to get an in-depth understanding of a concept or theme (Kumar 2011).

Research sample data:

Comparing qualitative and quantitative research methodologies, sample size used is the major difference in the actual research. As qualitative research is more flexible and dynamic, not that strict sample size requirements are determine for the sample data (Bhattacherjee, 2012). The number of experts in the logistics and customers of logistics service providers who operate in the Scandinavian market will be dependent upon the data saturation point. Data will be collected to a point where no new information will be gathered or it will become negligible. This stage will determine the sample size of the research.

Interview schedule:

The tool used to collect the data during the interviews is a semi-structured questionnaire that allows to explore the thoughts and opinions together with personal practices and experiences of respondents in the area of investigated field. The semi-structured questionnaire consists of one section, 3 open questions and is presented in the table 4 below.

Table 4 Semi-structured questionnaire

Scale	
Service Quality Dimensions - context of Scandinavia	
1. What is your perception on the theoretical identification of these service quality dimensions for LSP operating in the Scandinavian market?	
Personnel contact quality	Order accuracy
Order release	Order conditions
Information quality	Order quality
Ordering procedures	Order discrepancy
Timeliness	
2. What other logistics specific dimensions could be added the service quality model? Which could be removed?	
3. How would you describe the influence LSQ to competitiveness of a company? What strategies do LSP use to gain and maintain competitive advantage?	

Note: *LSP - logistics service provider
Source: developed by author

Selection of respondents:

Non-random/non-probability sampling design will be used, where experts for sampling will be chosen based on their experience in the field of logistic services. Sample size will be determined by data saturation point. Up to this point, seven interviews are scheduled with experts from 7 different firms who are operating the Scandinavian market (Table 5). If sample size will remain the same if there will be no new information or data will become negligible.

Table 5 Characteristics of experts for planned interviews

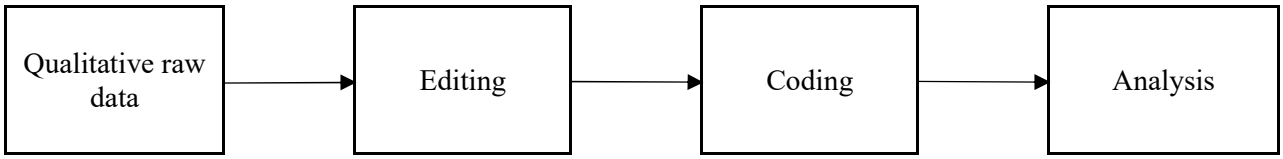
Respondent indicator	Education degree	Country	Experience	Type of organization	Occupation	Industry orientation
R1	Doctoral	Finland	10	Supplier	Head of logistics department	Manufacture of fabricated metal and electronics
R2	Masters	Norway	9	Supplier	Head of sales department	Manufacture of paper and paper products
R3	Masters	Sweden	32	Business consulting company	CEO	Computer programming, consultancy and related activities in logistics sector
R4	Masters	Sweden	12	Supplier	Sourcing manager	Wholesale of wood and other construction materials |
R5	Masters	Sweden	5	Supplier	Export sales manager	Wholesale of metals and metal ores
R6	Masters	Denmark	30	Supplier	Productions and logistics manager	Manufacture furniture fittings
R7	Masters	Denmark	35	Supplier	Supply chain manager	Manufacture of furniture

Source: developed by author

Data analysis:

The key importance of qualitative data analysis is to understand the phenomenon instead of trying to predict it or explain it (Bhattacherjee 2012). That is why, transcribed recordings of the interviews are crucial source of data and has to be coded and analysed by employing continuous comparison strategy. The research model will be refined using the comparison of the data collected. Steps of data analysis are shown in Figure 8.

Figure 8 Steps in data analysis for research part



Source: developed by author

Limitations of the research: research was conducted in the Scandinavian market, as it was distinguished to be a powerful economy, leading to many business opportunities, as well as competition. Scandinavian countries thinking is considered to be similar, due to their history, language, geographical location, economic growth and values, Danish, Swedish, Finnish and Norwegian country specifics can affect research findings, due to governmental decisions and regulations. That is why, there can be limitations for generalization of the findings of the study to be applicable to the entire region. Furthermore, qualitative study has been conducted, although quantitative study with a large enough sample of customers in the Scandinavian market have to be obtained and conducted, to ensure the results are representative of the industry as a whole. Moreover, recent pandemic and armed conflict in Ukraine has introduced new challenges to the logistics sector and thus might change the perception on some results or areas of the study.

In summary, we decided to use qualitative research methods because they tend to provide more in-depth and detailed information compared to other methods like surveys and questionnaires. This approach allows us to gain a deeper understanding of the topic at hand. Additionally, qualitative research is more flexible and does not have strict requirements for sample size. The number of experts and logistics customers that we will include in our sample will be determined by the point at which we reach data saturation, where we are no longer collecting new or significant information. We will use a non-random or non-probability sampling design, selecting participants based on their expertise in logistics services.

3. RESEARCH ON LSQ INFLUENCE TO COMPETITIVENESS OF AN LSP OPERATING IN THE SCANDINAVIAN MARKET

In this part of the Master Thesis, interview data will be analysed. The research was based on the research methodology discussed previously. The main purpose of the research was to investigate what dimensions of LSQ are applicable to the logistics service sector in the Scandinavian market, what additional dimensions could be added, based on our research context and what other factors, from LSQ, have the most positive influence on the competitive advantage of LSP. Data was gathered for the development of a model, which would be applicable to the Scandinavian market, as well as the sector of Logistics, more specific – logistics service providers. Outcome is a new model, that could be applied by the LSP's in the Scandinavian market, in order to assess their LSQ and improve competitiveness.

Semi-structured interviews took place between 2022 November 29th to December 13th, overall, 7 interviews were conducted with experts 6 working in companies who supply goods in the B2B and B2C sectors and 1 from business consultancy company, which provides logistics consulting. All of respondents use logistics services daily, with both inbound and outbound goods in the Scandinavian market. Interviews were held online via Teams platform, average interview took 1:08 h. Each expert had 3 main semi-structured questions to answer, where an additional question could be asked by the interviewer based on their provided answers. Semi-structured questions and results presented in tables below.

3.1. Assessment of LSQ dimensions appliance to LSP operating in a Scandinavian market

First research question looks into the theoretical foundation of the LSQ model, its dimensions, if they apply to the LSP's operating in a Scandinavian market. Personnel contact quality dimension results are presented in Table 6.

Table 6 Findings on personnel contact quality dimension

Question 1	What is your perception on the theoretical identification of these service quality dimensions for LSP operating in the Scandinavian market?
Dimension	Personnel contact quality
R1 – "high importance, the better the personnel contact, the more business there will be. With this immense competition in this market, we have today, usually customer will choose suppliers who they can trust and has found common ground. This also comes from the fact that customers' needs have to be met and personnel contact quality if for sure a key to that. It could be contact between a sales rep, operations person, warehouse manager or even the driver, all of the personnel have influence on the overall service quality."	

R2 – "very important dimension, actually one of the main dimensions if we talk about customer and personnel interactions. It is a significant part of service quality, to provide a personalised touch to every customer. As Scandinavian companies usually go into long-term contracts, LSP should focus on this dimension for sure." R3 – "really important. The personnel contact really distinguishes a high-quality logistics service provider from an average one. It is one of the main criteria's when choosing a proper supplier." R4 – "very important, I would say, one of the most important because if you have good contact and find partnerships with good people, usually everything, you know, runs very smoothly. That is something most Scandinavians are looking for." R5 – "one of the most important dimensions, it is always good because relationships in business are important. Scandinavians are calm comparing to other regions, so we have to trust people to do their best work. " R6 – "communication and contact are important because you need to know the good news and the bad news. You have to trust people that you work with and I feel that this falls under contact quality." R7 – "Information and Communication is key and it's important that there is some kind of connection and you have to be honest."

Source: developed by author

Research results show that Personnel contact quality has a significant role in the perception of logistics service quality. All respondents confirm that this dimension has to be part of the model. Respondents R1, R2, R4 and R5 notes that there has to be good relationship between the customer and LSP, and it emerges from the personnel contact quality. R1 notes that all parties involved with the service have to perform proper contact with the customer, even those who are subcontracted by the main LSP. Respondents R2, R4, R5 and R7 explain that in the Scandinavian context, relationship between a customer and an LSP can lead to competitive advantage, especially if an LSP can provide a personalised touch and trust to the customer. Trust and honesty are mentioned by respondents R1, R5, R6 and R7, which has to come from the personnel of LSP, which ultimately leads to sustained competitive advantage and long-term commitment.

Order release dimension results are presented in Table 7.

Table 7 Findings on order release dimension

Dimension	Order release
R1 – "dimension name is not accurate, could be changed to capacity availability if considering a wider range of logistics service providers in our market (Scandinavian) as there are no	

products to release. And thus, this means it is important, to manage all regular flows, as agreed, but what stands out is the flexibility and response, when fluctuation appears." R2 – "I do not see how it is fit for logistics service providers apart from considering capacity is some way. Order capacity could be. Of course, capacity is important and is a part of service quality in Logistics, but this would differ from customer to customer, the importance level." R3 – "Not order release, this should be called something different, like service availability. There is no doubt that this is important, customers expect LSP's to have the capacity available, especially the capacity that was agreed." R4 – "It's important, of course, like all previous dimensions I would say it's. It differentiates your service package in a way that you can have availability when no one has. That itself puts you in a better position with your competition. This has to be a part of this LSQ model." R5 – "for logistics suppliers to call it capacity or availability is better I think. Customers do not wait for a specific product but for a truck in this case. So, order release should be changed I think. And yes, it is a factor of service quality in logistics, an important one." R6 – "could be named as service availability. To be able to handle normal flows, but LSP also should be able to handle fluctuations and that is a key dimension." R7 – "when you're talking about LSP, you're not talking on a release. Would not consider that applicable to LSP. But if we change the name somehow, to service release, service availability, then, could be."

Source: developed by author

Respondents R1, R2, R3, R5, R6, R7 note that Order release dimension name should be changed to Capacity availability or Order capacity, meaning the availability of resources to provide the service, for example, number of trucks available, number of available containers and space on the vessel. Apart from that, all respondents agree that this dimension is applicable to LSQ in the Scandinavian market, if the phrasing would be adjusted. According to R1, R4, R6, what gives competitive advantage for LSP is flexibility and having resource available when no one has. Dealing with customers fluctuation leads to higher service quality. Order release dimension is also mentioned by Rafiq & Jaafar (2007), as this dimension showed low factor loading, but authors only remarked it to be due to customers having both inbound and outbound logistics needs.

Order accuracy dimension results are presented in Table 8.

Table 8 Findings on order accuracy dimension

Dimension	Order accuracy
R1 – "this dimension needs to be in the model. To receive the ordered service, what was expected, no hidden fees or conditions. "	

R2 – “Is important, rates as agreed, no deviations.” R3 – “here we have to consider wrongful invoices, if we provide wrong equipment to the customer. This leads to waste of time and money for both the customer and LSP. So, this is extra important. “ R4 – “I think this dimension should be here. When you have a setup, you order the service, you expect that there will be no deviations. Overall service quality will be affected negatively if the order has been processed incorrectly.” R5 – “order accuracy is of course important, one or two errors are not an issue, that happens, but repeated errors will cause problems for overall service quality perception. “ R6 – “It essential to the model, this causes issues to the overall process.” R7 – “very relevant to logistics services. The extra work fixing the deviations is not something we are fond off and repetitive errors will make negative impact on overall service quality at the end. “

Source: developed by author

All respondents confirm that order accuracy is an important part of LSQ model for Scandinavian market. Respondents R1, R2, R3, R4 and R7 explain that LSP has to avoid errors in with the order, such as wrongful invoices, wrong equipment used or any other deviations, because these deviations waste time and money for both LSP and the customer. Incorrect orders will have a considerable negative effect on overall service quality.

Order conditions dimension results are presented in Table 9**.**

Table 9 Findings on order conditions dimension

Dimension	Order conditions
R1 – “High importance, as the customer entrusts you with his order and LSP is responsible for the whole trip. If any damages occur, then LSP is the responsible party firstly. “ R2 – “That is applicable to the model. LSP is responsible for the goods transported and has to have the knowledge on how to handle the goods, in order to avoid damages in the process. “ R3 – “This should also consider physical aspects of the service, the equipment, drivers, how well the goods have been transported, if there are any damages etc. And it has high importance.” R4 – “Order conditions are important in logistics service quality. Depending on the customer and the type of goods, LSP should be flexible enough to avoid any discrepancies regarding orders. “ R5 – “The logistics provider is responsible for the goods and thus damages are perceived in a negative way by a customer, if we talk about service quality in logistics.”	

R6 – “order conditions are a big part of service quality. You expect that there will be no damages, so it can impact only in a negative way.” R7 – “extremely important. Companies usually track the damages on their orders and thus asses the LSP depending on that.”

Source: developed by author

All respondents agree that order conditions are highly important to LSQ model. As LSP is responsible for the goods, damages during the service will negatively affect the overall service quality. Apart from that, R2 and R4 respondents note that LSP has to have the knowledge on how to properly handle the goods.

Information quality dimension results are presented in Table 10.

Table 10 Findings on Information quality dimension

Dimension	Information quality
R1 – “Very important. The information quality has to be modelled according to the customer, depending on what he needs. Flexibility and accurate information are the key.” R2 – “information should be provided in a way the customer needs. It has to be timely and accurate. It is significant to the LSQ model.” R3 – “We are working with information so it is extremely important. Some LSP do not have their own resources, so they just manage the information and to that correctly is what customers are looking for.” R4 – “one of the most important dimensions. It is necessary that a customer gets the correct information and in a way it is fit. So, flexibility here is also important, for an LSP to adapt to the customer and his needs for information. Supply chain depends on it.” R5 – “Important, as the information has to be correct, on time, deviations informed. The information itself has to be provided in format which the customer needs.” R6 – “Information has a huge role in the service sector, especially in logistics. Apart from providing correct information, the information has to be provided for customer specific needs.” R7 – “It is customers expectation that LSP keeps everyone informed if there are deviations so that the whole supply chain can be adjusted. It is one of the main dimensions”	

Source: developed by author

Information quality is highly regarded by all responded as one of the key areas of service quality in Logistics. All respondents confirm that this is one of the most important dimensions. R3 notes that some LSP do not have their own physical resources (warehouses, fleet, etc.) and use subcontractors, so they only manage the information flows. Respondents R2, R5, R7 mentioned that information has to be accurate, on time and deviations transmitted. Respondents R1, R2, R4,

R5 and R6 explain that the information that is provided should be modelled according to the customer's needs. LSP has to be flexible and adjust information channels and format depending on the customer.

Order quality dimension results are presented in Table 11.

Table 11 Findings on Order quality dimension

Dimension	Order quality
R1 – "This dimension should not be in the model, if we talk about LSP. If the product was transported properly, without any damages or other deviations and it does not work, then it is the supplier's responsibility. LSP is only providing the transportation/warehousing service, but does not provide the product itself." R2 – "dimension does not apply to LSP, as LSP is not responsible for the characteristics of the product, if they did not change during transportation. This part should be removed from the model." R3 – "not applicable to the LSP. It is the supplier who is responsible if the product works well or not. Unless damages occur during transportation, bet that is connected to order conditions." R4 – "it is more the supplier's responsibility that all works well, so, would remove it from this model." R5 – "I would not say it is applicable. LSP responsibility is to transport goods from point A to point B." R6 – "If a supplier is doing their own logistics this could be actual, but not with LSP. " R7 – "It's not important to the customer if we talk about LSP. It is not their responsibility, just the damages that come on to the shipments. Of course, if the product does not work properly due to wrongfully chosen equipment by the LSP, then it is LSP's responsibility, but then it comes back to order conditions."	

Source: developed by author

All respondents confirm that order quality dimension should be removed from the LSQ model. The reasoning behind this is that LSP is not responsible if the goods transported actually work if the product was transported properly, without any damages or other deviations, which could affect the product. LSP does not manufacture or provide the product itself. If goods are damaged during transportation and that is the reason behind them not working, then it should be placed under order conditions.

Ordering procedures dimension results are presented in Table 12.

Table 12 Findings on Ordering procedures dimension

Dimension	Ordering procedures
R1 – "This is important and ordering has to be flexible, constructed on the customer's needs. Difficult ordering procedures can lead customer on choosing the competition, solely on how to save time ordering. " R2 – "Important dimension, customer usually needs an efficient ordering procedure, especially when there are many orders to be placed. This has to be easy and flexible from the LSP perspective." R3 – "very important, customer might change the LSP if the ordering procedures are too difficult or problematic. " R4 – "ordering procedures are important, difficult ordering procedures can have a negative effect on the service quality. That is why, it has to be easy, best if it can be as the customer desires." R5 – "important. When customer has 200-300 orders, filling in a lot of unnecessary things will be problematic and could be a dealbreaker for the customer to continue using the LSP services. It has to be flexible; it has to be customers way." R6 – "It must be simple to order, you can decrease your competitiveness if you make it as a requirement that, for instance, you book everything through our system or in a specific way of LSP." R7 – "It is important. LSP and customer have to be on the same page, not to make it to difficult, model the procedures according to the needs of customers."	

Source: developed by author

Ordering procedures dimension is an important part of logistics service quality is applicable to the LSQ model for Scandinavian market. This was confirmed by all respondents. Respondents R1, R2, R4, R5, R6 and R7 explain that ordering procedures have to be efficient to the customer and modelled according to their needs. The negative aspects are noted by respondents R3, R4, R5, R6 and R7, where difficult and obstinate can lead to customer changing for another LSP.

Order discrepancy dimension results are presented in Table 13.

Table 13 Findings on Order discrepancy dimension

Dimension	Order discrepancy
R1 – "high importance, whenever a discrepancy has appeared, it is how fast and efficient LSP will manage it. Already discrepancy would have a negative effect on the service quality, so it has to be handled properly. "	

R2 – “very important, could be connected to order conditions in some way. LSP has to handle the discrepancies in a proper way.”
R3 – “very important, process of discrepancy handling should be well mannered and quick. Customer needs to feel that and that is what they expect.”
R4 – “important, because if you have any claims, then you expect them to be handled smoothly and correctly. This has to be proactive from the supplier’s perspective as the customer should not send constant reminders about the claim.”
R5 – “It is an important part of LSP service quality and it is expected that all discrepancies are handled fairly and quickly. “
R6 – “is really important, focuses on how it is handled. Should be openness to handle and to investigate.”
R7 – “Has to be in the model, as it is a part of service quality, how well the claims or other issues are resolved. Customer has to be cared for trough the whole process.”

Source: developed by author

Order discrepancy has high importance in the LSQ model for Scandinavian market. All respondents confirmed that due to how LSP handles order discrepancies, it influences overall service quality. All respondents noted that discrepancy handling should be fast and efficient.

Timeliness dimension results are presented in Table 14.

Table 14 Findings on Timeliness dimension

Dimension	Timeliness
R1 – “core dimension of service quality. Pick up on time, delivery on time is key in Logistics. Some customers can tolerate some delays, but constant delays will make any customer look for other options. “	
R2 – “important dimension. It is important the deliver the service as agreed, especially in the agreed time. Further planning and the whole supply chain can be affected in a negative way, if delays happen. And it is important on how often they happen.”	
R3 – “this dimension is self-explanatory and is important considering logistics. Whole service is based on pickup and delivery. Customer needs the lead times to match their processes.”	
R4 – “for many companies is very important, mostly because of the information flow, it affects so many others, and how they plan their work. Not only internally but externally as well.”	
R5 – “It is important. If the price and other service quality factors are similar, but transit time differs, of course the customer will choose the one he sees fit. Some customers have their special pick up or delivery time needs, so flexibility again comes to play here.”	

R6 – “timeliness is very important aspect of service quality. Customer has to be sure when choosing a LSP that he will load and deliver on time. This one of the key aspects of logistics.” R7 – “this dimension is quite significant. Receiving or shipping out the goods always has a backstory, there is more than delivery from point A to point B. Schedules have to be met, as more parties are usually involved in the process itself, so timeliness is key.”

Source: developed by author

All respondents agree that timeliness dimension has significance for LSP assessing its service quality. Respondents R1, R2, R3 and R7 mention that LSP is responsible for on time pickups and deliveries. That is valued by the customers and they would consider choosing other competitors based on this factor.

In conclusion, the main purpose of the first part of the research was to investigate what dimensions of LSQ are applicable to the logistics service sector in the Scandinavian market. We can conclude that 7 dimensions are applicable to the logistics service quality, which are Personnel contact quality, Order capacity, Order accuracy, Order conditions, Information Quality, Ordering Procedures, Order Discrepancy Handling, Timeliness. These dimensions fit the model of LSQ, although their formulation differs from our context and the original model by Mentzer et al. (2001), mostly due to the research context differences, between USA and Scandinavia, their understanding. Apart from that, different types of service providers were researched, original research was done on DLA, where it is both the supplier and logistics service provider, whereas in our research, only logistics service providers were researched. Due to these reasons, further corrections on dimension items will be needed. Furthermore, phrasing of dimensions Order release has been changed to order capacity, as LSP do not release products but offer service, so this dimension name was changed to Order capacity. Order quality has been removed from the model as a dimension due to the reasons that supplier is responsible for products to actually work, as LSP only provides the service. DLA in the original study has been formulized both as a supplier of products and logistics service provider. In our case, LSP is only responsible for damages made during the service and if damages cause items to not work, then LSP is responsible. We can also state LSP competitiveness comes from its uniqueness of resources which are tangible resources (technology and equipment), intangible resources (such as expertise, competence, flexibility), and capabilities (such as organizational routines, transportation capacity), as based on RBV theory. These resources create an organization`s distinctive nature of communication and customer care, flexibility and effectiveness which builds the competitive advantage.

3.2. Assessment of additional LSQ dimensions appliance to LSP operating in a Scandinavian market

Second question analyses the additional dimensions, that could compliment the LSQ model, which then could be applicable to the LSP's operating in a Scandinavian market, as well as the ones that could be removed. Second question results are presented in Table 15**.**

Table 15 Findings on additional LSQ dimension applicable for LSP in the Scandinavian market

Question 2	What other logistics specific dimensions could be added the service quality model? Which could be removed? Why?
R1 – "IT (information technology) could definitely be included in the model as a dimension. In the last few decades IT solutions have made a huge step in the logistics sector, that is Track & Trace systems, online booking portals, EDI transfers. It all depends on the customers' needs and possibilities. More and more customers ask for EDI and tracking solutions and it is seen as a competitive dimension for some customers." R2 – "innovations, that is tracking of shipments, B2B portals, stock management systems and information transfers are needed in these days usually. In the bigger picture, EDI transfers are required, then comes automation and data analysis Another one would be Environmental requirements, as Scandinavian countries focus is on sustainability. Already customers are requesting ISO 14001 certification for companies' environmental management. Third one could be corporate responsibility, but also could combine national requirements and business ethics." R3 – "could add: IT, Environment, Social responsibility, which is focused on code of conducts, business ethics, supplier management – to evaluate, follow up, manage." R4 – "the environmental focus has to be there, to have sustainable options. As well, IT, for having better views for each transport to measure the co2 emissions, to have some systems for stock management and tracking, data analysis." R5 – "environmental factors are very important. But we also have to lean on the European Union and regulations for businesses, to have LSP's treat their suppliers and workers fairly. Scandinavian countries are all about fair competition and fair working conditions. Also, IT is has been a factor now, as some companies need that IT connection with their systems and LSP's." R6 – "environmental impact is important, as well as tracking the carbon footprint and reporting on the activities to minimize it. I think that's where you can differentiate from competition.	

Business ethics, I cannot be associated with fraudulent companies. IT, you need to have it, as processes are becoming more and more digitalized, same is expected from the LSP's. Also, other innovations for making the processes more efficient."
R7 – "Scandinavian culture is based on sustainability and corporate responsibilities, that I think is a bit different comparing to other regions. This should be somehow considered as a dimension. Also, IT solutions should be considered as it is already 2022 and IT has already taken a big part of our lives overall."

Source: developed by author

Answering to the second question on additional LSQ dimensions, which are applicable to LSP operating in the Scandinavian market, respondents suggested to add several dimensions to the LSQ model. All respondents agreed that IT should be added to the model as a dimension, due to its importance in today's times. As businesses and daily lives are becoming more and more digitalized, there is a need for an LSP provider to offer innovative IT solutions with the logistics services, that fit the customer's needs. Logistics service quality refers to the use of new technologies and processes to improve the overall quality of logistics services, make them more efficient. Most mentioned innovations for logistics are: Track & Trace, EDI transferring possibilities, B2B portals, data analysis.

Secondly, respondents R2, R3, R4, R5, R6 and R7 mentioned Environmental focus as a dimension for LSQ model. It is noted that Scandinavian culture is based on focus on environment, sustainable options and is very important. So, for an LSP, it would have an advantage in the service quality, to have that focus and would lead to competitive advantage. Furthermore, respondents R2, R3, R5, R6 and R7 mentioned corporate responsibilities and business ethics, as companies have to be transparent, applying to all regulations, treat workers and suppliers fairly.

We can establish that second question research results show the need for two additional dimensions can be developed for the LSQ model, assessing the service quality of LSP, operating in a Scandinavian market:

1. **IT solutions** – Respondents note that IT innovations are an important part of service quality of an LSP. Respondents refer to these IT innovations to be most needed for logistics services: Track & Trace, EDI transferring possibilities, B2B portal and data analysis. These tools can help a company to improve the efficiency and effectiveness of its operations and better meet customer needs and expectations. This refers to the logistics company's use of new technologies and processes to improve efficiency and customer satisfaction (Cherchata et al., 2022; Ranieri et al., 2018; Winkelhaus & Grosse, 2020). Depending on the customer,

several innovation solutions should be provided, to help LSP deliver higher service quality than the competition.

2. **Corporate Social Responsibility (CSR)** – this term connects all of the rest dimension suggestions mentioned by the respondents R2, R3, R4, R5, R6 and R7. CSR according to Carroll & Brown (2018) includes business responsibility to society, which was mentioned by respondents as ethical behaviour, transparency, applying to all local and international regulations and laws, fair conditions for workers and suppliers, equality and sustainability. CSR is about a company's efforts to be responsible and accountable in its operations and relationships with stakeholders. We can connect companies' CSR efforts to contribute to the overall quality of its service.

To summarize, the goal of this research part was to analyse any additional dimensions to the LSQ model for LSP operating in a Scandinavian market. Due to the context of our study, respondents suggested focusing on several additional areas, that could be considered as dimensions. IT innovations and solutions are noted to be an important part of LSQ in today's world. Mentzer et al. study was conducted in 2001, so that itself suggests that during this time, IT made huge steps in development in all sectors, so it has to be considered as influential factor. Respondents also noted Track & Trace, EDI transferring possibilities, B2B portal and data analysis to be areas of need for the customers, that LSP should provide, at least to some extent, depending on customer's needs. These focus areas were contracted under IT solutions dimension. Furthermore, a huge focus from respondents was made on ethical behaviour, transparency, applying to all local and international regulations and laws, fair conditions for workers and suppliers, equality and sustainability. These focus areas are contracted under CSR. Scandinavian countries have the highest CSR ranking, where first is Sweden, fourth is Denmark and fifth is Norway. This ranking and respondent responses confirms that CSR is an important issue in the Scandinavian market, among companies, which has to be considered.

3.3. LSQ influence on competitiveness of LSP operating in the Scandinavian market

Third part of our research focuses into LSQ influence on competitiveness of LSP, operating in the Scandinavian market, as well as other strategies which affect competitiveness, which are most influential in the perception of experts from the field of Logistics in Scandinavia. Respondents were asked provide their understanding on what other strategies influence LSPs' competitiveness, in what way and how they stand with LSQ. Third question response results are mentioned in Table 16.

Table 16 Findings on the influence of LSQ to competitiveness and additional strategies

Question 3	How would you describe the influence LSQ to competitiveness of a company? What strategies do LSP use to gain and maintain competitive advantage?
R1 – "I would say focus on customer intimacy, how well LSP is connected to the customer, on a personal level as well. This helps to build trust and long-lasting cooperation. Market leader in innovations, to provide a service that is different from others and costs leader. Service quality would come first in companies' strategic approach to competitiveness, comparing to all others, but mostly, it is a mix off all of these factors. For Scandinavians costs is not always the go to factor when choosing a product or service." R2 – "for logistics sector and our market (Scandinavian), firstly comes Logistics Service Quality, then costs strategy, after that marketing strategies, how well the brand appears and lastly differentiation, that could be connected to innovations, other niche services." R3 – "depending on the customer and production he is shipping, depends the priorities of these factors. But for the majority, Service quality comes first, as I believe, Scandinavians are willing to pay extra to have that high end service quality, as at the end, they will save time and avoid issues and that will lead to profits in the long run. Although some suppliers or manufacturers have cheap products and would not be willing to pay extra and would choose price over quality. Of course, other strategies are as well important, such as costs and differentiations. Differentiation could come as a one-stop-shop, where companies offer full-service packages and have to deal with one company only." R4 – "I would rank Service quality as the main strategy, then price and then differentiation. " R5 – "Service quality I would rank the most important, then comes price. I would not say that price is the most important, but it is important. I think that the higher service quality of a company, the more competitive it is in the Scandinavian market." R6 – "I would prioritise Service quality over other strategies. I prefer to pay a little bit more, but to have higher logistics services. There is a lot of competition in our market (Scandinavian), so service quality will stand out. Another factor is price, which I would place in the second place." R7 – "Other factors would be price, payment terms and development possibilities. Right. I would you put service quality ahead of price, but minority of firms go with price as their produces go in bulk, not damaged easily, can be delayed"	

Source: developed by author

Respondents mentioned several different strategic approaches, which they think have influence on the competitive advantage of an LSP, apart from LSQ. All respondents mentioned

costs strategy to be one main one influencing competitiveness of an LSP in the Scandinavian market. Low-cost strategy has been studied extensively in product or service research and confirmed to be a core factor having influencing competitive advantage of a business (Assensoh-Kodua, 2019; Banker et al., 2014; Collin et al., 2019; Karia et al., 2015; Kusumadewi & Karyono, 2019; Sajeewa Wijetunge, 2016). Cost leadership strategy is usually built on the basis of achieving operational efficiency. Although scholars and literature review suggest that the competitive advantage through implementation of such strategies is temporary, and long-term sustained profitability is not achievable (Banker et al., 2014; Ranieri et al., 2018). If cost-leadership strategies can be implemented by numerous companies in an industry, then being a cost leader does not generate a sustained competitive advantage for a firm. Continuous improvement in operational efficiency at a pace faster than competitors is necessary to sustain superior competitiveness over time.

Differentiation – this strategy was mentioned by several respondents to have influence on competitiveness of LSP, by offering a service that is more innovative or advanced than those of competitors, service that is not available from other companies, marketing, which provides differentiation on brand image. Differentiation is a strategy that companies use to make their product or service stand out from those of their competitors. This can be especially important in highly competitive markets, where there may be many companies offering similar products or services. By differentiating their offering, companies can create a unique value proposition that sets them apart from their competitors and makes them more appealing to customers (Banker et al., 2014; Bhawsar & Chattopadhyay, 2015; Karakasnaki et al., 2019; Raue & Wieland, 2015; Sun & Pang, 2017).

After naming competitiveness strategies for LSP, respondents were asked to rank the mentioned strategies together with LSQ. All respondents agreed, that in the Scandinavian context, more often customers would choose LSQ as the most important source of competitiveness, considering competitiveness of LSP operating in the Scandinavian market. Several respondents mentioned that they would be willing to pay a higher amount to have higher service quality. This agrees with RBV theoretical approach to use companies' resources to make the service unique in some way, as it is suggested here. Although, respondents mentioned, that there some businesses in Scandinavia, who would choose cheapest solution, due to their commodities, which are low on price and can handle delays, are not easily damaged. Furthermore, service costs are the second most important strategic approach, after service quality, which influence competitiveness of LSP. Lower costs can be developed by low-cost strategy or by application of resource-based view theory. As in logistics research by identifying resources that play supporting roles and examining

the capabilities, LSPs' competitive performance can be enchanted and costs lowered. Additionally, differentiation, in different forms, was mentioned to go after service costs, as the third important factor which influence competitiveness. In literature, competitiveness attained through differentiation are more likely to be sustainable because unique services or products valued by customers cannot be easily imitated by competitors. A strategy of differentiation is usually developed around firm-specific and service-specific innovations and marketing efforts, that might take more time to imitate. According to scholars, businesses often build relationships with their customers on service customization, which can turn into long-term partnerships. Differentiation can be achieved by the same application of resource-based view theory, to use resources to develop new innovations, services, implement new technologies, improve the customer experience and intimacy even expand the service scope. Although experts of our study have mentioned costs to be more influential on competitive advantage, rather than differentiation, scholars suggest that cost-leadership strategies can provide a false perception of competitiveness and only provide short-term competitiveness, which is not sustainable (Banker et al., 2014; Bhawsar & Chattopadhyay, 2015; Karakasnaki et al., 2019). On the other hand, a strategy based on differentiation of service development, marketing and strong supplier and customer networks, will provide firms with a more durable advantages enabling sustainable competitiveness over time.

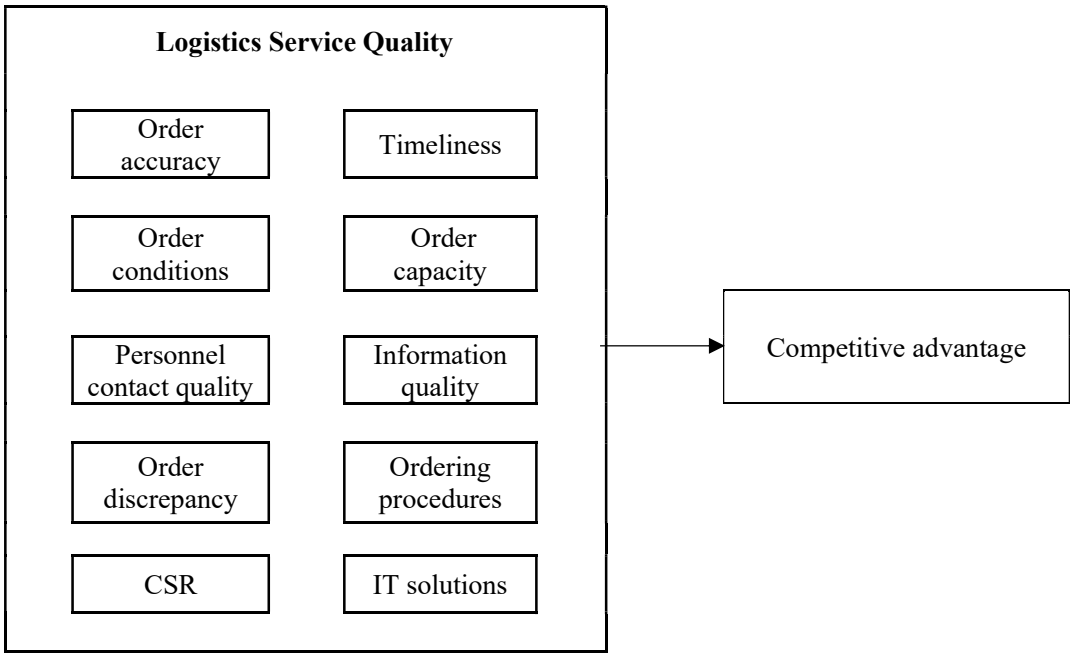
In conclusion, research findings show that LSQ is the most important strategic approach, which influences competitive advantage of LSP. Second most important strategy was confirmed to be costs, as more customers would be willing to pay extra, in order to have good service quality, but with exception to smaller number of businesses, who choose price over quality, due to transportation of low costs goods, that can be hardly damaged, transported in bulk and no issues if delays happen. Third strategic approach of influence was concluded to be differentiation, where new innovations, services, implement new technologies, improve the customer experience and intimacy, expanded service scope can be developed to have a competitive edge over the competition. It was noted that while cost-leadership strategies may provide short-term competitiveness, a differentiation strategy based on service development, marketing, and strong supplier and customer networks is more likely to lead to sustainable competitiveness over time.

3.4. Development of theoretical competitiveness assessment model, to be applied to LSP operating in the Scandinavian market.

In order for LSP to assess the LSQ of their own business, a competitiveness assessment tool has to be created, to measure individual companies' stance in the market and understand the customers perception of it. With the use of findings from our research and respondents, we can conclude that some alterations to the foundation of the LSQ model have to be made, so the model

would fit LSP's operating in a Scandinavian market. First alteration would be by redefining the dimension of *Order release* and changing it to *Order capacity.* This change to phrasing and understanding of it has to be made due to LSP's not releasing available products, but rather providing services and its availability, which is important part of LSQ. Secondly, *Order quality* dimension should not be a part of LSQ model, as LSP is not responsible for products to work, rather it is suppliers' responsibility. If the product does not work due to damages during transportation or handling, then it is under order conditions. Third alteration would be to add additional dimensions, that were developed based on the respondents' responses. The two new dimensions would be: *IT solutions* (IT innovations, Track & Trace, EDI transferring possibilities, B2B portal, data analysis) and *Corporate Social Responsibility* (ethical behaviour, transparency, applying to all local and international regulations and laws, fair conditions for workers and suppliers, equality and sustainability). After these changes, new LSQ model with 10 dimensions, Order accuracy, Timeliness, Order conditions, Order capacity, Personnel contact quality, Information quality, Order discrepancy, Ordering procedures, CSR and IT solutions are developed and presented in Figure 9.

Figure 9 Updated LSQ model applicable to the Scandinavian market



Source: developed by author

Further development of scale items has to be made. Original LSQ model by Mentzer et al., (2001) included originally 9 dimensions and a 25-item scale, which now has to be adjusted due to research results, so that the scale would be applicable to LSP operating in a Scandinavian market, as authors of this model limits their work to Defence Logistics Agency (DLA), context of USA and service surrounding it, which is DLA as a supplier delivering outbound goods to their customers. It has already been established by literature review and semi structured interviews, that

Scandinavian context and LSP operations are different. LSP is acting solely as a transporter and not a supplier of goods, as well, Scandinavian context suggests different business culture and needs for the customers, thus DLA has to be replaced by LSP and product definitions replaced by service.

From our research results, we have concluded to remove one dimension of technical quality, that is order quality. Order release phrasing has to be changed to order capacity, as LSP does not release the goods off their own, rather provide service capacity. Order release originally has 2 items connected to release quantities and 1 assessing equisition of quantities, but if we consider its application to the context of LSP in Scandinavian comapnies, they have to be changed. Respondents noted main reasoning behind Order capacity, which is that LSP handles agreed capacity and has the ability to manage fluctuation. This leads to development of only two items: *LSP handles all agreed capacity* and *LSP handles flucatuation in capacity*, disregarding *requisition quantities* and *release quantities*.

Secondly, personnel contact quality dimension partly fit for Scandinavian context, as respondents mentioned trust to be one of the main factors influencing it, as well as competence and problem solving. This is seen in Mentzer et al. (2001) LSQ model, but the phrasing has to be adjusted to LSP and service instead of product. Same 3 items remain, after rephrasing, they develop to: *The designated LSP contact person makes an effort to understand my situation; Problems are resolved by the designated LSP contact person; The service knowledge/experience of LSP personnel is adequate.*

Considering Order accuracy dimension, name remains the same, but all 3 items differ. Respondents explain that for an order to be accurate in logistics services of LSP, equipment, invoicing and agreed terms are important. Thus, leading to construction of 3 new items of: *Correct equipment provided for the service; Service provided per agreed terms; Correct invoices are issued for the service.*

Order conditions in Mentzer et al. (2001) LSQ model focus on materials, rather than other types of goods, for example finished products like furniture, electronics, car parts, etc., that is why “material” should be changed to “shipment” due to variety of it transported by LSP. As well, LSP only cover the handling part and there is no difference if handling comes in from a vendor or supplier, as LSP only is responsible for handling the goods from point A to point B. This leads to changing the existing 3 item scale to 2 items of: *Shipments handled by LSP's are undamaged; Damage rarely occurs as a result of the transport mode or carrier.*

Respondents mention information quality to be one of the most important dimensions in the LSQ model. This contradicts to Mentzer et al. (2001), but has a familiar understanding to study by Rafiq & Jaafar (2007), as this dimension has to have more attention and consider more items. Respondents from our research advised information quality to be accurate timely, customers informed of any deviations and that information would be provided specifically to each customer, as different information is specific to different customer. Original items from Mentzer et. Al (2001) only covers the catalogue information about products, which is not at all applicable to LSP. That is why, 4 new items are developed: *Information provided by LSP is accurate, Information provided by LSP is timely; Information on deviations is provided by LSP; Information provided by LSP is according to customers' needs,*

Ordering procedures are noted as an important part of LSQ model. Two main areas of ordering procedures that the respondents confirmed fit the original Mentzer et al. (2001) model, which covers ordering procedures to be effective and easy to use. All respondents noted that these two parts are important for LSQ. In addition, flexibility was noted as an extra factor for ordering procedures, where LSP has to adapt to customers ordering procedures and not force its own ordering process. That is why flexibility will be added in the same phrasing as was effectiveness and easy use of procedures, leading to 3 items: *Requisitioning procedures are effective; Requisitioning procedures are easy to use; Requisitioning procedures are flexible.*

Order discrepancy handling dimension is explained by respondents that it has to be easy, efficient and any discrepancies have to be corrected smoothly. This closely relates to Mentzer et al. (2001) item scale for order discrepancy handling and they are applicable to LSP's operating in the Scandinavian market. 3 items for order discrepancy: *Correction of delivered quality discrepancies is satisfactory; The report of discrepancy process is adequate; Response to quality discrepancy reports is satisfactory.*

Respondents consider timeliness to be one of the most important parts of logistics services that an LSP can provide. Main areas of focus are for LSP to provide lead-times that are needed for the customer, this also includes flexibility, where alterative solutions can be offered, thus customer can choose which would be needed for their business. Apart from that, loading and delivery times have to be respected, without any deviations. Considering Mentzer et al. (2001) provided items, they do not fully represent each factor mentioned by our study respondents, thus, items are adjusted to fit our research context. 3 items were developed based on the 3 original by Mentzer et al.: *Lead time provided by LSP is satisfactory; Loading and delivery times are without deviations; LSP is flexible with lead time.*

Additionally, two new dimensions have been added to the model: IT solutions and CSR. Both dimensions are classified as functional quality due to fact that functional quality addresses the process of service delivery, as in this case, both fall under this classification. IT solutions dimension is regarded to need the ability to trace shipments, data transmission (for example EDI), data analysis tools and innovations to improve efficiency. This leads to 4 item development for IT solution dimension, which is based on Cherchata et al. (2022) and Ranieri et al. (2018) research and looks into IT solutions, if customer has all off the solutions needed, if they are up to date, easy to use and efficient. This leads to 4 items construction: *LSP provides the necessary IT solutions; LSP IT solutions are up to date; LSP IT solutions are easy to use; LSP IT solutions increase efficiency.* Secondly, respondents agree that ethical behaviour, transparency, applying to all local and international regulations and laws, fair conditions for workers and suppliers, equality and sustainability have to be a part of service quality. Carroll & Brown (2018) connects all mentioned focus areas as Corporate Social Responsibility dimension. CRS itself has multiple dimensions and items to choose from, but respondents mention only couple of focus areas for LSP to consider, as mentioned above. Fair sales practices consider ethical behaviour towards competitions and customers, also includes transparency. Obligation to local and international laws and regulations implies LSP to local law and regulations, as well as international ones. Implement sustainable service solutions to cover sustainability and environmental focus. Furthermore, implement fair conditions for workers and suppliers, to include fair conditions for the drivers, warehousing staff and other employees, as well to have same fair conditions towards its suppliers (Carroll & Brown, 2018; K. H. Lee et al., 2016; Zhao et al., 2019). 4 items have been developed for CRS dimension assessment: *LSP implement fair sales practices; LSP implement local and international laws and regulations; LSP implement sustainable transport solutions; LSP implement fair conditions for workers and suppliers.*

Table 17 provides a visual representation of the new 31 item scale for assessing LSQ for LSP, operating in the Scandinavian market.

Table 17 item scale for assessing LSQ of LSP

Updated LSQ item scale for LSP operating in the Scandinavian market	
Order accuracy	**Timeliness**
1. Correct equipment provided for the service	1. Lead time provided by LSP is satisfactory
2. Service provided per agreed terms	2. Loading and delivery times are without deviations
3. Correct invoices are issued for the service	3. LSP is flexible with lead time
Order conditions	**Order capacity**
1. Shipments handled by LSP's are undamaged.	1. LSP handles all agreed capacity
2. Damage rarely occurs as a result of the transport mode or carrier.	2. LSP handles flucatuation in capacity
Personnel contact quality	**Information Quality**
1. The designated LSP contact person makes an effort to understand my situation	1. Information provided by LSP is accurate
2. Problems are resolved by the designated LSP contact person	2. Information provided by LSP is timely
3. The service knowledge/experience of LSP personnel is adequate.	3. Information provided by LSP is according to customers needs
	4. Information on deviations is provided by LSP
Order Discrepancy Handling	**Ordering Procedures**
1. Response to quality discrepancy reports is satisfactory	1. Requisitioning procedures are effective.
2. Discrepancy handling is efficient	2. Requisitioning procedures are easy to use.
3. Correction of discrepancies is satisfactory	3. Requisitioning procedures are flexible.
CSR	**IT solutions**
1. LSP implement fair sales practices	1. LSP provides the neccesary IT solutions
2. LSP implement local and international laws and regulations	2. LSP IT solutions are up to date
3. LSP implement sustainable transport solutions	3. LSP IT solutions are easy to use
4. LSP implement fair conditions for workers and suppliers	4. LSP IT solutions increase efficiency

Source: developed by author

Furthermore, research findings let us asses the competitiveness strategies of LSP in the Scandinavian market. As it was distinguished by experts, LSQ, Low-costs and Differentiation combine as main strategies of LSP competitiveness. Differentiation and low-costs strategy item scales have to be developed to fully assess the competitive environment of LSP. Considering prior studies and our interview findings, in this study cost leadership and differentiation are measured

in as separate scales (López-Cabarcos et al., 2015; Nimtrakoon & Tayles, 2015; Zehir et al., 2015). Table 18 provides a visual representation of the new 12 item scale for assessing low-cost and differentiation factors of LSP's, operating in the Scandinavian market.

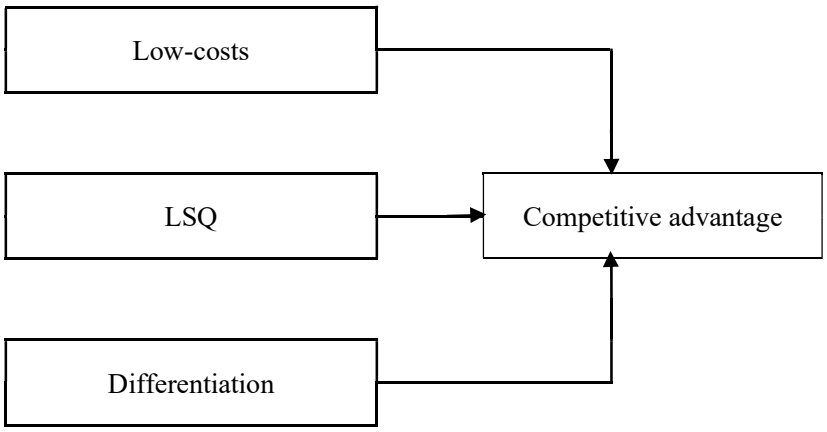
Table 18 item scale for assessing low-cost and differentiation factors of LSP

Developed low-cost assestment scale
1. LSP is achieving lower cost of services than competitors
2. LSP is making services/procedures more cost efficient
3. LSP is improving the cost required for coordination of various services
4. LSP is improving the utilization of available equipment, services and facilities
Developed differentiation assestment scale
1. LSP is introducing new services/procedures quickly
2. LSP is providing services that are distinct from that of competitors
3. LSP is offering a broader range of services than the competitors
4. LSP is improving the time it takes to provide services to customers
5. LSP is providing high quality services
6. LSP is customizing services to customers need
7. LSP is providing after-sale service and support

Source: developed by author

Research findings let us develop a research model for future research on competitiveness in the Scandinavian market for LSP (figure 10). As experts have confirmed, low-costs and differentiation strategies have influence over competitive advantage. LSQ in this case can be considered to be a part of differentiation strategy according to RBV theory, where high LSQ would be considered to be a unique service which provides an edge on the competition. Although to fully assess the needs and perception of the customer, understand what drives him to choose one LSP over another, we would need to assess LSQ as a separate strategic approach and differentiation to consider combining distinct, broader range services, which can be customizable.

Figure 10 research model for future research on competitiveness in the Scandinavian market for LSP



Source: developed by author

In conclusion, the research on the LSQ model in the context of logistics service providers (LSPs) operating in the Scandinavian market has found that some alterations to the model are necessary in order to better fit this context. These alterations include redefining the "Order release" dimension as "Order capacity," removing the "Order quality" dimension, and adding two new dimensions: "IT solutions" and "Corporate Social Responsibility (CSR)." The modified LSQ model includes a total of 10 dimensions and will be further developed with scale items that are specifically applicable to LSPs operating in the Scandinavian market. These changes were based on the results of literature review and semi-structured interviews with respondents, which indicated that the LSPs in this market are different from those in the context of the original LSQ model and have unique business culture and customer needs. The revised dimensions and scale items of the LSQ model will better reflect the specific characteristics and considerations of LSPs operating in the Scandinavian market.

CONCLUSIONS

1. Based on the analysis of scientific literature, it can be concluded that competitiveness in the logistics industry refers to a company's ability to effectively compete with other logistics service providers in the same market. This can be done through strategies that make the company's services stand out or offer unique value to customers. According to the resource-based view, a company's performance is influenced by its tangible and intangible resources and capabilities, which can give it a temporary competitive advantage if they are valuable, rare, hard to copy, and cannot be easily replaced.

2. Based on the analysis of scientific literature, it can be concluded that logistics sector has more than a few different types of service providers and each of these has their own list of usual activities and resources, but they are not limited to them. The context of Scandinavia is concluded to have high quality standards in regards to their strong economy, high rankings in corporate social responsibility, corruption prevention and other logistics related indexes. Thus, it's important to take this into consideration when creating a service quality model for a logistics provider, to consider this specific context and type of provider, as well as the expectations of the customer.

3. Based on the analysis of scientific literature, it can be concluded that there are some tools that can be used to measure LSQ, but there is no universal way to measure LSQ, as offered LSQ models are not be suitable for all types of logistics service providers and not all markets, thus provided models have to be adjusted to be sector and market specific. Primary dimensions for LSQ have been defined to be: order quality, order conditions, order accuracy, order release quantities and timeliness as technical quality, while personnel contact quality, information quality, ordering procedure and order discrepancy handling were re-classified as functional quality.

4. Based on the research findings, it can be concluded in the context of LSP operating in a Scandinavian market, LSQ model has to be changed and two new dimensions of CRS and IT solutions have to be added based on interview findings. As Scandinavian market has the highest rankings in CRS, this is also expected from to customers to be included in the LSQ.

5. Based on the research findings, it can be concluded that LSQ in most cases, can be the most important factor which influences competitive advantage. All respondents noted that LSQ is more important than low costs or differentiation, as customers would choose an LSP which provides higher service quality, even if the costs are higher (reasonable amount). Although, low-costs strategic approach by customer mean choosing low-costs supplier selection.

6. Based on the analysis of scientific literature and research findings, LSQ competitiveness assessment model has been developed, which can be used by LSP, to measure

LSQ influence to competitiveness in the context of Scandinavia, while also assessing its strategic approaches to competitiveness and customers perception of it.

Recommendation

1. Customers perception of LSQ in the Scandinavian market focuses on flexibility, trust and efficiency of LSP for all dimensions. Most customers want services tailored to their needs. That is why LSP has to develop their services around the customer. Information quality, IT solutions, ordering procedures have to meet customer's needs, to make work and communication efficient. Timeliness, order accuracy, order discrepancy, order capacity, order conditions, personnel contact quality and CRS are areas where customer has to trust LSP to meet their demands and perform in these areas.

2. Scandinavian market specifics include Corporate Social Responsibilities, which focus on transparency of LSP, following of laws and regulations, ethical behaviour, fair working conditions and sustainability. That is why, LSP has to take attention in their company's approach to their strategy, as Scandinavian countries are leading company and country rankings for CSR. This is considered as a value for Scandinavian people.

3. Research findings suggest that customers based in Scandinavia primarily connect LSQ aspects of LSP to competitiveness. After that comes low-costs and service differentiation. That is why, LSP has to use its resources to develop high quality service for the customers rather than exploiting low-costs or differentiation strategic approaches.

Directions for further research: for future research a quantitative study would be suggested on the basis of newly developed LSQ model for assessing the competitiveness of LSP operating in a Scandinavian market. With the inclusion of additional variables that explain contrasting areas of differentiation strategy in the logistics sector. It would be interesting to see how new innovations influence LSP competitiveness.

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SERVICE QUALITY INFLUENCE ON COMPETITIVNESS OF LOGISTICS SERVICE PROVIDER IN THE SCANDINAVIAN MARKET

Girvydas RIMEIKA

Master Thesis

Quality Management Master Programme

Faculty of Economics and Business Administration, Vilnius University

Supervisor Dr. Rimvydas Labanauskis, Vilnius, 2023

SUMMARY

62 pages, 18 tables, 10 figures, 114 references.

The aim of this master thesis is to determine the service quality influence on competitiveness of logistics service provider (LSP) in the Scandinavian market.

The Master thesis consists of three main parts; the analysis of literature, the research and its results, a conclusion and recommendations.

Literature analysis reviews competitiveness, service quality, logistics sector and specifics, logistics service quality model and Scandinavian context.

Following the literature analysis, the author carried out research understanding the logistics service quality (LSQ) dimensions, are they applicable to LSP in the market of Scandinavia as well as other competitiveness sources, that can provide a competitive advantage to a firm. In all, 7 experts were interviewed on a semi-structured approach, to find out their perception on LSQ, its influence on competitiveness of a firm and other strategies that can lead to competitive advantage. Furthermore, the results concluded that LSQ model had to be refined by removing one dimension of Order quality and adding two new dimensions of IT solutions and CSR to the model. In addition, competitiveness sources have been distinguished by confirming LSQ was the main source of competitiveness, following several strategic approaches of low-costs and differentiation strategies. Based on RBV theory, LSP can use its own resources to provide high service quality, leading to competitive advantage among companies. Moreover, a model has been developed for companies to assess and understand their level of LSQ and find out customers priorities regarding competitive advantage.

The conclusions and recommendations summarise the main concepts of literature analysis as well as the results of the performed research. The author believes that the results of the study could give useful guidelines to the companies that are going need to assess their LSQ and look into their strategies to gain and maintain competitive advantage.

PASLAUGŲ KOKYBĖS ĮTAKA LOGISTIKOS PASLAUGŲ TEIKĖJO KONKURENCINGUMUI SKANDINAVIJAS RINKOJE

Girvydas RIMEIKA

Baigiamasis magistro darbas

Kokybės vadybos magistrantūros programa

Vilniaus universiteto Ekonomikos ir verslo administravimo fakultetas

Vadovas dr.Rimvydas Labanauskis, Vilnius 2023 m

SANTRAUKA

62 puslapiai, 18 lentelių, 10 paveikslų, 114 literatūros šaltinių.

magistro darbo tikslas – nustatyti paslaugų kokybės įtaką logistikos paslaugų teikėjo konkurencingumui Skandinavijos rinkoje.

Magistro baigiamasis darbas susideda iš trijų dalių; literatūros analizė, tyrimo metodologija, atliktas tyrimas ir jo rezultatai,.

Literatūros analizė apžvelgia konkurencingumą, paslaugų kokybę, logistikos sektorių ir specifiką, logistikos paslaugų kokybės modelį ir Skandinavijos ekonominį kontekstą.

Atlikęs literatūros analizę, autorius parengė tyrimo metodologiją ir atliko autorinį tyrimą , nustatydamas logistikos paslaugų kokybės dimensijas, ar jos pritaikomos logistikos paslaugų teikejui Skandinavijos rinkoje bei kitiems konkurencingumo šaltiniams, galintiems suteikti įmonei konkurencinį pranašumą. Iš viso buvo apklausti 7 ekspertai pusiau struktūruotu požiūriu, siekiant išsiaiškinti jų suvokimą apie logistikos paslaugų kokybę, jo įtaką įmonės konkurencingumui ir kitas strategijas, kurios gali lemti konkurencinį pranašumą. Taip pat, buvo padaryta išvada, kad logistikos paslaugų kokybės modelis turėjo būti patobulintas, pašalinant vieną užsakymo kokybės dimensiją ir į modelį įtraukiant du naujus IT sprendimų ir CSR matmenis. Be to, konkurencingumo šaltiniai buvo išskirti patvirtinant, kad logistikos paslaugų kokybė buvo pagrindinis konkurencingumo šaltinis, vadovaujantis keliais strateginiais mažų sąnaudų ir diferenciacijos strategijų požiūriais. Remiantis ištekliais grįsta požiūrio teorija, logistikos paslaugų teikejas gali panaudoti savo išteklius, kad teiktų aukštą paslaugų kokybę, o tai lemia konkurencinį pranašumą tarp įmonių. Be to, buvo sukurtas modelis, skirtas įmonėms įvertinti ir suprasti savo logistikos paslaugų kokybės lygį.

Atlikto tyrimo rezultatai galėtų suteikti naudingų gairių įmonėms, kurios turės įvertinti savo logistikos paslaugų kokybę ir išnagrinėti savo strategijas, kaip įgyti ir išlaikyti konkurencinį pranašumą.

TO:
VILNIUS UNIVERSITY
Economics and business administration faculty
Universiteto str. 3, LT01513 Vilnius

2023.01.05

I herby confirm, that Girvydas Rimeika, student of Vilnius university, has presented our company his research findings and recommendations of his master thesis on Service quality influence on competitiveness of logistics service provider operating in the Scandinavian market.

His work provides valuable insights on the Scandinavian market and what logistics providers should focus on when providing a service. Furthermore, valuable insights were presented on customers perception and expectations of logisitcs service provider, what to focus on in order to gain competitive advantage over other logistics companies. Hopefully this will help our company to form a strategic approach in providing services for customers who do business in the Scnadinavian market.

UAB „AXIS TRANSPORT“
Head of sales
Eimantas Gadrus

UAB AXIS TRANSPORT DOKUMENTAI

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(signature)