SUPPLIER SELECTION IN A FINNISH TEXTILE AND CLOTHING COMPANY: CASE STUDY

Lappeenranta–Lahti University of Technology LUT

Master's Programme in Supply Management, Master's thesis

2023

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ABSTRACT

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Master's thesis

2023

64 pages, 3 figures, 1 table, and 1 appendix

Examiner(s): Professor Jukka Hallikas and Associate Professor Mika Immonen

Keywords: Supplier, Supplier selection, Supply chain

This master's thesis aims to determine how a textile and clothing company considers the supplier selection process as part of procurement activity. The supplier selection process has been a competitive advantage in companies' procurement activities by considering different factors that benefit the organization. The thesis analyzes the interviews collected from the case company to achieve this goal. Previous studies and the literature support the analysis.

The thesis has been implemented as a qualitative study. The data acquisition strategy has used a case study and semi-structured interviews as a data collection method. Interviews were collected from four employees of the case company. The thesis's theoretical framework deals with the supplier selection process theory.

The study results show that the purchasing managers consider the supplier selection process intuitively. Based on the interviews, there are similarities in the definition of the supplier selection process. Based on the similarities, there is a potential need for a guideline in the case company for a strategically cohesive process.

The thesis concludes that there is experience and knowledge in the case company's approach to the supplier selection process. However, the case company could benefit from a more analytical or data-driven approach to rationalize the intuitive approach. By integrating strategies and rational thinking through data into the supplier selection process, the case company could gain a competitive advantage through a more consistent process, considering strategic factors, and improved collaboration.

TIIVISTELMÄ

Lappeenrannan–Lahden teknillinen yliopisto LUT

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Kauppatieteet

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TOIMITTAJAN VALINTA SUOMALAISESSA TEKSTIILI- JA VAATEALAN YRITYKSESSÄ: CASE STUDY

Kauppatieteiden pro gradu -tutkielma

64 sivua, 3 kuvaa, 1 taulukko, ja 1 liite

Tarkastaja(t): Professori Jukka Hallikas ja Apulaisprofessori Mika Immonen

Avainsanat: Toimittaja, Toimittajavalintaprosessi, Toimitusketju

Tämä maisterin tutkielma pyrkii selvittämään, miten tekstiili- ja vaatealan yritys ottaa huomioon toimittajavalintaprosessin osana hankintatoimintaa. Toimittajavalintaprosessi on ollut kilpailuetu yritysten hankintatoiminnassa ottaen huomioon erilaisia tekijöitä, jotka hyödyttävät organisaatiota. Tavoitteen saavuttamiseksi tutkielma analysoi tapausyritykseltä kerätyt haastattelut. Aikaisemmat tutkimukset ja kirjallisuus tukevat analyysia.

Tutkielma on toteutettu laadullisena tutkimuksena. Tietojen hankintastrategiana on käytetty tapaustutkimusta ja puolistrukturoituja haastatteluja tietojenkeruumenetelminä. Haastatteluja kerättiin neljältä tapausyrityksen työntekijältä. Tutkielman teoreettinen viitekehys käsittelee toimittajavalintaprosessin teoriaa.

Tutkimustulokset osoittavat, että toimittajavalintaprosessi otetaan huomioon intuitiivisten näkökohtien kautta hankintapäälliköiden toimesta. Haastattelujen perusteella toimittajavalintaprosessin määritelmässä on yhtäläisyyksiä. Näiden yhtäläisyyksien perusteella yrityksessä on potentiaalinen tarve ohjeistukselle strategisesti yhtenäisen prosessin luomiseksi.

Tutkielman johtopäätöksenä on, että tapausyrityksellä on kokemusta ja tietoa toimittajavalintaprosessista. Kuitenkin yritys voisi hyötyä enemmän analyyttisestä tai dataperustaisesta lähestymistavasta intuitiivisen lähestymistavan perustelemiseksi. Yhdistämällä strategiat ja rationaalinen ajattelun dataan pohjautuen toimittajavalintaprosessissa, tapausyritys voisi saavuttaa kilpailuetua yhtenäisemmän prosessin, strategisten tekijöiden huomioon ottamisen ja parannetun yhteistyön kautta.

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1. Introduction

Given that raw materials and component parts represent most of the product's cost, managing suppliers is a crucial issue in supply chain management (SCM) (Yoon, Talluri, Yildiz & Ho, 2018). Nowadays, supply chains frequently contribute more than 70% to 80% of the end product's value (Punniyamoorthy, Mathiyalagan & Parthiban, 2011; Zimmer, Fröhling & Schultmann, 2016). The importance of suppliers and supply chains to a company's performance has increased. As a result, the rivalry is now present not just between businesses but also across their supply chains. Additionally, more strict regulations and pressure from various stakeholders, particularly in the last 20 years, have compelled many companies to implement environmental and social improvements in their operations and supply chains. (Bueyuekozkan, 2012; Bai, Sarkis, 2014)

Choosing and evaluating suppliers is more complex, particularly for the textile and clothing sector. To maintain the smooth operation of the supply chain, a high degree of product service is required due to unexpected needs (demand), quick product replacement, and significant seasonal influence on products. New standards for corporate social responsibility have been proposed considering the growth in social exposure. (Tong, Wang & Yi, 2021) Additionally, the worldwide textile sector consumes more than 30 million tons of materials annually, which puts much strain on the environment (Chen, Burns, 2006). The textile and clothing sector should thus design guidelines for a supplier selection index assessment system that considers economic, social, and environmental aspects. (Tong, Wang & Yi, 2021)

The relevance of this study speaks for itself, as the stakeholders are pressuring the textile and clothing sector to be more socially and environmentally aware. In addition, Tong, Wang, and Yi (2021) suggest that the details of supplier selection in the textile and clothing sector should receive more attention. Hence, this case study of a Finnish textile and clothing company will examine the details of supplier selection, thus providing a basis for it.

Literature on the topic of supplier selection is extensive. According to many articles commonly referred to, the foundation of supplier selection is the article of Dickson (1966), “An Analysis of Vendor Selection Systems and Decisions” where the author proposed 23 different criteria for supplier selection. In addition, after reviewing the literature reviews of Weber, Current, and Benton (1991), Ho, Xu, and Dey (2010), Govindan, Rajendran, Sarkis, and Murugesan (2015), Wetzstein, Hartmann, Benton, and Hohenstein (2016), and Saputro, Figueira, and Almada-Lobo (2022) for the topic of supplier selection, the word extensive literature on the subject is not an understatement.

One of the most common types of study or research in literature is using some method in supplier selection. From the literature reviews, we can see that in addition to its commonness, there is also a comprehensive list of different ways invented for the supplier selection problem. Although the literature is comprehensive, it can be seen as a problem when the literature is detailed and focused on specific methods. However, the theory chapter based on the various sources can be seen as extensive on the topic of supplier selection. Therefore, providing the reader with a clear picture of supplier selection in theory and in organizations.

Tong, Wang, and Yi (2021) suggested a more detailed look into supplier selection in the fashion and apparel industry in their article “Sustainable Textile and Apparel Enterprise Supplier Selection Research”. Although, the authors state that the article is helpful for organizations in the fashion and apparel industry. However, they also state that the industry is dynamic and complex, and the organization in the study does not necessarily represent the whole industry.

1.1 Goals and research questions of the thesis

The thesis aims to fill the research gap that Tong, Wang, and Yi (2021) suggested by paying more attention to the details of supplier selection in the fashion and textile industry. The textile and clothing sector is under pressure from stakeholders and the global environment as it consumes materials heavily. Selecting the correct suppliers can unload the pressure, and

therefore, the research focuses on a case company in the Finnish textile and clothing sector. Additionally, the thesis aims to analyze what is common in supplier selection in Finland's textile and clothing sector. Hence, creating a goal to answer the research questions. The research questions are as follows:

1. What are the main factors in the textile and clothing sector when selecting a supplier?
2. What are the benefits and challenges of selecting a supplier in the textile and clothing sector?

And a sub-question:

1. What is the ideal selected supplier alike in the textile and clothing industry?

1.2 Limitations of thesis

The first limitation of the thesis is that the findings might not be relevant to other nations because the study concentrates on a single Finnish organization. Researching the problem from the viewpoints of organizations from different geographical and economic locations would be beneficial. Furthermore, the topic could be explored by comparing how the matter is viewed and handled in various contexts.

The methodology of the study is another limitation of the study. The case study method is one of the research's other drawbacks. At the same time, it might provide a helpful overview of linked phenomena and accurate information, however, it might not be helpful to those outside the case firms. Additionally, different employees of the same company or even the same interviewee may in the future provide different replies to the information learned in this research, using data from case firms might thus raise reliability concerns. It could be beneficial to generalize the phenomena by researching it quantitatively. With a bigger sample size than a case company, a generalization could be made. However, doing an in-depth analysis of an organization is beneficial to gain a deeper knowledge of the phenomena.

Thirdly, the subject is supplier selection, and therefore, other supply chain management topics are not presented. In addition, reliability can be questioned as the thesis is done as a case study, however, the research on the topic is broad, thus providing a comprehensive image of the subject. Therefore, the validity of the thesis is proven.

1.3 Structure of thesis

First, the thesis begins with the introduction chapter of the thesis with subchapters of goals, limitations, research questions, and key concepts. After the introduction, the thesis will present a theory chapter on supplier selection and the different steps of the process. The thesis will then provide a research methodology and data collection chapter. After this, the thesis will continue with an analysis of the data as an empirical chapter. Lastly, the thesis will conclude the main findings of the research and answer the research questions presented before. supplier relationship management.

1.4 Framework

Figure 1 presents the conceptual framework of the thesis and how different concepts are connected. The conceptual framework will help the thesis gain insight and knowledge on the researched topic, supplier selection. Through analysis of the literature and the case company, the research will have conclusions on what are the important elements in the textile and clothing industry.

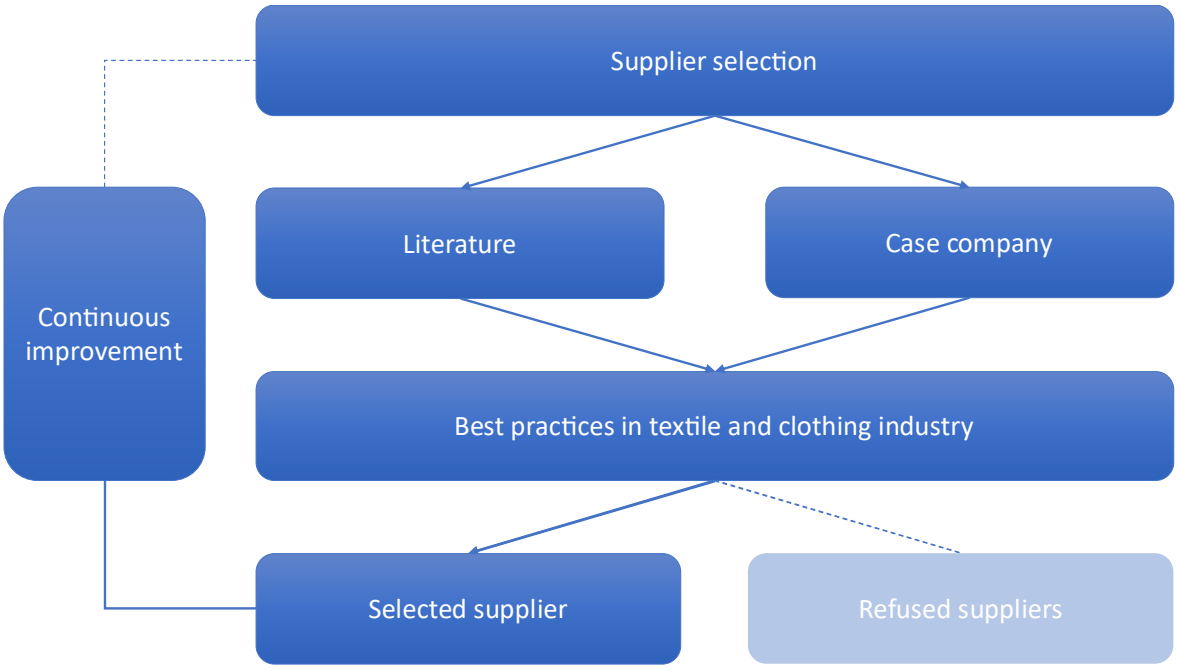

Figure 1, Conceptual framework

1.5 Key concepts

Supplier – A supplier is a person, group, or business that offers products or services to another business or person. Suppliers are frequently the source of the raw materials, components, or completed goods that a business utilizes to create its own products or services in the business world. (Weele, 2014)

Supplier selection (SS) – The process of identifying and selecting suppliers that can deliver the products or services an organization requires is known as supplier selection. Supplier selection aims to find suppliers that can fulfill the organization's requirements, offer value for the money, and support the organization's overall aims and objectives. (Weele, 2014)

Supply chain (SC) – A supply chain is a network of businesses, individuals, tasks, data, and assets used to produce and distribute a good or service to clients. It covers every step from the point of origin to the point of consumption in the manufacturing, distributing, and transporting of goods and services. (Weele, 2014)

2. Theory

This main chapter discusses the theoretical framework of this thesis. The theoretical framework includes supplier selection and the relevant processes. 5 chapters include an overall view of supplier selection, definitions and scope of the supplier selection, factors that influence the supplier selection, methods of evaluation, and benefits and challenges of the supplier selection. Lastly, the theory chapter will conclude the chapters and provide insights of relevance to the subject. The purpose is to produce a comprehensible theory for the reader, with the help of which empirical research, analysis, and conclusions are made.

2.1 Supplier selection

Supplier selection is a crucial decision for organizations, as it can have a significant impact on the quality and cost of the organization's products or services, as well as its overall performance (Ghodsypour & O'Brien, 1998; Golmohammadi & Mellat-Parast, 2012). In new task situations, the supplier selection process is the same regardless of the importance of the situation. The process cannot be prepared in advance because of the unique nature of the situation. In rebuy situations, there is more variety in the organization and execution of the steps in the supplier selection process. The supplier choice in routine items is fixed for a period and is reconsidered periodically. (de Boer, Labro & Morlacchi, 2001) The supplier selection process traditionally involves evaluating and selecting suppliers from a pool of potential candidates based on a factor such as price, but recently factors such as quality, delivery, flexibility, sustainability, and resilience have emerged in research (Huang & Keskar, 2007; Dabhilkar, Bengtsson, von Haartman & Åhlström, 2009; Liu & You, 2021; Leong, Wong & Wong 2022).

In addition, the supplier selection process is an important decision for organizations because of its effect on environmental aspects. The pressure put on businesses to fulfill their socially responsible obligations has increased due to demand from the government, media, regulatory

bodies, direct and indirect consumers, and other stakeholders. Regardless of the size or industry of the firm, sustainability has been included in the business strategy. Business models depend on the balance of economic, social, and environmental factors, crucial for innovation and profitability. (Barbanti, Anholon, Rampasso, Martins, Quelhas & Filho, 2022)

As stated above, supplier selection is a crucial decision for organizations (Ghodsypour & O'Brien, 1998; Golmohammadi & Mellat-Parast, 2012), and it usually consists of four steps of decisions (Figure 2). Firstly, the supplier selection process starts with defining the product or service specification and continues to selecting criteria used to evaluate the suppliers. Thirdly, the selected supplier base will be reduced based on the criteria and whether the suppliers meet them or not, and lastly, the evaluation of each remaining supplier and the selection of supplier or suppliers, depending on the need of the organization. (Drake, 2012)

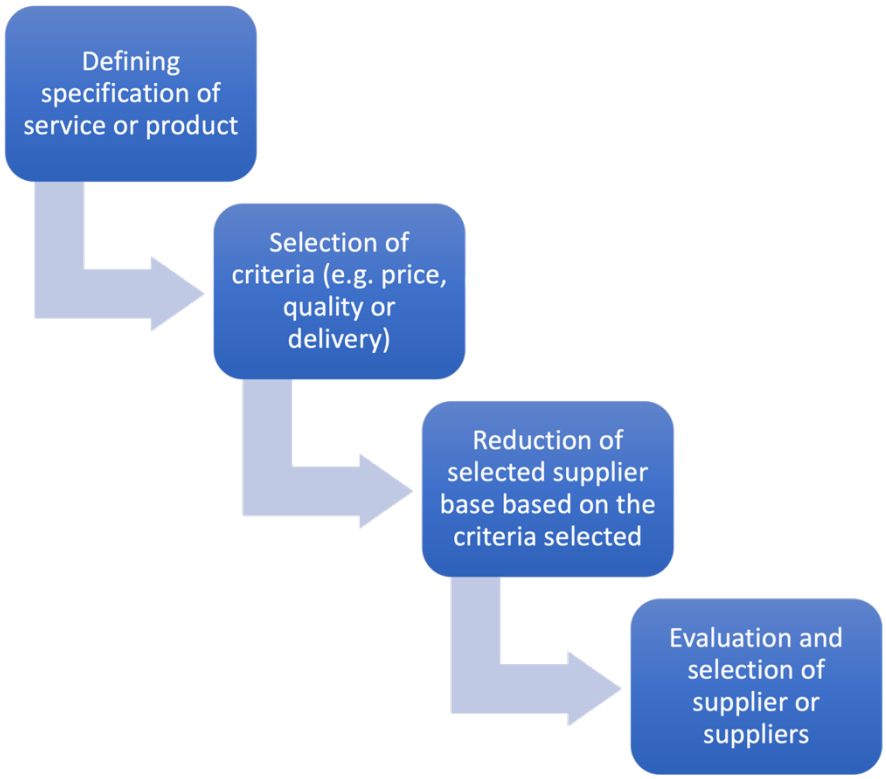

Figure 2, Supplier selection process. (Drake, 2012)

Therefore, effective supplier selection can bring several benefits to organizations, such as cost savings, improved quality, increased efficiency, and, furthermore, provide a competitive

advantage. (Qian, 2014; Mukherjee, 2017) However, the supplier selection process can also be time-consuming and resource-intensive, and there is always a risk of selecting a supplier that does not meet the organization's needs or expectations (Straube, Durach & Phung, 2016). There are various approaches and frameworks that organizations can use to select suppliers, however, it all comes down to a decision between a single source or multiple source decision (Wetzstein, Hartmann, Benton & Hohenstein, 2016; Mukherjee, 2017).

Supplier selection is a critical decision for organizations as it impacts product or service quality, cost, and overall performance (Ghodsypour & O'Brien, 1998; Golmohammadi & Mellat-Parast, 2012). The selection process involves defining product or service specifications, selecting evaluation criteria, reducing the supplier base, and evaluating and selecting suppliers. Traditional factors like price are still important, but new factors like quality, delivery, flexibility, sustainability, and resilience have emerged. (Huang & Keskar, 2007; Dabhilkar et al., 2009; Liu & You, 2021; Leong, Wong & Wong 2022) Sustainability has become a crucial factor due to pressure from stakeholders (Barbanti et al., 2022). Effective supplier selection can result in cost savings, improved quality, increased efficiency, and competitive advantage (Qian, 2014; Mukherjee, 2017). However, the process can be resource-intensive and time-consuming, with a risk of selecting unsuitable suppliers (Straube, Durach & Phung, 2016). Organizations can use various approaches to select suppliers, but it ultimately comes down to a decision between a single source or multiple source decision (Wetzstein, Hartmann, Benton & Hohenstein, 2016; Mukherjee, 2017).

The purpose of this literature review is to provide an overview of the factors and methods that organizations consider when selecting suppliers, as well as the benefits and challenges of the supplier selection process. The review will examine the various approaches and frameworks that organizations can use to select suppliers and discuss the advantages and disadvantages of the approaches overall. The review will also explore the benefits and challenges of effective supplier selection and discuss any implications for practice or future research. Overall, this literature review aims to provide a comprehensive overview of the supplier selection process and to identify best practices for organizations seeking to evaluate and select suppliers effectively. By understanding the factors, methods, and approaches that

organizations use to select suppliers, organizations can improve their decision-making and realize the benefits of effective supplier selection. Ultimately this will lead to a competitive advantage in organizations.

2.2 Definition and scope of supplier selection

Supplier selection is the process of evaluating and selecting suppliers from a pool of potential candidates based on a range of factors such as price, quality, delivery performance, flexibility, and sustainability (Wetzstein et al., 2016; Mukherjee, 2017). The goal of the supplier selection process is to identify the supplier or suppliers that will best meet the organization's needs and expectations while also considering the overall cost and risk associated with each supplier (Yoon, Talluri, Yildiz & Ho, 2018; Saputro, Figueira & Almada-Lobo, 2022).

The scope of supplier selection can vary depending on the type of organization and the products or services being purchased. For example, a manufacturing company may select suppliers for raw materials, components, and finished goods (Ellram, Zsidisin, Siferd & Stanly, 2002), while a service organization may select suppliers for consulting or professional services. Organizations may generally choose from various suppliers, including manufacturers, wholesalers, distributors, and service providers. (Famiyeh & Kwarteng, 2018)

Additionally, the scope of supplier selection can extend into the social aspects of organizations. The adoption of sustainable procurement practices in the supplier selection process by manufacturing companies shows a moderate dispersion, with the greatest dispersion observed in practices related to social aspects. For example, Barbanti et al., (2022) found a concerning issue is that around 20% of the companies they analyzed did not consider whether their supplier candidates engage in philanthropic activities, generate local jobs, or comply with the Universal Declaration of Human Rights of the United Nations in their

supplier selection process. These two practices have the most significant potential to differentiate companies. (Barbanti et al., 2022)

According to the article of Lasch and Janker (2005), the supplier selection process typically begins with identifying the organization's purchasing needs and developing a list of potential suppliers. The organization may use various sources to identify potential suppliers, such as trade publications, industry directories, or recommendations from other organizations (Bossert & Raddatz, 2004). Once the list of potential suppliers has been compiled, the organization can begin evaluating and selecting the most suitable suppliers (Winter and Lasch, 2016).

The supplier selection process can be complex (Lasch & Janker, 2005) and time-consuming (Zhou & Xun, 2018), as it involves evaluating many potential suppliers based on various factors. Additionally, according to the article of Bossert and Raddatz (2004), Organizations must consider potential suppliers' technical capabilities and capacity, as well as their past performance, financial stability, and overall reputation (Drake, 2012). In addition, organizations may need to consider factors such as the supplier's location, delivery capabilities, and flexibility to meet changing needs.

In conclusion, supplier selection is a crucial decision for organizations, as it can have a significant impact on the quality (Bossert & Raddatz, 2004) and cost of the organization's products or services (Lasch & Janker, 2005), as well as its overall performance (Famiyeh & Kwarteng, 2018). According to the article of Saputro, Figueira, and Almada-Lobo (2022) supplier selection process involves evaluating and selecting suppliers from a pool of potential candidates based on a range of factors such as price, quality, delivery performance, flexibility, and sustainability. The scope of supplier selection can vary depending on the type of organization and the products or services being purchased, and organizations may choose from various types of suppliers, including manufacturers, distributors, and service providers (Bossert & Raddatz, 2004. Effective supplier selection is critical to the success of an organization, and organizations must carefully evaluate and select suppliers to ensure that

they meet the organization's needs and expectations (Saputro, Figueira & Almada-Lobo, 2022).

The goal is to identify the supplier or suppliers that best meet the organization's needs while considering the overall cost and risk associated with each supplier (Saputro, Figueira & Almada-Lobo, 2022). The scope of supplier selection can vary depending on the type of organization and the products or services being purchased. (Ellram, Zsidisin, Siferd & Stanly, 2002; Famiyeh & Kwarteng, 2018) Additionally, the social aspects of organizations may also be considered in the supplier selection process (Barbanti et al., 2022). The supplier selection process can be complex and time-consuming and involves evaluating many potential suppliers based on various factors such as technical capabilities, past performance, financial stability, reputation, location, and delivery capabilities (Wetzstein et al., 2016; Mukherjee, 2017).

2.3 Factors influencing supplier selection

There are several factors that organizations consider when evaluating and selecting suppliers, and according to Wu and Weng (2010), supplier selection criteria have existed since 1966 when Dickson proposed 23 different criteria. In this chapter, the point is not to go into details but to provide some examples from the literature, as these factors can vary depending on the industry, the products or services being purchased, and the specific needs and priorities of the organization (Bossert & Raddatz, 2004). As aforementioned, these factors are, for example, price, quality, delivery, flexibility, sustainability, and resilience (Wetzstein et al., 2016; Mukherjee, 2017; Leong, Wong & Wong, 2022).

2.3.1 Price

According to Kotula, Ho, Dey, and Lee (2015), the price can be a key success factor in supplier selection, as organizations are typically looking to minimize their purchasing costs or maximize their competitiveness. However, the more traditional approach to supplier

selection, single criteria, of lowest price is no longer applicable in modern complex supply chain networks (Ho, Xu & Dey, 2010). Although, organizations may consider various factors when evaluating the price of goods or services, such as the supplier's quoted price, the cost of transportation and handling, and any volume discounts or other incentives the supplier offers (Govindan et al., 2015). In addition, the suppliers' willingness to cooperate or negotiate to reduce costs and, therefore, offer reasonable prices (Wu & Weng, 2010).

Due to globalization organizations are also looking for labor that is inexpensive, produces better quality, and has more innovations to cut procurement costs. However, this also provides risks to the supply chain which can produce higher prices for products or transportation. (Ali, Zhang, Liu, and Shoaib, 2022) Althought all contracts usually have price, costs, or payment terms in it, therefore, it usually is mandatory and, depending on the sector, affects more or less to the organizations willingness to procure (Kotula et al., 2015). Thus, price can be seen as a non-negotiable factor when selecting a supplier, however, it depends on the organization how much price weighs in their decision making when selecting a supplier.

2.3.2 Quality

Quality is another important factor in supplier selection, as organizations want to ensure that they receive goods or services that meet their specifications and requirements (Zhou & Xu, 2018). In addition, According to Ho, Xu, and Dey (2010), quality is a more important factor than any other in the supplier performance review. Organizations may consider various quality-related factors when evaluating potential suppliers, such as the supplier's track record of producing high-quality products or services, their quality management systems, and the results of any quality audits or assessments (Gao, Ju, Gonzalez & Zhang, 2020). Although suppliers’ quality performance is an important factor, companies also want to reduce risks related to damaged or low-quality products (Pandey, Shah & Gajjar, 2017), as these can cause, for example, safety issues (Shi, Yan, Shi & Ke, 2015).

To remain competitive in today's market, businesses must be able to establish long-term supply-chain connections. Therefore, making quality assessment is a crucial factor of supplier selection as the quality can affect organization negatively or positively. (Chen, Chung & Chang, 2021) In the supplier selection process quality can also be viewed from the perspective of quality of the decision making as it can be a risk (Dupont, Bernard, Hamdi & Masmoudi, 2018). Additionally, quality as a factor can be viewed from the organization's perspective. The organization needs to be able to have reduced cost of compensations due to errors, faster response time for contacts, or enhanced product image due to better quality. Overall, Quality is a complex concept with various dimensions, and its specific components vary across different processes. (Slack, Brandon-Jones & Burgess, 2022)

2.3.3 Delivery

Delivery is a critical factor in supplier selection, as organizations rely on their suppliers to deliver goods or services on time and in the required quantity (Zhou & Xu, 2018). Organizations may consider factors such as the supplier's delivery performance or reliability (Haeri & Rezaei, 2019), their lead times (Dabhilkar et al., 2009), and their ability to meet urgent or unexpected demand when evaluating potential suppliers (You, Zhang, Xu & Liu, 2020). In addition, in optimal case, the units delivered late is minimized, and the lead times are low (Pandey, Shah & Gajjar, 2017). Ultimately undelivered commodities, raw materials, or services can lead to financial losses for organizations (Alikhani, Torabi & Altay, 2019), therefore proving its criticality.

Considering delivery in the supplier selection process can be more complex because the decision maker needs to think about if they want to use single- or multi-sourcing strategy. Additionally, if using multi-sourcing strategy, the ordered quantity is probably greater than needed. However, by single-sourcing the question of suppliers who are riskier but cheaper versus less risky but more expensive arises. (Dupont et al., 2018) Efficient delivery approaches cut expenses while guaranteeing advantages like increased sales and profits, enhanced complaint handling, customer loyalty and satisfaction, and expanded market share. (Arif, Bakkappa, Bhimaraya & Sahay, 2009)

2.3.4 Flexibility

Flexibility is a factor that organizations may consider when selecting suppliers, as it refers to the supplier's ability to adapt and respond to the changing needs and requirements of the organization and market (Luthra, Govindan, Kannan, Mangla & Garg, 2017). In response to the mounting complexity and unpredictability of the business landscape, companies are incorporating flexibility as a fundamental aspect of their operational strategies. In this context, flexibility refers to the capability to adapt or respond without incurring significant setbacks in terms of time, effort, cost, or performance. Embracing flexibility holds the potential to enhance a company's competitive edge, especially when it comes to the pivotal task of making informed decisions regarding the adoption of cutting-edge technologies. (Sanchez, Perez, 2005)

Flexibility can be seen as a sub-criterion, for example, for factors like price, quality, and delivery. (Luthra et al., 2017) Flexibility can be seen as several dimensions that organizations may consider, such as willingness to cooperate on prices (Wu & Weng, 2010), adapting to quality requirements (Zhou & Xu, 2018), or adaptation to unexpected demands of the organization (You et al., 2020). By considering these dimensions of flexibility, organizations can identify suppliers that can adapt and respond to the organization's changing needs and that can support the organization's growth and success. Therefore, ultimately leading to lower costs such as transportation, inventory, and production and improved customer satisfaction. (Singh & Sharma, 2014)

Ultimately, as Sanchez and Perez (2005) proved, flexibility can affect an organization's competitiveness through different dimensions of flexibility, however, all dimensions are not equal. Launch flexibility is essential for organizations facing high uncertainty, and volume flexibility is more important for organizations facing cyclical high uncertainty. Additionally, organizations are prone to essential flexibility while missing out on more complex flexibility capabilities thus losing competitiveness. (Sanchez, Perez, 2005)

2.3.5 Sustainability

Sustainability is a factor that organizations may consider when selecting suppliers, as it refers to the environmental, social, and economic impacts of the supplier's operations to select a supplier that can enhance the supply chain (Govindan, Rajendran, Sarkis & Murugesan, 2015). There are several dimensions of sustainability that organizations may consider, including environmental sustainability, social sustainability, and economic sustainability, which need to be integrated to achieve sustainability (Liu, You, 2021). Environmental sustainability can be described as a performance containing water, waste, or energy, and a practice containing capabilities, management, or commitment. Social sustainability includes internal practices, management and commitment, and external practices, such as stakeholder involvement. Economic sustainability includes capabilities such as quality or financial performance such as costs. (Zimmer, Fröhling & Schultmann, 2016)

Therefore, sustainability is a broad spectrum of different factors where the focus is to do them greener, hence literature and organizations have been using the term green supplier selection (Banaeian, Mobli, Fahimnia, Nielsen & Omid, 2018). For example, sustainability can include factors such as quality in the form of materials used to be acceptable by ISO standards (You et al., 2020). By considering these dimensions of sustainability, organizations can identify suppliers that can operate in an environmentally, socially, and economically responsible way, supporting the long-term sustainability of the organization and its stakeholders, hence bringing organizations a competitive advantage (Liu, You, 2021).

Organizations must integrate all upstream supply chain members to get the most benefits from sustainable supplier management (SSM). As a result, SSM plays an essential role in the design of a sustainable supply chain, driving economic, environmental, and social performance improvements beyond first-tier providers. As a result, in the sustainability framework, focal companies are frequently held accountable for their upstream supply chains. Buyers must purchase goods and services from suppliers and supply chains that can provide them not just at the lowest possible cost, with the highest quality, and with the

greatest flexibility, but also in a socially and ecologically responsible manner. (Zimmer, Fröhling & Schultmann, 2016)

2.3.6 Resilience

Supply chain disruptions can have substantial negative ramifications on revenue and productivity. Generally, risks connected with supply chains can be categorized into two main types: operational and disruptive. Operational risks encompass the everyday uncertainties inherent in supply chains, including fluctuations in customer demand, transportation expenses, and supply uncertainties arising from operational challenges like power outages and technical malfunctions. On the other hand, disruption risks pertain to major event-triggered upheavals, encompassing natural disasters, human-induced accidents, or malicious attacks. While disruption risks are typically less likely to materialize, their consequences are notably more severe compared to operational risks. Resilient suppliers are those capable of enduring and rebounding from diverse risk origins. (Hosseini, Barker, 2016)

Resilience in supplier selection refers to the ability of a company to identify and select suppliers that can withstand potential disruptions and continue to provide goods and services in a timely and efficient manner. This is important because disruptions can come from a variety of sources, such as natural disasters and shortages of materials, and can have a significant impact on a company's operations and bottom line. (Leong, Wong & Wong, 2022) For example, organizations should look for suppliers that are in different regions and are not overly dependent on a single location. This can help mitigate the impact of a natural disaster or other disruption that may occur in a specific area. (Hosseini, Khaled, 2019) Therefore, to reduce the risk of doing business, organizations need to consider suppliers' resiliency to prevent or overcome disruptions, ensuring the supply chain is capable (Amindoust, 2018).

2.3.7 Conclusion

In conclusion, the factors considered when evaluating and selecting suppliers can vary depending on the industry and the organization's specific needs and priorities (Bossert & Raddatz, 2004). Some of the common factors include price, quality, delivery, flexibility, sustainability, and resilience (Wetzstein et al., 2016; Mukherjee, 2017; Leong, Wong & Wong, 2022). Price is a key factor in supplier selection as organizations aim to minimize their costs or maximize their competitiveness (Kotula et al., 2015). However, the traditional approach of selecting suppliers based on the lowest price no longer applies in modern complex supply chains (Ho, Xu & Dey, 2010). Quality is also an important factor in supplier selection, as organizations want to receive goods or services that meet their specifications and requirements. Delivery is a critical factor, as organizations rely on their suppliers to deliver goods or services on time and in the required quantity. (Zhou & Xu, 2018) Flexibility refers to the supplier's ability to adapt and respond to the changing needs and requirements of the organization (Singh & Sharma, 2014). Sustainability refers to the environmental, social, and economic impacts of the supplier's operations, and organizations aim to select suppliers that enhance the supply chain (Govindan et al., 2015). Resilience refers to the ability of suppliers to withstand disruptions and continue to provide goods and services in a timely and efficient manner (Leong, Wong & Wong, 2022).

Table 1, Factors influencing supplier selection

Factor	Source
Price	Ho, Xu & Dey (2010), Wu & Weng (2010), Chen & Wu (2013), Govindan et al. (2015), Kotula et al. (2015), Alikhani, Zhou & Xu (2018), Torabi & Altay (2019), Gao et al. (2020)
Quality	Ho, Xu & Dey (2010), Wu & Weng (2010), Chen & Wu (2013), Govindan et al. (2015), Kotula et al. (2015), Shi et al. (2015), Pandey, Shah & Gajjar (2017), Zhou & Xu (2018), Alikhani, Torabi & Altay (2019), Gao et al. (2020)
Delivery	Dabhilkar et al. (2009), Ho, Xu & Dey (2010), Wu & Weng (2010), Kotula et al. (2015), Pandey, Shah & Gajjar (2017), Zhou & Xu (2018), Alikhani, Torabi & Altay (2019), Haeri & Rezaei (2019)
Flexibility	Wu & Weng (2010), Govindan et al. (2015), Luthra et al. (2017), Haeri & Rezaei (2019), You et al. (2020)
Sustainability	Govindan et al. (2015), Banaeian et al. (2018), Gao et al. (2020), You et al. (2020), Liu & You (2021)
Resilience	Amindoust (2018), Hosseini & Khaled (2019), Leong, Wong & Wong (2022)

2.4 Methods of evaluating suppliers in pre-qualification

Instead of focusing solely on procurement quality, the company must establish and implement a qualification program for its suppliers that goes beyond simple metrics and considers the aims and strategies of the entire supply chain (De-Pablos-Heredero, Fernández-Valero & Blanco-Callejo, 2017). The qualifying process involves evaluating potential suppliers' compatibility with defined requirements. The organization that conducts the qualification seeks to ensure the hiring of suppliers who are qualified and meet the

requirements and demands of the organization. (da Rosa, Feilstrecker, 2019) Evaluating suppliers can be seen as reducing potential suppliers to a number of acceptable ones for the organization (de Boer, Labro & Morlacchi, 2001).

One common method of evaluating suppliers is to review their past performance. Organizations may request references or case studies from the supplier, or they may review the supplier's track record of delivering goods or services on time and to the required quality standards. (Weele, 2014) In addition, if a buyer can accurately assess a supplier's performance, there is a chance that relationship quality will gradually increase (Hoque, Rana, 2020). Organizations may also review the supplier's history of product recalls, financial reports, or quality issues, as well as any customer complaints or disputes (Weele, 2014).

Additionally, sourcing decisions that are based on a supplier's location can bring various benefits in certain circumstances. For instance, a local supplier may feel more accountable for providing better service because they are part of the same community as the buyer. Similarly, buying organizations may also have a preference to support local businesses. Furthermore, local suppliers can often provide faster response times and lower transportation costs. On the other hand, expanding the geographical range of sourcing to national or international sources can bring greater competition, better pricing, and more options. However, when deciding to source domestically or internationally, there are trade-offs to consider. Typically, communication and delivery are more reliable with domestic sources, while international sources can offer lower prices due to lower labor costs. (Sollish, Semanik & Sollish, 2011)

Another method of evaluating suppliers is to visit their facilities in person to verify the information suppliers have provided (De-Pablos-Heredero, Fernández-Valero & Blanco-Callejo, 2017). This can provide organizations with an opportunity to see the supplier's operations first-hand and to assess the supplier's facilities, equipment, and processes. Organizations may also let suppliers visit their facilities to help suppliers gain better knowledge of the use of the product ordered. (Fugate, 2006) Organizations may also conduct audits of potential suppliers to assess their operations and processes in more detail. Audits

can be used to verify the supplier's quality management systems, environmental practices, or social and ethical policies. Audits can also provide organizations with an opportunity to identify any areas of improvement or risk that may need to be addressed. (Pfeiffer, 2017)

According to Drake (2012), it is also essential for organizations to eliminate bias in supplier selection to have a mutually beneficial relationship. Methods for eliminating bias include, for example, obtaining supplier ratings from cross-functions of the organization, such as manufacturing, research and development, or distribution. By involving more people in supplier selection, the problem of potential bias or the source and impact of bias in supplier selection can be eliminated. (Drake, 2012) Therefore, the organization can be sure that they select a supplier that meets the organization's requirements.

Frequently assessing and continuously enhancing sustainable practices is imperative for companies to achieve satisfactory results in their implementation. Sustainable practices implemented into the supplier selection process do not only bring costs but generate improvements in performance, such as a reduction in costs. For example, in the manufacturing sector, the operations have the potential to cause significant environmental impacts, mainly through energy consumption, disposal of hazardous waste (such as refrigerant oils, cutting oils, casts, etc.), and loss of raw materials. Hence, a method of improving these social aspects is needed in supplier selection. (Barbanti et al., 2022)

In conclusion, the company should establish a supplier qualification program that goes beyond simple metrics and considers the overall supply chain goals and strategies. The qualification process involves evaluating the compatibility of potential suppliers with defined requirements to ensure they meet the organization's needs. (De-Pablos-Heredero, Fernández-Valero & Blanco-Callejo, 2017) One method of evaluation is to review the supplier's past performance, including delivery history, product recalls, financial reports, and customer complaints (Weele, 2014). Another method is to visit the supplier's facilities in person to verify the information and assess operations. Audits can also be used to verify the supplier's quality management systems, environmental practices, and social and ethical policies. (Pfeiffer, 2017) Sourcing decisions can also be influenced by the supplier's location,

with local suppliers offering faster response times and lower transportation costs and international suppliers potentially offering lower prices (Sollish, Semanik & Sollish, 2011). To eliminate bias in supplier selection, it is essential to obtain supplier ratings from cross-functions of the organization and involve more people in the selection process (Drake, 2012). Sustainable practices should be implemented into the supplier selection process to achieve satisfactory results in their implementation and generate improvements in performance (Barbanti et al., 2022). In addition, the suppliers' role in supply chains is crucial for organizations to ensure the continued supply of products and, hence, assessing suppliers to guarantee business continuity is a must-do for organizations (Weele, 2014).

2.5 Approaches to selecting a supplier

There are several approaches or frameworks that organizations can use to select suppliers. These approaches can vary depending on the complexity of the decision, the number of suppliers being considered, and the specific needs and priorities of the organization. (Weber, Current & Benton, 1991; Dulmin, Mininno, 2003; Ho, Xu & Dey, 2010; Govindan et al., 2015; Liu, You, 2021) Suppliers can be chosen through single or multiple sourcing. The whole supply comes from one supplier under single sourcing. Conversely, with multiple sourcing, a group of suppliers provides the complete supply. (Mukherjee, 2017)

Single-criteria decision-making (SCDM) involves evaluating potential suppliers based on a single criterion or factor, such as price, quality, or sustainability (Eydi, Fazli, 2019). This approach can be suitable for simple decisions where only one factor is important or where there are clear trade-offs between different criteria (Weber, Current & Benton, 1991). However, it can be problematic in situations where multiple criteria are important or where the relative importance of different criteria is not clear. SCDM can be approached from different aspects, for example, mathematical, data, or linear aspects (Ho, Xu & Dey, 2010). Therefore, providing various models and methods that can solve single supplier selection problems (Wetzstein et al., 2016).

Multi-criteria decision-making (MCDM) involves evaluating potential suppliers based on multiple criteria or factors (Govindan et al., 2015). This approach can be more suitable for complex decisions where multiple criteria are important and where there are no clear trade-offs between different criteria (Dulmin, Mininno, 2003). There are several different MCDM methods that organizations can use, such as individual methods like data envelopment analysis (DEA) or analytic hierarchy process (AHP), and integrated methods like analytic hierarchy process (AHP) genetic algorithm (GA) (AHP-GA) and analytic hierarchy process (AHP) data envelopment analysis (DEA) (AHP-DEA) to analyze suppliers. (Ho, Xu & Dey, 2010) According to Dulmin and Mininno (2003) the MCDM is a necessity to have closer and longer supplier relationships.

The DEA method is one of the most used ones because the model can undergo modifications to accommodate qualitative data, including the transfer of knowledge, the quality of service, the reputation of the supplier, and so on. Additionally, the DEA model has been adapted to account for uncertain performance measures and work with imprecise data. Additionally, The AHP-GP approach is a more widely used integrated method than other models. This is since each component of the model has its own unique benefits. The consistency verification aspect of AHP helps ensure that the decisions made are consistent, as it acts as a review and revision mechanism for the decision-makers. As a result, their judgments are more dependable, which is essential for making sound decisions. (Ho, Xu & Dey, 2010)

In conclusion, according to many sources, there are several approaches that organizations can use to select suppliers. These approaches include single-criteria decision-making (Weber, Current & Benton, 1991; Ho, Xu & Dey, 2010) and multi-criteria decision-making (Dulmin, Mininno, 2003; Govindan et al., 2015; Liu, You, 2021). The most appropriate approach will depend on the complexity of the decision, the number of suppliers being considered, and the specific needs and priorities of the organization. Therefore, the supplier selection problem needs either SCDM or MCDM methods to create a competitive advantage. However, MCDM is more suitable for complex decisions. (Weber, Current & Benton, 1991; Dulmin, Mininno, 2003; Ho, Xu & Dey, 2010; Govindan et al., 2015; Liu, You, 2021)

2.6 Benefits and challenges of supplier selection

One of the primary benefits of effective supplier selection is cost savings (Kotula, Ho, Dey, and Lee, 2015). By carefully evaluating and selecting suppliers, organizations can identify suppliers that offer competitive prices and negotiate favorable terms (Wu & Weng, 2010). This can help organizations to reduce their overall purchasing costs and increase their profitability (Kotula, Ho, Dey, and Lee, 2015). Effective supplier selection can also lead to improved quality which is the most desirable factor for organizations (Ho, Xu, and Dey, 2010). By selecting suppliers that have a track record of producing high-quality goods or services, organizations can improve the quality of their own products or services and increase customer satisfaction (Zhou & Xu, 2018).

In general, adopting sustainability practices in supply chain processes has shown to be beneficial for organizations. Some benefits include cost reduction, improved reputation, reduced stakeholder pressure, increased innovation, improved working conditions, greater transparency in negotiations and information sharing among companies, and reduced environmental impacts by suppliers. However, to achieve these benefits, organizations need to take several actions, such as improving communication management between buyer and supplier companies, aligning environmental and social objectives, implementing audit processes for continuous improvement, fostering mutual cooperation, and developing indicators to measure sustainable practices, among other actions. Developing these actions contributes to sustainability and makes companies more competitive. (Barbanti et al., 2022)

Effective supplier selection can also increase efficiency by reducing the risk of delays or disruptions in the supply chain (Amindoust, 2018). By selecting reliable suppliers that can deliver goods or services on time and in the required quantity, organizations can reduce their inventory levels and improve their overall supply chain efficiency (Haeri & Rezaei, 2019). Effective supplier selection can also enhance an organization's competitiveness by providing access to innovative products or services and enabling the organization to bring new products or services to market more quickly by selecting flexible suppliers (Singh & Sharma, 2014).

Additionally, effective supplier selection can improve an organization's image to stakeholders by selecting sustainably aware suppliers (Liu, You, 2021).

However, there are also challenges associated with the supplier selection process. The supplier selection process can be time-consuming and resource-intensive, as it involves evaluating many potential suppliers based on various factors (Govindan et al., 2015). This can require a significant investment of time and resources, which may be challenging for organizations with limited resources (Dulmin, Mininno, 2003). There is always a risk of selecting a supplier that does not meet the organization's needs or expectations. This can lead to delays (Haeri & Rezaei, 2019), quality issues (Zhou & Xu, 2018), or other problems that can impact the organization's performance and profitability (Singh & Sharma, 2014).

Evaluating potential suppliers can be difficult, as organizations may not have complete information about the supplier's capabilities or performance (da Rosa, Feilstrecker, 2019). This can make it challenging for organizations to make informed decisions and to accurately assess the risks and benefits associated with different suppliers (Weele, 2014). The supplier selection process can be complex, particularly when multiple suppliers are being considered or where multiple criteria need to be considered (Liu, You, 2021). Organizations may need to use specialized methods or approaches, such as multi-criteria decision-making, to make an informed decision (Govindan et al., 2015). Effective supplier selection can also require the development of strong, collaborative relationships with suppliers. This can involve regular communication and coordination, as well as the development of mutual trust and respect. (Hoque, Rana, 2020) Building and maintaining these relationships can be challenging, particularly when the organization is working with many suppliers or where there are cultural or linguistic barriers (Weele, 2014).

In conclusion, effective supplier selection can bring several benefits to organizations, including cost savings (Kotula, Ho, Dey, and Lee 2015), improved quality (Ho, Xu, and Dey, 2010), increased efficiency (Haeri & Rezaei, 2019), enhanced competitiveness (Singh & Sharma, 2014), and improved image to stakeholders (Barbanti et al., 2022). Careful evaluation and selection of suppliers can identify those with competitive prices and high-

quality goods, reduce the risk of supply chain disruptions, provide access to innovative products, and promote sustainability. However, there are also challenges associated with the supplier selection process, including time and resource investment (Govindan et al., 2015), the risk of selecting a poor-performing supplier (da Rosa, Feilstrecker, 2019), difficulty in evaluating potential suppliers (Weele, 2014), the complexity of the decision (Liu, You, 2021), and the need to develop strong supplier relationships (Hoque, Rana, 2020). In addition to the challenges mentioned, it's worth noting that effective supplier selection is an ongoing process that requires regular monitoring and evaluation (da Rosa, Feilstrecker, 2019). This is because suppliers' performance can change over time, and new suppliers may emerge that could provide better value to the organization. Thus, organizations need to have systems in place to regularly assess their suppliers' performance and identify areas for improvement. (Weele, 2014) By doing so, organizations can ensure that they are working with suppliers that provide the best value and meet their evolving needs (Haeri & Rezaei, 2019). This can help organizations to maintain their competitive edge in the marketplace and achieve long-term success (Singh & Sharma, 2014).

2.7 Supplier performance evaluation

Organizations use the process of supplier evaluation to assess the performance of their suppliers, gauge their capabilities, and pinpoint areas that need to be improved. Evaluation of suppliers is crucial in the modern global business environment since their performance has a big influence on an organization's overall success. (Nair, Jayaram & Das, 2015) Practices for evaluating suppliers can be thought of as tools for influencing supplier behavior. The underlying premise is that if such an influence attempt is successful, it will result in altered supplier behavior that is in line with the interests of the evaluating company, improved supplier capabilities, and improved supplier performance, all of which will be advantageous to the evaluating buying company. (Hald & Ellegaard, 2011)

A fundamental component of a successful supply chain is managing the supply base by locating, choosing, and overseeing suppliers for strategic, long-term partnerships. Reviewing supplier performance also aids the process of developing and improving

suppliers. In fact, several studies have indicated that choosing a supplier may be the most crucial step in the purchasing process, and purchasing managers must routinely assess supplier performance to identify and keep top suppliers. (Wu & Blackhurst, 2009)

Depending on whether the buying business invests resources "directly" or "indirectly" in a particular supplier, supplier development might be differentiated. In an "indirect" function, little to no resources are committed, but in a "direct" one, the purchasing business takes an active part and allocates human or capital resources to a single supplier. On-site visits, educational and training programs, inviting supplier staff to meetings, and offering cash, credit, tools, equipment, or other specialized assets are all examples of direct supplier development efforts. Indirect supplier development operations entail the purchasing company providing incentives or mandating supplier improvement through supplier evaluations, supplier assessments, raising performance targets for the supplier, or the assurance of future business. (Wagner, 2006)

For supplier assessment, a variety of techniques are employed, including both qualitative and quantitative techniques. Surveys, questionnaires, and interviews are examples of qualitative procedures that are used to collect data regarding supplier performance. Comparatively, quantitative approaches examine data and assess supplier performance using statistical methodologies. Supplier scorecards, cost analyses, and quality measurements are a few examples of quantitative methodologies. According to research, integrating qualitative and quantitative methodologies can produce a more thorough supplier assessment. (Samut, Aktan, 2019)

Despite the advantages of supplier assessment, there are several difficulties that firms run into when putting such programs into place. Choosing the proper measures to assess supplier performance is one of the biggest issues. Organizations must determine the measures that are pertinent to their business goals and make sure that these measurements are in line with the capabilities of the supplier. Organizations must also establish a clear set of standards for supplier evaluation and selection. Failure to do so may lead to unsatisfied suppliers and

adverse effects on the functioning of the supply chain. (Maestrini, Luzzini, Caniato, Maccarrone & Ronchi, 2018)

In conclusion, evaluating suppliers is an important procedure that has a big influence on an organization's success. Organizations may use the process to find the best suppliers, reduce the risks of subpar work, and spot improvement opportunities (Dutta, Jaikumar & Arora, 2022). Organizations may assess supplier performance using both qualitative and quantitative approaches, but they must choose the right metrics and create precise standards for choosing and evaluating suppliers. Organizations may improve the performance of their supply chains and achieve a competitive edge in the current global economic climate by tackling these issues. (Ersoy, Dogan, 2020)

3. Methodology

The purpose of this main chapter is to describe the method used to conduct the research, information acquisition strategy and analysis, and data collection method. The chapter aims to introduce the methods used to analyze research results. The goal is to justify why the methods in question are suitable for examining the thesis phenomenon.

3.1 Research method

The research method of this thesis is qualitative research. Puusa, Juuti, and Aaltio (2020) describe qualitative research as an effort to understand the phenomenon under study from the perspective of the target persons. It is good to apply qualitative research to research when the purpose is to obtain information about cause-and-effect relationships in certain cases (Metsämuuronen, 2011). The purpose of this thesis is to get information on how supplier selection is considered in the target company, which is why qualitative research is suitable for use.

A case study has been used as a data acquisition strategy in the thesis. One the definition that Flyvbjerg (2011) retrieved from the Merriam-Webster dictionary describes well the need to complete the thesis as a case study: *"Intensive analysis of a single unit (person or community) emphasizing development factors affecting the environment."* When looking at the target company, the case study is suitable as a data acquisition strategy because the thesis examines how and why supplier selection works in the case company. Metsämuuronen (2011) lists as one of the advantages of a case study that the results can be applied in practice because the purpose is often functional.

Narrative analysis has been used as the data analysis method in the study. The purpose of the narrative analysis is to form a new story based on the material, with the help of which the central themes of the material are brought out (Heikkinen, 2018). Riessman (2008) states

that the researcher's purpose of narrative analysis is to study the "how" and "why" of what the interviewee says and not just the content to which the saying refers. The purpose of the study is to create a whole and clear picture of the case company's understanding of the aspect of supplier selection. The purpose of the analysis is to answer the research questions based on interviews with the personnel of the procurement unit of the target company. This will come to perform by interpreting the answers as narratives.

3.2 Data collection and case company

Semi-structured individual interviews have been used as the data collection method in the thesis. A semi-structured interview is suitable for a case study because it has the advantage of having answers to the central topics of the study in the interviewees' own words. Another notable advantage is to bring out something that was not considered at the beginning of the thesis. (Pusa, Juuti and Aaltio, 2020) With semi-structured interviews, justifications for topics can also be clarified which have been poorly or not at all previously known (Metsämuuronen, 2011).

It is emphasized to the interviewees to conduct the previously mentioned narrative analysis, that they are allowed to answer the questions freely, and the researcher only tries to promote the progress of the narrative. It is also worth noting that narrative material is created if the interviewee is given as good an opportunity as possible to explain. Therefore, the data collection method was a semi-structured interview. (Hänninen, 2018) Yin (2009, 106–109) lists interviews as strong for collecting material because the questions can be focused directly on the topic of the case study, and they can be used to get insightful conclusions or explanations. However, it is worth noting that interviews are prone to poorly worded questions, biased answers, and the effects of the interviewer's own prior knowledge, assumptions, and interpretation errors (Yin, 2009, 106–109).

In this thesis, interviews and data were collected by interviewing four interviewees from the case company. As aforementioned, the interviews were conducted using a semi-structured method which enables interviewees to answer in their own words (Pusa, Juuti and Aaltio, 2020). In the interview questionnaire, four questions were assigned to get a little background of the interviewees. The four interviewees were all experts in their field and could make decisions with the management of the case company. Three out of four interviewees were purchasing managers (or equivalent) with different category-related responsibilities. The fourth interviewee is a chief operating officer who is responsible for the procurement and design departments of the case company. The hierarchy of the case company can also be seen in Figure 3, however, the conclusion from the interviews was that there is mutual respect for each interviewee's area of expertise, especially from the COO.

Figure 3, Hierarchy of the interviewees in the case company.

Fast changes in customer demand and significant seasonal impacts on products characterize the textile and apparel industry (Tong, Wang & Yi, 2021). The fashion industry encompasses both the creation and provision of goods and services. On the production side, it involves designing and manufacturing clothing, bags, shoes, and various textile and leather accessories. However, the scope of the fashion industry extends beyond these items to include jewelry, eyewear, perfumes, watches, and even interior home items. Fashion

companies typically operate as comprehensive entities engaged in producing and distributing clothing and accessories, encompassing non-textile things as well. (EU, 2021)

These assortments of products are curated into collections, forming a cohesive image that holds symbolic value and serves as the foundation for generating value within the industry. Alongside tangible goods, the fashion industry relies heavily on specific service activities. These encompass essential functions such as design, prototyping, wholesale and retail operations, e-commerce, and various auxiliary functions like event management, media and communication, advertising, marketing, and public relations. (EU, 2021) Textiles and apparel are essential industries in developed and developing nations, contributing to wealth generation and employment (Bruce, Daly & Towers, 2004). In this industry, the concept of a fashion product without a strong brand identity and a strategically crafted image is virtually unthinkable. All these ancillary activities collectively contribute to the value-creation process and overall competitiveness of the fashion industry. (EU, 2021)

The case company is in the textile and clothing industry and is based in Finland. Therefore, it is important to view some standard numbers from the industry. However, it can be noted that the numbers are not directly transformable into if the company is successful or not. The apparel market's worldwide revenue was 1.53 trillion USD in 2022 and is expected to be 1.74 trillion USD in 2023. Additionally, the apparel market's growth is expected in the following years and is estimated to be 1.94 trillion USD in 2027. However, the textile and clothing industry's turnover in Europe was 146.9 billion Euros in 2021. Including 65.3 billion euros in clothing and 81.6 billion euros in textiles. Compared to 2018 (which is the highest year of turnover between 2010 and 2021) numbers of 91.4 billion euros in textiles and 79 billion euros in clothing, the industry has not been in a growth cycle. The decline can also be seen in the number of manufacturing companies in the textile and clothing industry. In 2021 there was a total number of 142934 manufacturing companies in the industry, whereas the number was 177603 in 2016 (which even isn't the highest number between 2009 and 2021). It can also be seen in the number of employees, which is approximately 1.3 million in 2021 compared to approximately 1.7 million in 2016. The import value of clothing

in Finland is 1.72 billion USD, and the export value of clothing from Finland is 298 million USD. (Statista 2021)

4. Findings

This chapter will introduce the empirical part of the study. It includes the findings from the four interviewees' answers to the questions (Appendix 1) presented in the interviews. Additionally, the purpose of this chapter is to categorize and summarize the answers into the themes that were provided in the theory chapter.

4.1 Background

The questionnaire used in the interviews had four questions about the interviewees' backgrounds. The purpose of these questions was to find out what the interviewees' roles and responsibilities in the organization are. As aforementioned, one of the interviewees is a chief operating officer (interviewee 1 in future references), and three of the interviewees are purchasing managers with different responsibilities (interviewees 2, 3, and 4 in future references).

Additionally, in the background questions, the interviewees were asked how they are in contact with suppliers. The interviewees all described that managers are in contact with the suppliers about the products and matters related to them. Additionally, they are in contact with the suppliers about relationship development. According to interviewee 1, the operational purchasing department handles the contact with suppliers' regarding the day-to-day purchases and operations.

The last question of the background questions was to describe the ideal supplier. Interviewees all described comprehensively and extensively the ideal supplier:

> *Interviewee 1: "... From our perspective, the ideal supplier is big enough but still small so that they are suitable for our business in which case we matter..."*
>
> *Interviewee 2: "...So that they are an enabler to what we are seeking..."*

> *Interviewee 3: "…They would produce a ready product… …and control the upstream of supply chain…"*
>
> *Interviewee 4: "… Co-operative development towards a common goal to achieve the best outcome is important…"*

Additionally, the interviewees described qualities such as high quality, sustainability, locality, and cost efficiency. Overall, the consensus from the interviewees is that the ideal supplier would be the one that could serve the organization's needs with high quality and have flexibility in their operations. Interviewees also pointed out that price is not a decisive factor, as having a lower price usually means bigger minimum order points or not being a very flexible supplier. An ideal situation for the organization, according to interviewee 1, would be to have a supplier who wants to develop their operations and whom the organization can develop operations with.

4.2 Supplier selection

In the supplier selection theme, the interviewees were asked three questions about supplier selection. These questions were purposely broad because the idea was to understand the broader lines in the organization's supplier selection process before diving deeper into it. The interviewees all have a consensus that in their organization, the supplier selection process starts from a need for a new product or product category. The process usually continues with contacting already familiar suppliers to see if they can produce the product that is needed. However, if no current supplier can produce the wanted product, the organization has a few different alternatives for how to find a new supplier. According to interviewee 1, the organization hardly ever contacts new suppliers meaning that they would not have a reference from someone or had never met with the supplier before. The suppliers are usually already met through meeting requests or at conventions and then contacted if the situation requires it. According to interviewees 2 and 3, the alternatives are through their own contacts or references from the industry and organizations like Business Finland.

After finding potential suppliers, the organization sends the specifications and pictures of the product to the supplier. Then the discussions with the supplier start about what are the

minimum order quantities, price points, and sustainability qualities for the product that the organization had in mind and if the supplier can match that. Additionally, whether the supplier can produce it or not and how. After these things are matched with the supplier, the organization usually asks for a quality product model. The process is then continued to the operational operation details with the most suitable supplier for the organization.

All the interviewees had a similar answer to the question of what the goal of the supplier selection process is. The consensus is that the organization finds the best supplier that serves the organization's needs through collaboration. Additionally, the consensus was that the organization finds a supplier that would lead to long time collaboration to develop the processes further. However, the emphasis was not only on collaboration and the generated success for both the organization and the supplier but that the product that the supplier produces is sustainable and that the supplier accepts the sustainability goals that the organization is driving for.

In answer to the question “What do you think is the scope of supplier selection?” the interviewees had similar answers. However, due to the interviews being held in Finnish, the translated question was hard to understand. Due to the poor translation, the answer to the question can be seen throughout the interviews when the interviewees talked about social, environmental, and economic sustainability in the supplier selection process. Additionally, the interviewees were all in the consensus that the organization does not stand for any human rights violations and is always looking for different certifications when dealing with new and potential suppliers.

4.3 Factors influencing the supplier selection

When asked what factors are the most common or crucial for the organization, the interviewees had similar answers. The most common and crucial for the organization seems to be the flexibility of the supplier. This is due to the seasonal products that are common in the industry, which require different amounts produced at different times. Additionally, the

interviewees talk about flexibility in the context of minimum quantities that can be procured as the organization is not big on a global scale, problems can arise when there is no flexibility towards smaller organizations. In addition, the flexibility factor is a key factor for the organization as they are looking for suppliers who think that the organization is an important customer and can therefore develop the operations by having a voice in, for example, sustainability-related subjects.

Quality was another factor that was commonly referred to by interviewees. Quality was referred to throughout the interviews with all participants, as the organization is in the clothing and textile industry. The quality factor is crucial for the organization as they, like many others, want quality products that were agreed upon and prevent, for example, reclamations. Interviewee 2 said:

> *"... We do not want to work in a disposable world where we produce low-quality products..."*

which also connects the sustainability factor to the quality factor. As commonly as the quality was mentioned, sustainability-related issues through the interviews arose as well. According to the interviewees, the suppliers must sign the organization's code of conduct, which contains ecological, economic, and social sustainability-related expectations. Quality, as aforementioned, is crucial for the organization due to the industry they are in, but sustainability seems to be more crucial for the organization and something that they are proud of. As interviewee 1 said:

> *"... in our industry 97 percent of the emissions comes from the scope 3 emissions which are indirect..."*

which is why the organization wants collaborative suppliers so that they can go through third-party audits. Through the audits, the organization, with the supplier's cooperation, will go through development proposals to tackle sustainability-related problems.

All the aforementioned factors arose throughout the interviews with all the interviewees. However, factors such as price and locality only arose when asked about the most common or crucial factors for the organization. Price does not seem crucial for the organization as the

usual way is to provide the supplier with a price they aim for. Additionally, it depends on all the factors that are more crucial for the organization, and the price will come from the compromises in other factors, for example, if they want better quality, it will result in a higher price. Locality as a factor is common for the organization because some of the suppliers are in regions or countries that possess risk factors. Hence, it is a factor that the organization will have to inspect when considering new suppliers.

When asked if the opinions of different stakeholder groups affect the factors that are considered, the interviewees were all in the consensus that the effect is minimal. The typical factor from stakeholders' is the sustainability of the organization's operations. However, interviewees said that, for example, the consumer is usually late in these issues because the problems are already being dealt with within the organization. Therefore, the stakeholders' opinion is heard but unimportant as the organization is a proactive forerunner in sustainability-related topics. However, some factors are regulated by the European Union, affecting the organization's supplier selection process. The organization does not actively listen to the stakeholders because, as all the interviewees said, the sustainability-related topics that usually arise within the stakeholder groups are already being dealt with because it is very important for the organization. However, there are also indirect effects that the organization might need to consider. These include big online stores that the organization sells its products to that might have their own sustainability goals. Overall, as aforementioned, the organization is a proactive forerunner in sustainability-related actions, and therefore, the actions are not from the stakeholder groups but from the organization.

4.4 Pre-qualification of the supplier

The interviewees' answers to questions 11 and 12 were again in consensus. All interviewees acknowledged the same methods that the organization uses to pre-qualify the suppliers. The organization has a battery of questions that they supply to potential suppliers. The questions include production technical aspects such as compatibility to produce the wanted product or minimum order quantities. However, as the organization has different product categories, they cannot use this battery of questions with all the suppliers as it is not compatible as it is.

The organization will also check the operational-related questions, such as delivery times and payment terms, to see if they are compatible or if they need adaptation.

The organization uses interviews with the suppliers as one of the primary methods to pre-qualify them. These interviews are intended to dive deeper into the suppliers' operations, how they operate, and when they are operating. In the interviews, the organization also checks the compatibility of its code of conduct with the supplier. Additionally, the organization visits the suppliers' facilities to see their production first-hand. However, as interviewee 1 says:

> *"... Last year, I guess for all brands, less than 1% of purchases were from completely new suppliers ..."*

the organization does not actively search for new suppliers but utilizes existing suppliers to produce new products. Despite this, the pre-qualification still applies to existing suppliers.

The interviewees were also asked about how the evaluations in the pre-qualification process affect the supplier selection process. The interviewees had similar answers that the pre-qualification process is a more continuous process than just getting information and then accepting or rejecting the supplier. Doing the interviews, visiting supplier facilities, and possibly getting samples from the supplier require time and are processes that can be improved if needed. The organization does look at certifications and third-party audits before even considering a supplier, as they do not use suppliers that, for example, violate human rights. However, after the "basics" are verified, acceptance or rejection comes after some time has been given to the relationship. The organization, as aforementioned, values flexibility, and it is something they are looking for in pre-qualification from the suppliers. Therefore, the rejection comes from the suppliers' inability to adapt, communicate, or deliver.

4.5 Supplier selection approaches

In this section of the interview, the interviewees were asked about their knowledge of selecting the correct approach in the supplier selection process. The consensus that could be seen from the interviewees' answers was that there is a void in the organization's usage of an approach in the process. Interviewee 3 said:

> *"... Maybe we use some approach unknowingly what the academic world considers as an approach... ...but maybe one could say that we do not use..."*

which compresses all interviewees' knowledge of different approaches to the supplier selection process. However, the interviewees did not see this as necessary in their organization, as aforementioned, because they emphasize flexibility through collaboration with the suppliers rather than number-driven approaches.

The interviewees were also asked about the organization's use of different methods when selecting the supplier. The consensus was that the organization does not use any specific method. The organization, as aforementioned, does not deal with that many new suppliers yearly, and, therefore, the decisions are not backed up using, for example, mathematical or data-based methods. However, interviewee 1 saw the opportunity for these kinds of methods:

> *"...In order to be able to evaluate suppliers in a more comprehensive way, such a process would be almost a necessity..."*

and, therefore, this could be something that the organization might consider in the future.

Currently, the organization's approach to selecting suppliers is more objective. The interviewees trust their gut feeling, connections, and experience when selecting suppliers. The interviewees' approach is more human-orientated rather than data-based, however, as interviewee 2 said:

> *"...We do not have any nicer analytical processes... ...The decision comes from us... ...I do not know if it is because we are a small organization..."*

the organization's size might be in a key role as to why the organization's approach is more human-orientated. All interviewees acknowledge the possibility of using a different approach when selecting a new supplier or comparing suppliers, however, most suppliers that the organization uses are referred to them. Hence, the interviewees are focused on

relationship management with the new supplier rather than calculating weights to different factors. Interviewee 4 said:

> *"… Of course you get acquainted with the company but it is not data-based in that way… … It is more like that they can do this and that… …It is more human-orientated…"*

meaning that the organization focuses on the operational capabilities of the supplier and then backs it up with experience and gut feeling. This is due to the industry the organization is in, where the products are more customized for different seasons rather than being standardized from year to year.

4.6 The benefits and challenges

In this chapter, the idea was to comprehend what kind of challenges or benefits the interviewees see in the supplier selection process. Additionally, the idea was to see what kind of challenges or benefits they see after a successful process of selecting a supplier. All interviewees presented benefits and challenges, however, the consensus was that the best possible outcome from the supplier selection process was a flexible supplier with which the organization could create a long-lasting collaboration. Additionally, the consensus on the worst possible outcome was that the supplier is only used once.

The interviewees talk about different benefits that they think the supplier selection process brings. As aforementioned, supplier flexibility was the consensus, but other benefits were also talked about, such as competitive advantage, which interviewee 2 pointed out:

> *"… You can get a significant price advantage and thus such a significant competitive advantage in the market…"*

Interviewee 4 pointed out that trust in the supplier is an important benefit:

> *"… So that we can trust… …quality assurance… …and like reliable continuity…"*

and that trust can bring quality improvements by continuously improving the processes. Additionally, interviewee 3 points out that having a relationship with the supplier benefits

the organization as it does not always have to have consuming negotiations with the supplier, for example, about quality or price. Interviewee 1 says:

> *"…With careful selection we get a product that lasts… …and it becomes business and not tinkering…"*

which also transfers into long-lasting collaboration.

The challenges that the interviewees mentioned were mostly about the aforementioned one-time supplier. Interviewee 3:

> *"…Compared to these one off suppliers… …everything has to be negotiated a bit longer and heavier…"*

The trade-off between a supplier that the organization can create a relationship is seen as a big advantage as the one-time suppliers are wasting the organization's resources. Additionally, if the supplier is only used once, the organization must do the selection process again with the other possible suppliers. Interviewee 4 said:

> *"…Challenge is if something does not work…"*

which is the worst outcome, however, they added:

> *"…Of course you try to figure out the supplier choices…"*

meaning that the organization tries to do the supplier selection process so that there will not be challenges with the selected supplier. Interviewee 2 also pointed out the challenges of dealing with a supplier that is based in a risky country:

> *"…For example, Turkey is at the moment a political hot topic… …And of course the country is not the people and the people are not the country…"*

which can potentially cause, for example, indirect challenges as interviewee 2 also pointed out:

> *"…In our industry as well, the side effect is that comment from consumers…"*

Interviewee 1 presented challenges for the organization from the sustainability aspect:

> *"…Especially in these ESG-related things we want better and we can talk with suppliers, we can visit there locally, we can take a third-party audit of its factor, however, we can never be sure because we often operate so far from our suppliers geographically…"*

and, additionally, interviewee 1 added:

> *"…regulation is not the kind that would be ok here, but it's still ok there…"*

presenting challenges for the organization that wants to be the forerunner in sustainability-related matters.

4.7 Supplier's performance evaluation

The last questions of the interviews were around the topic of evaluating suppliers' performance. The interviewees agreed that the organization does not actively evaluate the performance of the suppliers. All interviewees also said they follow the amounts of reclamations they do. However, as interviewee 3 said:

> *"…Evaluation and, in a way, monitoring is done all the time, but it is not terribly systematic and we do not really asses them afterward…"*

exposing the organization's weakness in evaluation.

When talking with the interviewees about the topic of evaluation, the consensus was that the organization's actions are reactive rather than proactive. Interviewee 1 said the following:

> *"…With the biggest (suppliers) the problems are talked about constantly… …With the smaller ones the problems can grow into something bigger, however, we do not instantly reject them because everyone makes mistakes…"*

however, there is no proactiveness towards overcoming the problems. They are talked about after they have been spotted. Interviewee 3 said:

> *"…It is a constant analysis and it usually starts from design or operations comments that "hey this supplier is having problems" which then becomes the procurement department's job to contact them and solve the problem…*

which highlights the reactive approach. When talked about if it could be beneficial, interviewee 2 said:

> *"...Surely that could be a good thing… ...Of course everything could be improved of course… ...However, how would that performance be defined, or what would be included in it…"*

proving that the organization is not against the idea of evaluating the suppliers' performance more thoroughly.

More likely, the lack of evaluation is due to the industry that the organization is in. Interviewee 3 said:

> *"...Kind of we do it all the time for the performance, for the schedules, for the quality but we do not have any yearly reviews for example…"*

meaning that due to the seasonal production, which is normal for the fashion and apparel industry, there are evaluative actions throughout the year. However, there are no reviews of past problems, hence, the supplier's performance is not systematically developed. Interviewee 1 acknowledges the potential benefits of the evaluations:

> *"...I think it would only be beneficial, supplier surely would appreciate to know what went well or poorly…"*

which could easily be developed as the organization emphasizes collaboration with the suppliers. However, interviewees said that there are monthly meetings with the most important suppliers, for example, around the topic of product or reclamations, but these are only with the most important ones.

Overall, All the interviewees agreed that after the supplier selection process is done, there could be a need for more in-depth analysis for the performance evaluation of the supplier. However, the depth could depend on how important the supplier is to the organization. For example, some evaluation is already being done with the most important suppliers but maybe not with smaller ones.

5. Discussion and conclusions

This main chapter aims to present answers to the thesis's research questions and conclusions that have risen during the process. In this thesis, the goal was to study the supplier selection process in a Finnish textile and clothing company. To achieve the goal, the thesis used the theories of the supplier selection process presented in the literature and the four semi-structured interviews done in the case company. The thesis was carried out as a qualitative case study using narrative analysis as the analysis method, which enabled us to study the interviewees' stories and the organization's methods of operation. In the following paragraphs, the answers to the research questions are given, the conclusions are presented, and suggestions for further research are proposed.

5.1 Discussion

The review of answers to the research question will begin with the sub-question of *"What is the ideal selected supplier alike in the textile and clothing industry?*" as it provides a base for the main research questions. In the interviews, one of the background questions was, *"Can you describe the ideal supplier?"* which this part will focus on. The interviewees agreed that the best supplier would be one that could provide the organization's demands with excellent quality and operational flexibility towards a common goal which is coherent with what Qian (2014) and Mukherjee (2017) have suggested. The interviewees also agreed that the ideal supplier should grow with the organization and form a collaboration that enables flexibility in operations. This is also what Barbanti et al. (2022) suggest, the ideal situation is that there is transparent communication between buyer and supplier with aligned objectives and continuous improvement, which brings a competitive advantage to the organizations involved.

Additionally, as Haeri and Rezaei (2019) suggest and what interviewees said, the supplier would be local and reliable in the ideal situation, providing an efficient supply chain. As aforementioned, the organization would ideally deal with a supplier whom the organization

can develop operations with, and therefore, as Singh and Sharma (2014) suggest, the organization could have a competitive advantage through innovative products or services. The interviewees also pointed out that ideally, the supplier would not have any sustainability-related problems, which could improve the organization's image to different stakeholder groups, as Liu and You (2021) point out. Overall, to answer the sub-question, the ideal supplier would be flexible with high-quality operations through good communication and transparency. Additionally, they would be reliable and local with the ability to adapt to the organization's demands and, over time, improve collaboration through innovative ideas to gain a competitive advantage for both parties.

The first research question is *"What are the main factors in the textile and clothing sector when selecting a supplier?"*. This will be a continuum to the sub-question to determine the most critical factors in the textile and clothing sector. Depending on the sector and the requirements and goals of the organization, many factors may be considered while assessing and choosing suppliers (Bossert & Raddatz, 2004). As the interviewees stated, the organization does not view price as an important factor, hence confirming Ho, Xu, and Dey's (2010) findings that the conventional method of choosing suppliers based on the lowest price is no longer appropriate in modern supply chains. Additionally, the organization does set up price points that they are aiming for to be competitive and to stay in business, as Kotula et al. (2015) suggest. According to Ho, Xu, and Dey (2010), quality is an important factor when selecting a supplier, and according to the interviewees, quality is an important factor for the organization. The interviewees described quality's importance as a factor from the perspective of receiving what was agreed upon, which is coherent with Zhou's and Xu's (2018) article. Additionally, as Pandey, Shah, and Gajjar (2017) suggested, the organization is preventing risks such as reclamations through low quality when focusing on the quality factor.

The interviewees also mentioned the sustainability factor when selecting a supplier. For example, interviewee 1 mentioned that 97% of their industry's emissions are scope 3 emissions. Hence, the organization is making the suppliers sign their code of conduct to tackle some of these emissions. As Liu and You (2021) suggest, this way, the organization

can find suppliers who can operate in an environmentally, socially, and economically responsible way that supports the long-term sustainability of the organization and its stakeholders, hence bringing organizations a competitive advantage. Additionally, some interviewees mentioned locality as a factor because the organization does business in countries with risk factors. These can influence the resilience of the supply chain, as suggested by Hosseini and Khaled (2019), businesses should search for suppliers that are spread out around the globe and are not overly dependent on a single area. By doing this, the effects of a natural catastrophe or other disturbance that can happen in a certain region might be reduced. Thus, preventing the organization from any disruptions or ability to provide goods and services, as Leong, Wong, and Wong (2022) suggest.

The most talked about factor in the interviews and the main factor in the textile and clothing industry is flexibility. The textile and clothing industry is seasonal, and therefore, product specifics and capacities change throughout the year, which is inevitable and will require an adaptive supplier, as Luthra et al. (2017) suggest. Additionally, when selecting a flexible supplier Wu and Weng (2010) pointed out cooperation to reach wanted price points, You et al. (2020) pointed out flexibility toward unexpected demand needs, and Zhou and Xu (2018) suggested flexibility toward quality requirements which were exactly what the interviewees emphasized when talking about finding a supplier who is flexible toward their needs and requirements. Additionally, the interviewees mentioned that they need a supplier whom they are top priority and, therefore, can provide flexibility in many different areas as Luthra et al. (2017) suggest that it can also be seen as a sub-criteria or an enabler for different factors. Thus, the answer to the first main research question is that the main factors for the textile and clothing sector are flexibility, quality, and sustainability.

The second research question in the thesis is, *"What are the benefits and challenges of selecting a supplier in the textile and clothing sector?"*. This and the previous research questions will answer the thesis's topic completely. Kotula et al. (2015) and Wu and Weng (2010) suggest that by carefully evaluating and making an effective supplier selection, organizations can have cost savings and reduce overall purchasing costs, which will increase profitability and, therefore, bring competitive advantage as a benefit just like the interviewee

2 described. Interviewee 3 described quality through trust as a benefit of effective supplier selection. Ho, Xu, and Dey (2010) described quality as the most desirable factor for organizations, and Zhou and Xu (2018) suggest that this can be achieved by selecting a supplier with a good track record, hence quality comes through trust. As Haeri and Rezaei (2019) suggest and interviewee 3 said, if organizations can select reliable suppliers that deliver goods or services on time and in the correct quantities, it will improve supply chain efficiency and collaboration and will benefit the organization, not waste resources in negotiations. Interviewee 1 said that one of the benefits is getting a product that lasts through collaboration, which is in line with what Barbanti et al. (2022) suggest that organizations need to improve communication and foster mutual communication to achieve sustainability benefits.

The challenges in supplier selection for the organization arise mostly from the potential of a one-time supplier. Interviewee 3 said that the challenge is the longer and heavier negotiations. Dulmin and Mininno (2003) and Govindan et al. (2015) suggest that the selection process is resource-intensive and time-consuming. The same applies if the organization must search for a new supplier if the previous one is only used once. Interviewee 2 said that one of the challenges in supplier selection is dealing with a supplier that presents risk factors based on location. Hosseini and Khaled (2019) suggest that organizations should not depend on a single location to help mitigate the risk of disruption. Additionally, there are sustainability-related challenges, as interviewee 1 said, of suppliers doing something that the organization does not support because they do it behind their back or there are different regulations compared to the organization's location. However, according to Liu and You (2021), if the organization can select sustainably aware suppliers, they can improve their image to stakeholders.

During the interviews, the most discussed subject that reoccurred in almost every question was flexibility from the supplier. In the section on benefits and challenges, flexibility was combined into long-lasting collaboration. This was the interviewees' consensus about the best benefit of supplier selection in the textile and clothing industry. According to the interviewees, the most challenging and worst situation is the one-time supplier, which

consumes the organization's resources. However, as Weele (2014) says, building and maintaining these relationships is challenging. The answer to the second research question is that the benefit of supplier selection for the organization is long-lasting partnerships with flexible suppliers who produce quality products and services, enabling both competitive advantages. The challenge for the organization is the resource-intensive supplier selection process if it does not lead to a successful collaboration with the chosen supplier and ends before or after the first actions.

In the textile and clothing industry, supplier selection is challenging for smaller organizations that want flexibility, quality, and sustainability. However, based on the interviewees' answers, the organization possesses the know-how and knowledge to select and nurture the best suppliers and existing relationships. Although, the organization could benefit from adapting universal guidelines to the supplier selection process that could steer the purchasing managers toward the organization’s goals. The organization already had very similar actions to what was suggested in the literature. Additionally, the organization is a forerunner in sustainability-related actions and is aware of the problems. Therefore, the comment in Tong, Wang, and Yi’s (2021) article about textile and clothing enterprises only maximizing economic interest and not paying attention to ecological and humanistic concepts is not valid in the case company.

The maturity level of the case company’s supplier selection process can be described as being managed. The case company does the supplier selection process, however, the organizations are selected based on the employees' past experiences, connections, or gut feelings. The supplier selection process seems to be reactive in the case company as there are no guidelines or processes defined. The purchasing managers, who are doing the supplier selection process, seem to be experienced in their field. Additionally, the managers explained the process of selecting a supplier quite well and explained details that are common in the industry. However, despite being capable, the case company could benefit from guidelines, defined processes, or common factors (e.g., suppliers’ sustainability) that would bring a stronger connection to the company’s strategies. Additionally, the case company does not

seem to utilize data in its supplier selection process, this could also rationalize the intuitive selection of a supplier more broadly.

The limitation of this thesis is that it is a case study and does not reflect the industry or other organizations in, for example, Finland. Additionally, there is the limitation of only conducting this thesis in the clothing and textile industry as it would be a lot different in other industries based on the literature. Therefore, the thesis did not provide novelty to the academic research. However, it offers deeper insight into the clothing and textile industry in a specific market. The thesis does agree with Tong, Wang, and Yi's (2021) article and will verify their findings. Under the pressure of the market, public, and ecology, textile and clothing organizations can break through obstacles by engaging multiple companies. The concept of sustainability has been a gift to the textile and clothing industry while increasing the demand for suppliers. Unpredictable customer demands, tremendous product varieties, and high product quality and service levels characterize the textile and clothing industry. Additionally, in the future, the industry will gather more social attention. However, the case company considers social and environmental responsibilities while meeting its economic benefits. These highlights that apparel suppliers need flexibility, not only in product design and innovation but also in the delivery and return processes, to improve the competitiveness of apparel brands. Overall, the findings from the case company accommodated the previously mentioned article, which was the thesis's goal. The case study was successful, and the case company will have insights into its operations in the supplier selection process. Ultimately the interviewees presented benefits and challenges in the interviews, and with the literature, the best benefit in the industry seems to be a competitive advantage through long-lasting collaboration, which enables the previously mentioned critical factors and thus creates the ideal supplier whom the interviewees described. Therefore, proving the need for a congruent supplier selection process to enable a competitive advantage in the future.

5.2 Managerial implications

The thesis provides some managerial implications for the textile and clothing industry. First, as aforementioned, the supplier selection process is crucial for organizations. Hence, it

should be implemented in organizations, and it should be a cohesive process throughout the organization. Therefore, the coherent process could provide the same results over time for the organization. Additionally, the coherent process could be adapted to match the organization's strategies and values.

Secondly, the textile and clothing industry is described as an industry where tremendous product varieties, unpredictable customer demands, and high product quality and service levels are normal. Therefore, the factors that revoke the industry characteristics are essential for the organization. Through flexible suppliers, the organization can address unpredictable demand and tremendous product varieties. With a sustainable supplier, the organization can ensure that high-quality products are produced and service levels are fulfilled. The supplier will have a competitive advantage through environmental, social, and economic aspects. Additionally, the case company could benefit if they could measure or collect data on these aspects when selecting a supplier. This could enhance the competitive advantage of both organizations.

Thirdly, the organization can have long-lasting collaborations by enabling the two previously mentioned implications. Additionally, it enables the organization to have fewer one-time suppliers when the process is coherent, and qualities like flexibility, quality, and sustainability are necessary for suppliers to be selected. Thus, the selected suppliers are ideal for the organization creating a perfect environment for collaboration and competitive advantage for both.

5.3 Future research

The textile and clothing industry, as Chen and Burns (2006) said, consumes millions of tons of materials annually, which consume the environment. Thus, as Tong, Wang, and Yi also suggest, the guidelines of supplier selection in the textile and clothing sector should be investigated more from the economic, social, and environmental aspects. This thesis focused on a single organization’s supplier selection process to find out what are the critical elements

in it. Therefore, future research could be focused on doing the same using a bigger sample size. Additionally, the research could be done as a quantitative to gain more generalized information on the phenomenon.

Secondly, future research could also examine the textile and clothing industry's supplier selection process and create an industry-specific framework. The industry is seasonal, meaning the needs and specifications of the organizations might differ many times per year. However, the same suppliers can usually produce different products or services despite the changes. There still could be an industry-specific framework for the supplier selection process that promotes flexibility, quality, and sustainability.

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Appendices

Appendix 1, Interview Questions

Background

1. What is your role in the organization?
2. What are your responsibilities in the organization?
3. How are you in contact with the organization's suppliers?
4. Can you describe the ideal supplier?

Supplier selection

5. Can you describe how you see the supplier selection process in your organization?
6. What do you think is the goal of supplier selection?
7. What do you think is the scope of supplier selection?

Factors of supplier selection

8. What are the most common factors in the supplier selection process?
9. What factors do you think are the most crucial ones for your organization?
10. Does your organization follow the stakeholder's opinion of what factors should be considered in supplier selection? (e.g., sustainability issues)

Methods of evaluating the suppliers in pre-qualification

11. Can you describe your knowledge of methods to pre-qualify suppliers?
12. What kind of methods does your organization have for supplier evaluation (in pre-qualification)?
13. How do the evaluations affect the supplier selection process?

Approaches to supplier selection

14. Can you describe your knowledge of what goes into the process of selecting the correct approach in the supplier selection process?
15. What kind of approach does your organization use to compare suppliers?

Benefits and challenges of supplier selection