



# Improving a Case Company's tendering process through participatory action research

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### **Tendering process development for case company**

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### **Abstract**

The goal of the thesis was to come up with improvement proposal for case company by taking part in their tendering process for logistics supplier. Case company was aware that the current process was quite open and could be developed further. Case company didn't have process charts or evaluation matrix for service procurement.

Research methods used in the thesis was action research where the data collection was made by participant observation. Different steps of tendering were documented and results analyzed during the thesis. The theoretical framework focused on the topics of supply chain, tendering and outsourcing.

Based on the observations was conducted a development proposal for the case company. The proposal for the company was to involve a clear evaluation matrix to evaluate tendered companies. The result opens different values to consider during tendering a logistics supplier. The result makes tendering evaluation clearer and gives the tendering structure.

### **Keywords**

Tendering, procurement, supplier evaluation, logistics, 3PL, action research, development

### **Miscellaneous (Confidential information)**

Appendices 1,2,3,4,5,6,7,8,9,10 and 11 are confidential and removed from the public thesis. The basis for secrecy is section 24(17) of the Act on the Openness of Government Activities (621/1999), a company's business or trade secret.

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# 1 Introduction

Last-mile logistics is known to be most expensive, and least sustainable part of a supply chain. Sustainable solutions are trending in the world. Companies are looking for more and more sustainable ways to continue their business. Additionally, logistics outsourcing has gained interest among companies, scholars, and researchers. It has been recognized as an effective strategy for gaining head start, enhancing customer service, and lowering operational expenses. (Aguzzoul, 2014; Boyson et al., 1999; Jonsson, 2008).

Most of the logistics solutions of the case company are tied with warehousing solutions, so those are not that easy to tender, also therefore there is no process charts or given structure for how it usually should be done, as the need for this logistics solution has been around for two years. The objective of this thesis is to participate in a tendering process to find best suitable logistics partner for the case company and to give improvement and development proposal of the current processes of logistics tendering. Thesis will be conducted as action research by observing current tendering processes, values and habits by taking part in the process to gather best possible insight and knowledge of the tendering processes in case company to assure possible development proposals for the case company. Case company has its own standards for tendering frequencies and the current service provider should be tendered within the next six months.

Company X is mostly interested in possible cost savings, sustaining good customer service between all stakeholders in the supply chain, but they are also keen on lowering emissions, as consumers are more aware of sustainability and emissions. Case company's long-term goal is to have zero emissions by 2050, which is in line with United Nations goals of net zero emissions by 2050. Most of the emissions are currently from scope three which this tendering is also about.

Question 1	What to develop in case company's tendering process?
Question 2	What criteria should company X use in tendering when sourcing for sustainable and cost-efficient logistics service provider?
Question 3	Should sustainability be a big factor in logistics tendering for case company?

Table 1. Research questions

## 2 Research methods

Here I will go through the chosen research methodology and data collection methods, which both are crucial for a successful thesis.

### 2.1 Action research

Action research is a research method that brings practical benefits and actively develops social practices. Different action research varies from one end to end, where the other end is about developing individuals work methods and the other end can be about popular movement.

Theoretical basis relation to development goes two ways'; theoretical basis is needed for developing practices, but new information is gathered by changing practices. Action research's starting point can be a practical problem, when somebody notices being unsatisfied with the current policy and starts to develop workplaces policy. (Heikkinen & Kaukko, 2023)

Action research aims to develop processes by reflecting on what's been done. Intent is to understand the process from another perspective, by receding from normal thinking and routines. Action research has four main steps: 1. planning 2. execution 3. observation and data collection 4. evaluation and reflection. (Heikkinen & Kaukko, 2023) On figure 1. you can see the steps starting from top right.

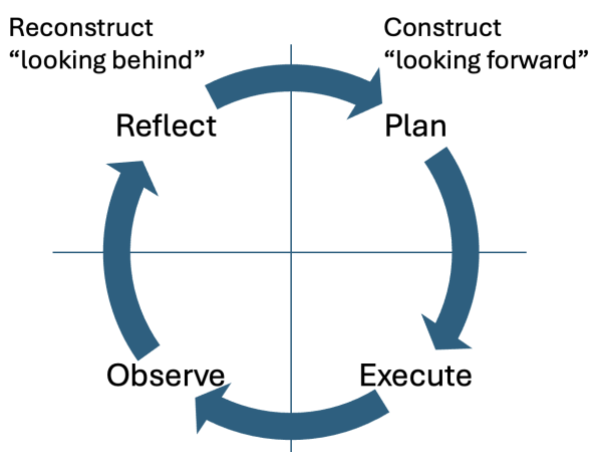


Figure 1. Action research Heikkinen & Kaukko, 2023.

## **2.2 Data collection methods**

Action research is usually looked as one of qualitative research methods, but during an action research researcher can use both methods qualitative and quantitative. In qualitative research the main point is to understand and interpret the subject and its meaning comprehensively without numbers. (Heikkinen & Kaukko, 2023).

In this thesis data-collection methods were participant observation, literature analysis and questionnaire. The research was mixed between qualitative and quantitative, so these methods suit it well. Participant observation was the main research methods where the current processes and methods were used to gather information for further analysis and development.

### **2.2.1 Observation**

Observation allows access to processes natural operational environment and therefore makes it possible to see if people do as they say or they are expected to do. Observations benefit is its authenticity, but data could be lost also as one cannot observe everything around him, therefore it is important to consider possible interference in the results (Hakala, 2024).

Observation has four different subcategories, participant observation, non-participant observation, covert observation and overt observation. In participant observation, participants know their participation in research. In participant observation, researcher is actively involved in the research with informants. Observation research methods have in common that everything has more than one perspective and that all of them are important. Researcher must be respectful for representatives and their knowledge. Researcher is there to learn and not to teach (Tuomi, 2018).

## **2.3 Analysis**

Content analysis is method that can be used in all qualitative research. In content analysis you can analyze almost any written material such as, dialogs, reports, books, articles and interviews. With content analysis we can gather literature for conclusions (Tuomi, 2018). Inductive analysis is about gathering data first and then developing it, where you bring out your main findings apart them being good or bad for the research. Main challenge is to stay honest and open to the material (Hakala, 2024).

## **2.4 Reliability and ethnicity**

Reliability is a key factor in thesis writing. In practice it is about being able to convince the reader of your thesis that it is trustworthy in every possible way. Reader should be able to trust that with your written actions makes the result possible, the text shouldn't appear from nothing. One factor towards reliability is chosen data-collection method, is it justified for your thesis? Another crucial factor in qualitative research is analysis of the material and how collected data is used, the amount of material could easily get out of hand and therefore qualitative researchers must make choices regarding what should be studied and what not to include in the study (Hakala, 2024).

When evaluating ethnicity writer tries to evaluate what methods he can use to achieve the purpose of the thesis. Example of good ethics is to acknowledge that person being researched has the right to know what is it for and what is done to the collected research data after the thesis is done (Hakala, 2024).

## **2.5 Scope**

As mentioned earlier the scope is to find what parts of tendering process could be developed that are currently made by Supply chain manager. The thesis will not consider work that is outsourced inside the case company, for example contracting or NDA's. This thesis will look more detailed in the factors of how case company ends up with certain logistics service provider and what criteria it is using.

### 3 Logistics

The purpose of this chapter is to open different methods of logistics services and bring sustainable aspects of transportation. This chapter also defines logistics and relationship management with third party service providers.

At its finest logistics is a plan for the flow of goods and information through a business. Supply chain management uses this as its foundation and looks for collaboration between the processes of other parties in it, according to Martin (2016, p.1-2). In the context of logistics and supply chain management, it's important to recognize that the material flow contains also intangible goods. The supply chain involves also an information flow, as illustrated in Figure 1. (Rushton et al., 2022, p.5).

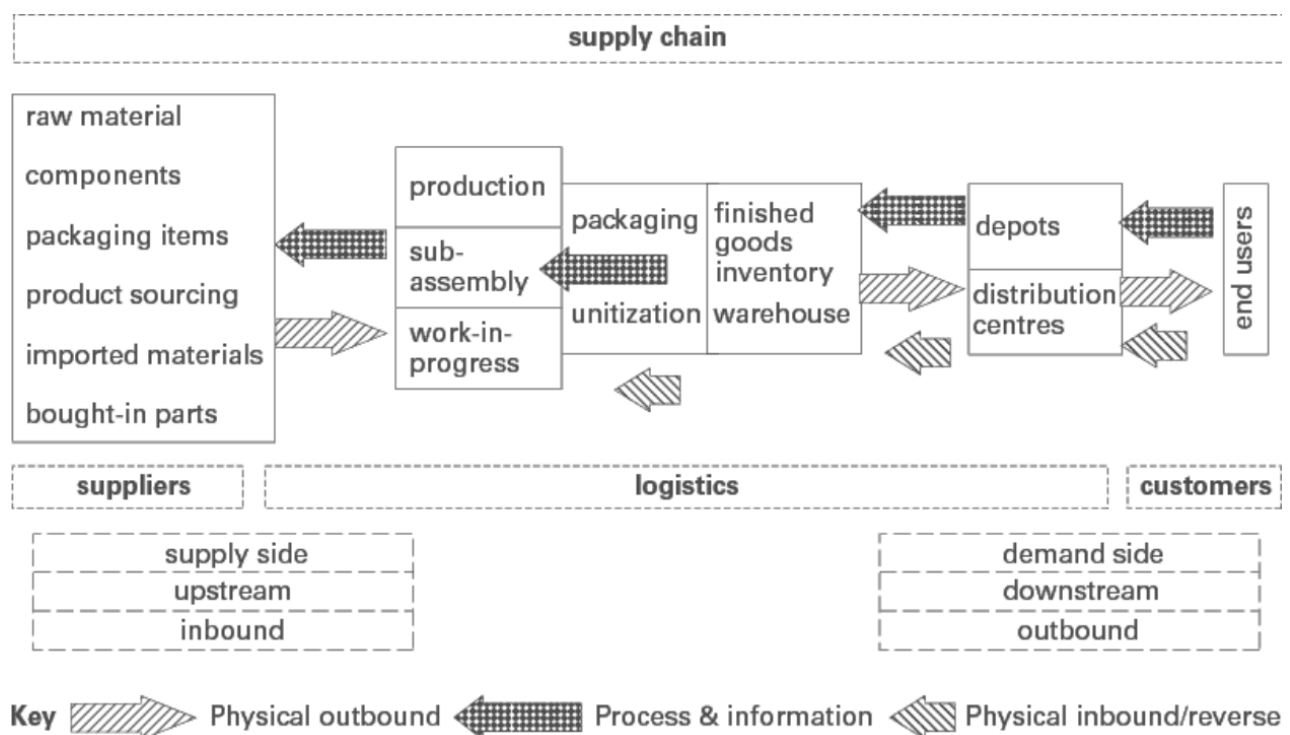


Figure 2. Flows of the supply chain, Rushton et al.(2022, p.5)

Logistics has multiple dimensions but to narrow it down Rushton et al. (2022, p.26) states that the ABC of logistics is transportation, warehousing and inventory, these are the main categories that have been around for long but were seen often just as individuals. When we look at

transportation, warehousing and inventory as a part of a bigger picture, we can see a connection between these parties.

### **3.1 Logistics service models**

According to Li (2014, p.2), logistics can be seen as actions in a flow of goods between end customers and producing customers. Before that, Rutner and Langley (2000, p.73) determined logistics as a trade cycle which was developed to create value to companies, some do it by themselves and others outsource it. Companies that don't have own logistics parties do business with others, which can be ranked to different parties. Most used party logistics according to Achahchah (2019, p.151-152) are first party logistics (1PL) which involves the shipper managing all logistics internally, maintaining full control and flexibility to meet customer needs. This approach can be cost-effective and customer-focused due to a steady and optimized network. Second party logistics (2PL) outsources operational tasks such as transportation to a third party, while the shipper retains management responsibilities, allowing a focus on improving processes and controlling costs. Third party logistics (3PL) extends outsourcing to include activities like inventory management and customs clearance, with the service provider potentially subcontracting specialized tasks. The focus is on creating a long-term partnership while the shipper oversees logistics management. Fourth party logistics (4PL) involves outsourcing the entire supply chain, including sourcing, manufacturing, and distribution, to a neutral, non-asset-based provider that manages processes and coordinates with existing logistics partners. The relationship emphasizes collaboration and shared risks and benefits. Fifth party logistics (5PL) expands 4PL by integrating innovative solutions for e-commerce, enhancing sales, and managing tasks such as order processing.

### **3.2 Green transportation**

Green transportation logistics aims to reduce energy use, waste emissions, and roadway congestion from transport vehicles by implementing efficient project planning and material circulation systems. Strategies include better route planning, improved load handling, streamlined market operations, and coordinated management in response to rising costs over time (Tao, 2008, p. 525). Examples of green logistics practices include using eco-friendly vehicles, reusing pallets and containers, combination of freight going to mutual route, loading trucks fully, standardizing

truck sizes, and preferring logistics suppliers that shares the value of sustainability (Thiell, 2011, p. 335).

Companies want to profit by their business, but on the other hand companies investing in green technology face higher costs, which may reduce their incentive to engage in such activities. A typical feature of green innovation is the significant role of political measures in promoting its adoption. While traditional innovation typically responds to market demand and technological factors, the drivers of green innovation are primarily regulatory. Green innovation practices impact not only environmental protection but also business performance. Green innovations should not be viewed merely to comply with government regulations but also as a proactive approach that provides competitive advantages and enhances business operations. However, not all green innovations are the same. Different innovations require specific types of resources and expertise, which in turn call for different implementation methods. (Calza et al. 2017).

### **3.3 Logistics cost structure**

According to Achahchah (2019 p.86-87) hub-and-spoke based logistics center cost structure depends on various things, such as amount of pallets, distances, schedule, labor, waiting-times and vehicles used. Hub-and-spoke logistics needs a lot of manual labor, as the driver has many stops for loading and unloading. Achahchah adds that also the pallet size has an affection as a euro pallet is 80 cm times 120 cm and around can hold for around 700kg.

Depending on the market service providers might offer different prices, low prices to increase volumes, leading to larger margin or high prices to attract premium customers with high-end products. Service providers might try to get multiple customers with lower price to increase market share; after achieving the market share, they'll try to increase the prices and therefore margins (Achahchah, 2019 p.86-87)

Achahchah (2019 p.104-109) points out various factors that logistics companies are doing to be more cost efficient: Firstly, the amount of stops, optimizing and investigating delivery drivers stops and if all of them were made and if not, why. Secondly Used time per delivery stop, how long it takes to load or unload at a certain spot, busier locations take more time than smaller ones.

Thirdly empty kilometers, when a driver must drive an empty truck, it never generates money for the company, therefore route optimizing deliveries and pickups in the same direction is critical.

What comes to fees and different things added to the final invoice Achahchah (2019 p.126) states that, “There is a wide range of rate structures per mode of transport, geographies, accessorials, surcharges, currency conversions, rounding rules, equipment types, pallets, weights, dimensions, and breakeven-point calculations”. Achahchah (2019, p.219) finds fuel surcharge costs as an industry accepted practice, in which the transportation company should remember to give money back to its customers when fuel prices go lower than the baseline.

### **3.3.1 Operation cost reduction**

To reduce costs and increase profitability, companies often outsource logistics operations to third-party logistics (3PL) providers, allowing them to focus on their core competencies. These 3PLs have become key players across various industries and supply chains by helping to cut expenses, improve efficiency, and increase the quality of customer service. Once the decision to outsource is made, selecting the right provider becomes a crucial next step. Choosing a capable and reliable set of 3PL partners that align with the company’s specific requirements and supports long-term collaboration is essential. This decision is influenced by several factors, including pricing, the range of services offered, and geographical location (Darko & Vlachos, 2022).

## **3.4 Sustainable relationship management with 3PL**

In today’s competitive business world, the relationship between buyers and suppliers has become more complex, but there’s a growing focus on building partnerships that benefit both sides. As supply chain management has gained attention, more companies have come to see how important mutual trust is for creating strong, long-term relationships (Thiruchelvam & Tookey, 2011).

To stay competent and up to date companies must collaborate. According to Marchet et al. (2016) 3PL industry is facing issues with growing and standing out of their competitors. In addition, Baumard (2009), emphasizes the import of co-operation between the customer and its service provider to plan common strategies in order to manage these challenges.

Lai et al. (2013) point out that the relationship between a company and its third-party logistics provider is becoming more critical to overall business success. Bringing 3PLs into sustainable supply chains doesn't just improve financial results, it also supports growth for the company and the supplier. This dependence, in turn, supports optimal and competitive operations. The quality of the relationship with 3PL providers is crucial in managing this partnership, specifically in three areas: managing dependency, enhancing the integration of logistics processes, and boosting overall business performance (Lai et al., 2013).

Lieb and Lieb (2010) found in their survey that companies face five key challenges when trying to adopt sustainable practices. The biggest issue is finding a balance between sustainability goals and customers' expectations for competitive prices. Other challenges include setting clear sustainability targets, defining internal priorities, collecting precise data on current operations, and building awareness of sustainability issues across the organization.

### **3.5 Sustainable road logistics**

According to Inkinen & Hämäläinen (2020) one way for road logistics to lower emissions of trucks is to use optional fuels, such as biodiesel, liquefied natural gas, or methanol. Unfortunately, these are rather new solutions and tend to cost more than regular diesel. Electric vehicles have had a breakthrough during the last decade. Trucks with electric powertrains are also a way to lower emissions (Inkinen & Hämäläinen, 2020). EV-Trucks total cost of ownership is almost 8% higher than a diesel truck according to Cheng & Lin (2024). Inkinen & Hämäläinen (2020) also suggest daily basis operational solutions to reduce emissions. Optimizing routes and trucks for routes, to use EV trucks in short haulage and biodiesel trucks in longer routes.

European emission targets won't be reached easily. Breed et al. (2021) suggest that if European union wants to get to their goal of net-zero greenhouse gas emissions by 2030 (European commission, 2018), the percentage of heavy duty zero emission vehicles should be 4-22% of the fleet in roads of European union, this considers hydrogen and electric vehicles.

### 3.6 Risk management

Companies must calculate risks and when to take them. Logistics risk refers to the odds and impact of unexpected events or conditions that can disrupt any part of the supply chain, potentially causing operational setbacks (Abdullah et al., 2019). Jüttner et al. (2003, p.200) defines risk management in supply chain as “Any risks for the information, material and product flows from original suppliers to the delivery of the final product for the end user”. As seen in figure 1. Supply chain has more parties than just two.

Logistics covers a wide range of tasks, including sales forecasting, purchasing, warehousing, inventory control, packing, material handling, transportation, order processing, customer service, returns, and waste management (Dey et al., 2011). Supply chain management helps businesses streamline these processes, cut logistics costs, and improve customer satisfaction. Still, supply chain management often faces uncertainties like inaccurate demand forecasts, variable lead times, natural disasters, equipment breakdowns, and labor disruptions. Managing these risks is a key part of supply chain operations, and steps should be taken to reduce their impact (Abdullah et al., 2019).

According to Cristopher (2023) the five most common risks in a supply chain are Globalization, which is due to companies going for the lowest price, resulting long lead times and big safety stocks. Centralized distribution which leads to longer distances, but it is more cost efficiency. Outsourcing, as it is growing trend and gives company freedom to focus on its core competence, but we must remember that wider and more complex supplier network, the riskier it becomes. Reducing supplier base even though it comes with many benefits it has also drawbacks. If you are leaning on one big supplier and they are having problems, it will reflect directly to your supply chain. Not having attention in supplier risk management in optimizing supply chain, companies often try to find ways to lower costs in their supply chain for example in using just in time production, which lowers safety stocks and is beneficial in steady economy, but it comes with a bigger risk in supply chain so it is critical to find a balance between costs and risk management in supply chain (Cristopher, 2023).

Achahchah (2019 p.155) pointed few hidden wastes of outsourcing as outsourced party is not owning the goods being transported and this might lead to decrease in sense of urgency and delay

in responsiveness for logistics companies. Additionally outsourced companies might face inflexibility due to strict protocols, instructions and agreed scope. In spontaneous challenges outsourced companies are often consulted as they have better knowledge in their own core business.

## **4 Outsourcing**

This chapter goes through what is outsourcing, why are companies outsourcing and what should one take into consideration when outsourcing some of their processes. More precisely supplier selection and evaluating suppliers.

### **4.1 Reasons for outsourcing**

Bolumole (2007) explains that outsourcing strategies are designed to help companies stay competitive in today's fast-moving business world. This need becomes even more pressing during tough economic times, when there's extra pressure to improve productivity, increase profits, and cut logistics costs. A strong logistics outsourcing approach can be a key solution to help businesses lower expenses while also improving service quality and overall supply chain performance.

Outsourcing gives both parties the opportunity to benefit from others expertise, Achahchah (2019) highlights. The cooperation drives companies to invest in sourcing for suppliers as it is efficient and practical for both companies, also being able to share one's expertise is beneficial to each other (Achahchah 2019).

Outsourcing, as Achahchah (2019) describes, involves transferring specific assignments, responsibilities, or functions to an external party. This process allows businesses to reallocate resources and focus on their core competencies. The growing popularity of 3PL services reflects this trend, as more companies worldwide adopt logistics outsourcing to optimize operations and enhance their strategic focus (Setiawan & Ellitan, 2023). The two key variables in transportation according to Achahchah (2019, p.86) are costs and transit-times. Therefore, it is important to investigate suppliers properly as service provider is an important part of the whole supply chain. Arif & Jawab (2018) addresses that outsourcing is a great way to lower delivery times and expenses without companies having to do big investments.

### **4.2 Supplier evaluation**

Choosing the right supplier can be a complex process. Companies need to find suppliers that align with their strategic goals. For example, if a company focuses on differentiation, it should prioritize

qualities like innovation, advanced technology, and top-tier quality over just getting the lowest price. In such cases, suppliers that are flexible and responsive to change are ideal. On the other hand, if the company's strategy is centered around cost efficiency and high volume, a more streamlined—though possibly less adaptable—supplier might be a better fit (Benton, 2020, p. 167). Benton also emphasizes the importance of evaluating a supplier based on their future capabilities rather than just their track record.

Bergman and Lundberg (2013) found that factoring in both price and quality can improve procurement efficiency, although it does add complexity. They also point out that many supplier selection methods, particularly the scoring criteria used, are often poorly designed. Applying basic economic principles could make these processes more effective.

Deshmukh and Chaudhari (2011, p. 283) note that suppliers are often evaluated using criteria like price, product quality, delivery time, and reliability. Benton (2020, p. 168) adds that other key factors include a supplier's expertise in supply chain management, financial health, and geographic proximity. With so many variables to consider, supplier selection can quickly become an overwhelming task.

#### **4.2.1 Evaluation matrix**

In a study of improving supplier evaluation technique for a company Barmuta et al., (2022) conducted a supplier evaluation matrix where they would have criteria, weight of the criteria and rating scale. Bermuta et al., found out that supplier evaluation model shouldn't be complex but rather simple, practical and adaptable for different circumstances. They suggest that during evaluation the criteria should be changed to match with the goals of evaluation. This technique helped Barmuta et al., to clarify the evaluation and objectivity in the process to give suppliers rankings.

O'Brien (2023, p.464) argues that scorecards in use should include sustainability as a measure to drive sustainability between businesses. The values used in scorecard should be designed based on the purpose. O'Brien (2024) also criticizes that who should add the data do evaluate company's sustainability, easiest it would be to have the supplier fill the scorecard based on procurement

team's view. For lowering company's scope 3 CO2 emissions company would need a KPI for total supply chain emissions (O'Brien, 2023 p.467)

### **4.3 Spend**

Variety of companies follow where their cash goes, one tool for it is spend analysis. Achahchah, (2019 p.111) defines spend analysis as a tool used to examine spend data by collecting, categorizing, and assessing expense information to identify areas of wasteful spending. Starting by identifying all data sources, such as departments, locations, functions, systems, and individuals. Gathering the data into a single file for easier analysis, then clean and standardize it by addressing errors and ensuring uniformity in elements like modality, region, product lines, lanes, markets, and cost categories (e.g., surcharges, waiting times, fuel costs) to capture crucial details. Next, organizing and categorizing the data as thoroughly as possible. Finally, analyzing it using graphs, Pareto diagrams, pie charts, or any other way that is convenient (Achahchah, 2019).

### **4.4 Sustainability in outsourcing**

Ed-Dafali et al. (2023) suggest that to establish a lasting competitive advantage, outsourcing companies need to thoroughly assess the abilities and relationships of their service providers. What comes to sustainable actions made by logistics companies Baah et al. (2020) points out greener logistics strategies, such as reducing waste, using sustainable transportation, reverse logistics, eco-friendly packaging, and environmental monitoring, have positively impacted both sustainability and profitability. In conventional logistics handling, greener logistics management entails the combination of ecological, financial, and humanitarian concepts. Many multiple-criteria decision analysis approaches, mathematical programming, and intelligent algorithms have been utilized in the literature for logistics service providers choice and assessment. (Guarnieri et al., 2014). Le & Ikram (2022) found out that based on several case studies the kind of outsourced services differed between organizations depending on the industry. The study discovered a significant positive association between sustainability innovation and corporate competitiveness (Le & Ikram, 2022).

Lammgård (2012) highlighted the size of sourcing companies in his study, which showed that purchasing function is crucial for driving environmental considerations. Larger customers with

significant purchasing power are more likely to see their environmental demands fulfilled. Dynamic industries demand swift market responses, supply chain flexibility, and the outsourcing of value-added activities beyond transportation and storage. However, outsourcing decisions are primarily guided by a company's strategy specifically, how quickly it aims to respond to the market and the unique requirements of its sector. Since most companies outsource transportation and storage to 3 PL providers, their inventory control policy largely determines their outsourced storage choices. Additionally, research by Ali et al. (2023) suggests that strengthening 3PL-client relationships improves performance by enhancing partner commitment. Key relational factors such as trust, cooperation, information sharing, and balanced power dynamics significantly impact the success of these partnerships, the stronger these elements, the more successful the collaboration. These insights are essential for 3PL providers, transporters, and partnership managers, as a lack of initial trust can hinder long-term success. (Ali et al., 2023) Together these studies indicate that sustainability is a worthy key indicator in outsourcing.

#### **4.5 Shareholders**

Shareholders give the company direction where to go. This affects also sustainability and investments towards it (O'Brien 2023 p. 141). O'Brien adds that when owners believe in something you can be sure that it can be seen in the entire company. Unfortunately keeping suppliers happy with good financial returns has grown eagerly. The top three most used values in a logistics company according to Atasever (2024) were firstly customer focus, focusing on customers' needs and satisfaction, secondly sustainability by focusing on continuing business without harming the nature or society and thirdly productivity.

## 5 Tendering

This chapter defines all steps in tendering. With these steps most companies could go through their tendering processes.

### 5.1 Tendering process

To get the best supplier for the company, it is necessary to analyze and evaluate suppliers very carefully. However, the time spent on selecting a supplier is tied to the procurement importance. For the selection of a supplier related to a significant purchase, it is worth spending more time and money, while not for a smaller purchase or a shorter-term supplier relationship it's worth using a lot of resources. As for the supplier selection process itself, many procurement industry professionals have the same opinion that there is no single best way to evaluate and select suppliers (Benton 2020, p.166)

A poor choice can result in losses for the supply chain, directly impacting the company's performance. Selecting the right supplier is often challenging for purchasing managers, especially now, as supplier selection criteria continue to evolve (Frej et. al, 2017) .

Tendering has various steps. Starting the whole project, it needs a reason for it, such as contracts deadline, need for cutting expenses or company policy. After having the green light to move forward for tendering it needs an objective. These two steps can be done simultaneously, with other important steps such as schedule and resourcing. Other steps of tendering are preparing the offers, sending them, negotiation, comparing the offers and making a contract. Every step has their own aspects and together these steps make up for the whole tendering process. (Hytönen & Lehtimäki 2007, P.26 & 38–39).

#### 5.1.1 Preparing for tendering

Preparing can be started when tendering company has defined the targets for tendering, content has been defined and need for tendering estimated. This step includes also selecting potential service providers. Good number of service providers in tendering is roughly 3-6, as with only one, you'll lose the meaning for tendering and over six will make going through the data too laborious.

One thing to consider when choosing the possible service providers is to estimate how interesting your co-operation is to them. For big national companies' small industry company is not as interesting as for a small company. You should look for a position where service provider keeps you as an important and meaningful client. You also must consider service providers capability to answer to your needs (Lehikoinen & Töyrylä 2013 p.74).

### **5.1.2 Selection process**

Sollish and Semanik (2006) emphasize that supplier selection is a critical task handled by the procurement department. Because of its importance, purchasing managers need to implement a well-structured process to identify and choose the most suitable suppliers for the business. Van Weele (2018) adds that supplier selection is a step within the broader purchasing process, beginning with market research once the functional or technical requirements have been defined.

### **5.1.3 Selection criteria**

As said in chapter 4.1 this goes hand in hand with supplier evaluation. Depending on preferred outcome the selection criteria should differ. While traditional supplier selection criteria, such as costs, lead-time and quality are widely used across industries, today's globalized markets have raised the bar. Buyers now look for suppliers who can also perform well in areas like reliability, flexibility, environmental responsibility, and continuous improvement, along with meeting other customer-specific expectations. As a result, clearly defined selection metrics have become essential for effective supply chain management (Thiruchelvam & Tookey, 2011).

### **5.1.4 Non- disclosure Agreement, NDA**

The tendering process almost always involves confidential information, which is why an NDA is signed before any information is exchanged. There are various NDA templates available, and each service provider likely has its own version. However, the tendering company should use its own template to ensure that the agreement aligns with its objectives. This approach also provides insight into how smoothly the participating service providers handle the agreement process. Additionally, an NDA serves as a clear signal to service providers that the bidding process is about to begin. (Lehikoinen & Töyrylä 2013 p.89–90.)

### **5.1.5 Request for information, RFI**

The purpose of the request for information phase is to identify the service providers that best meet the needs. The more detailed the information provided to the participating service providers in the RFI, the higher the quality and relevance of their responses. The RFI should clearly outline the requirements related to the service content, ensuring that service providers understand these as mandatory criteria rather than just informational details. (Lehikoinen & Töyrylä 2013 p.90.) Achahchah (2019 p.122-123) sees RFI as a questionnaire, that with one can reduce the length of the possible supplier list.

### **5.1.6 RFI response**

The first step for a service provider is to decide whether to participate in the tendering process. Large service providers receive many invitations to tenders and must carefully consider which ones are worth pursuing. They typically evaluate factors such as the attractiveness of the client, their own capability to perform the requested services, and their chances of winning the tender. The goal is to determine their position relative to competitors (Lehikoinen & Töyrylä 2013 p.91–94).

If the decision is not to participate, the service provider informs the tendering company in writing. If they choose to participate, they begin gathering the necessary information for the RFI response. The preparation of the response depends on the situation and industry. For standardized services, ready-made sales materials may be used, while in other cases, the response is tailored specifically to the client (Lehikoinen & Töyrylä 2013 p.91–94).

All service providers invited to participate must submit their responses by the deadline specified in the RFI. After the deadline, the tendering company reviews the responses to identify service providers that are both capable of meeting the requirements and willing to offer their services. Based on the RFI responses, the companies selected to continue in the tendering process are determined (Lehikoinen & Töyrylä 2013 p.91–94). It is also important to give feedback to the suppliers that didn't make it to the next step. (Achahchah, 2019 p.125)

Van Weele (2018) adds that suppliers meeting most of your criteria should be investigated further by purchasing team to evaluate set criteria for tendering. In addition, here one could compare the offers price wise, but it is smarter to compare total cost of ownership rather than just the given price.

### **5.1.7 Request for proposal, RFP**

The RFP (Request for Proposal) phase involves continuing with the service providers selected based on their RFI responses. To ensure high-quality proposals from the providers, the RFP must clearly include sufficient and accurate information, such as the scope of the tendered project and the required service and quality levels. (Lehikoinen & Töyrylä 2013 p.94–96).

There is no need to repeat the details already provided in the RFI, instead, the information should be expanded and described in greater depth. If the tendered project is extensive, it can be divided into smaller parts within the RFP. This approach allows for a more detailed evaluation of the service providers' pricing for smaller sections and potentially enables different providers to be selected for different parts of the project. (Lehikoinen & Töyrylä 2013 p.94–96).

### **5.1.8 Request for quotation, RFQ**

Achahchah (2019, p.126) says that after receiving answers for RFP and narrowing down the list of potential suppliers, the next step is request for quotation. In an RFQ one should provide the suppliers historical data from previous years that the suppliers can use for calculating their offers. For the first round Achahchah (2019 p.126) suggests using your own form for quotation, so it is easier to compare the gotten prices. Second round of quotations is recommended as service providers try to build some room for negotiation.

### **5.1.9 Offers**

Upon receiving the request for proposal, service providers reassess whether they have a realistic chance of winning the tender and determine the strategy they will use to pursue it. The response time for RFPs is typically 2–4 weeks, so the service providers must begin working intensively as soon as they decide to participate (Lehikoinen & Töyrylä 2013 p.99–100).

Preparing a proposal requires extensive internal collaboration across various areas of the organization. The proposal team includes experts who define the service being offered and calculate its costs. The sales department focuses on pricing the services and assessing their profitability, while the finance department verifies the calculations (Lehikoinen & Töyrylä 2013 p.99–100).

The proposal should be finalized at least a few days before the deadline set by the client. This allows the remaining time to be used for internal reviews and refinements to ensure the submission is accurate and polished. (Lehikoinen & Töyrylä 2013 p.99–100).

#### **5.1.10 Analysing the offers**

The procuring company must be prepared and ready to analyze bids as the deadline approaches. It's essential to review the proposals impartially and thoroughly, ideally involving several people in the process. The quality of bids often varies significantly within a tender: some providers' proposals align closely with the company's needs, while others may struggle to meet the requirements outlined in the request for proposal (Lehikoinen & Töyrylä 2013 p.106–107).

The procurement team selects the most promising candidates from the submissions and proceeds to the negotiation phase with them. If the RFP is divided into smaller sections, negotiations can continue with multiple providers to find the best fit for each area. However, this approach can create challenges and extra work in managing the supplier environment due to excessive fragmentation, increasing the risk of unclear responsibilities among the different providers. (Lehikoinen & Töyrylä 2013 p.102–104).

Once negotiations conclude, the contract is finalized. At this stage, the content should already be agreed upon, so the focus is on formalizing the agreement. The contract should include everything specified in the RFP and the bid, as well as any adjustments or changes made during negotiations. Contracts are usually based on templates from either the procuring company or the service provider but using the procuring company's template is generally recommended. (Lehikoinen & Töyrylä 2013 p.106–107).

## **6 Tendering process in case company**

Here is written everything done in closed tendering for a 3PL service provider. Actively taking part in the tendering process helps to identify possible development needs and to see the big picture of the case company's tendering process.

### **6.1 Reasons, objective & targets**

Company X policy is to tender suppliers at least every 2-3 years, preferably two. Originally co-operation with current logistic service provider started in 2021 with an estimated need of logistics services. Since then, the number of pallets moving by this service provider has doubled which indicates that a new price should be discussed. In addition, Company X is starting its emission reporting this year and customers have been asking for the company's emission report in increasing amounts. If you add here inflation rates from past few years, there is no doubt that the service should be tendered, focusing on sustainable and cost savings goals.

As Achahchah mentioned in chapter 2.1. that key variables in transportation are cost and transit time also company X's targets for tendering were to find the best suitable logistics service provider, focusing on cost savings, sustainability and overall quality. There wasn't a ready-made process chart of the company's tendering processes, so every step was discussed between Supply chain manager and me, what we would like to know of the possible suppliers and what to tell them to achieve best outcome of the tendering.

First step after determinizing the need and goal for tendering was to get familiar with company purchasing standard and code of conduct, to stay in line with company policies in the tendering.

### **6.2 Preparing for tendering**

Firstly, we decided the schedule for this tendering, as the reasons, objectives and targets were established earlier and where not necessary to go through separately. On Tuesday 23.11.2024 we agreed to book for the first meeting to narrow down the possible suppliers, to look what we should ask through RFI and to narrow down the service providers we want to take further into the tendering process.

Research for possible service providers was done by searching for them from desktop search, in addition to knowledge of supply chain manager and me. Minimum criteria were that they must provide temperature-controlled logistics services, which was confirmed online or based on knowledge. Also, their reputation should be reasonably good as what google shows. This tendering is for a need and services from this field have been sourced before also, which justified for us to not waste more time in finding for potential upcoming businesses, new entrepreneurs in this field might be too risky to start off with, as it would make uncertainty in the supply chain. All the companies except one was well known for us and Company X had done business with them in the past. This one company was new for both of us and there were great websites to the company saying that they offer temperature-controlled logistics services in Finland, so it was added to the list of tendered companies.

We also agreed on rough schedule for the tendering as it was during Christmas holidays and new year, we decided to be more flexible for ourselves. Benton (2020, p.166) pointed out that “the time spent on selecting a supplier is tied to the procurement importance” and therefore this is not scheduled too strictly or made priority one for company X.

RFI sent out	25.11.	+/-2 days
Answers for RFI	2.12.	within 1 week
Analyzing RFI	3.-4.12	+/-1 day
NDA	4.12.	+/- 2days
Making RFQ	1.-4.12.	+/- 2days
RFQ/RFP out	4.12.	+/-3 days
Response to RFQ/RFP	20.12.	two weeks
Analyzing RFQ's / RFP's	21.-2.1.	before newyears
Round two for RFQ	2.1.-10.1.	1 week
Analyzing round two	13.1.	+/- 2 days
Decision making	13.1.	+/- 2 days
Contracting	15.1.	+/- 2 days

Table 2. Tendering schedule

### 6.3 RFI

On appendix 9. we can see that the questions on the RFI were all open ended to gather data from chosen companies as what they are doing or how they are doing, in addition, we are not giving too much information for them beforehand. By not giving too much information of the logistics

volumes in this stage, we can see how interested the tendered companies are by their answers to our RFI, as Lehtikoinen & Töyrylä suggested in chapter 6.1. 1..

RFI questions were formed to give us opportunity to narrow down the companies before asking for pricing or proposal. First two questions with three sub-questions are formed to make sure that they are offering the service to wanted end customer, in wanted delivery dates and are familiar with the customer.

Question three to five gives the companies possibility to give us statements of their future, as was found in Marchet et al. (2016) study "Assessing efficiency and innovation in the 3PL industry: an empirical analysis" 3PL industry is facing issues with growing and standing out of their competitors.

As seen on Table 1. companies were given one week time to answer to the RFI as the value of this tendering for company X is not remarkable and as mentioned earlier the questions should be rather easy for the answerer.

#### **6.4 RFI response & NDA**

From six sent RFI's we received five answers, as seen on Table 2., these five were taken under investigation. As seen on Table 1. only company 5 doesn't deliver on needed five days a week, so therefore they were informed about the issue and dropped from the tendering process. Most companies mentioned multiple services that they provide in addition to logistics services. Also, one of the questions about actions towards cost efficiency had little bit of variation, but one company clearly had effort in this and stood out positively.

After reviewing these answers seen on Table 1. we decided to move forward with everyone else except company 5, as they didn't currently drive to the end customers on other than two days a week. Moving forward with the rest of the companies, we had to sign a non-disclosure-agreement with the representatives, as we would be sharing confidential information in the next phase.

Company	Company 2	Company 1	Company 3	Company 4	Company 5
<b>Answered to RFI</b>	Yes	Yes	Yes	Yes	Yes
<b>Services provided</b>	Temperature controlled logistics services & warehousing	Temperature controlled logistics services, warehousing & picking services	Logistics services for foodstuff with fleet of 150 and staff around 350	Logistics services, customer service, EDI-services & routing services	Warehousing & logistics services in frozen, chilled and warm temperatures
<b>Has operated with wanted Company</b>	Yes, Chilled & Frozen goods	Yes, Chilled & Frozen goods	Yes	Yes, for multiple customers	Yes
<b>Type of business</b>	Delivering goods to asked customer	Delivering goods to asked customer	Cooperation with wanted company	Foodstuff delivery	Delivering foodstuff to wanted customer
<b>Delivery dates</b>	Sunday-Friday	Monday-Saturday	Monday-Sunday	Monday-Sunday	Wednesday & Friday
<b>Certificates</b>	ISO 9001 & ISO 14001	No, possibly in Q3/2025 FSC22000	ISO 9001 & ISO 14001	ISO 9001 & ISO 14001 & ISO 45001, certified by third party	FSC22000
<b>5- or 10- year plan about sustainability</b>	In line with EU's environmental goals, fleet has been up to European standard VI for past 10 years	Internal sustainability agenda	Zero emission by 2030	Not specified	Company is dedicated to sustainability; fleet is Euro VI standard
<b>Emission calculations</b>	Yes	Yes	Yes	Yes	Yes
<b>Actions to be cost-efficient</b>	Collecting data with ERP & TMS to have good fill rates, routes & fuel usage. Proactive work with delivery scheduling	Logical routing with 2-temperated cars	Staff training, driving behavior training, Modern fleet, using data & minimizing empty driving	Best practices, widest delivery coverage, best expertise & working systematically to achieve common goal	Route optimizing, driving behavior training, modern and serviced fleet, cost control

Table 3. RFI answers

## **6.5 RFP & RFQ**

The logistics process being tendered is not a new process so therefore we decided to merge request for proposal with request for quotation. Appendix 2. shows information provided to the companies we moved to this stage with. We wanted to give them as specific information as possible, but not to narrow down their pricing proposals. The product of the logistics service has a lot of seasonality as can be seen on appendix 2.

As Achahchah (2019) suggests, we should provide accurate data for the companies. The data seen on appendix 2. is from last 12 months as there was not a big change in sales forecast for upcoming year. Other relevant information such as weight and stacking pallets on top of each other were given to the companies so they could estimate the logistics costs more precisely.

We included also an example of logistics frequency for the end customers warehouses, this way the customer could give us insight if they would like to change the process or stay with it. Other specific information was term of delivery and payment condition.

## **6.6 Answers for request for quotation**

Here I go through the gotten quotations from tendered companies by every round. It is common that gotten quotations raise questions from tendering companies as happened here also.

### **6.6.1 First round of offers**

Tendered companies were given two weeks to answer with their proposal. Only company 4 did not respond by deadline, so I emailed them if they needed more time. Company 4 answered that the volumes for the wanted service were too low for them and decided not to participate.

Company 3 provided insights of their process which wasn't the same as we proposed as seen on appendix 5. Company 3's suggestion differs as they would be picking up the pallets during the same day to two of the three end customer warehouses and they also provided prices for deliveries on bank holidays. The form of the RFP is clear and includes everything we needed; it really leaves no questions for us. All warehouses have their own prices depending on destination,

which indicates that the prices are calculated more precisely. Company 3 also had a fee for waiting in loading or unloading stages of the service, which were new for us and had to be taken under investigation. What comes to company 3's pricing it is heavily relying on volumes as seen on appendix 2.

In appendix 7. we can see Company 1's offer. As there was no suggestion of doing things differently than proposed we can assume that we are working the way we firstly suggested. The pricing is clear and shared to two columns, two locations for same price and one on its own. On the right side of the offer, we can see all the small additions to the pricing, such as tax, fuel surcharge fee, payment terms and penalty interest.

In appendix 8. is company 2's prices. They didn't provide any suggestions either for given way of working. The pricing differs slightly as they gave dynamic pricing for different volumes. Company 2's prices included pallet returns, and their only additional fees were tax and fuel surcharges fee.

### 6.6.2 Analysing the answers

To get a better understanding of the pricing, I had to open them up with the volumes used in the RFQ phase. I had to calculate the pricing to include the additional fuel surcharge which differed quite a lot from company to company. On table 3. you can see the estimated cost by using the gotten prices by multiplying order times by volumes and by delivery price and fuel surcharge.

	Company 1	Company 2	Company 3	Old pricing
Cumulative pricing with given volumes	75 024,72 €	47 949,33 €	62 668,78 €	187 388,97 €
Fuel surcharge (included in price)	14,00 %	1,14 %	16,62 %	
Sustainability	Good	Worst	Best	

Table 4. Cumulative pricing with given volumes.

The prices differ a lot more than expected, even sustainability wise, when looking the information gathered from RFI's, so as normally in tendering we had to ask if there was any room for negotiation on the price.

### 6.6.3 Requesting new prices

Second round of tendering was conducted by asking for possibility to see if there was any room in some price ranges. As you can see from appendix 10. the order quantity is usually around 4-5 pallets, so we focused on that range. Also, for company 3 there was some questions regarding their fees in chance of a delay at loading or unloading, which was new to us as stated earlier. Companies were given one week time to answer questions and see if there was any room to negotiate. Two companies didn't low their prices nearly at all, but company 1 had a bigger decrease as you can see in table 4.

	Company 1	Company 2	Company 3	Old pricing
Cumulative pricing with given volumes	65 656,31 €	47 449,33 €	62 200,86 €	187 388,97 €
Fuel surcharge (included in price)	1,23 %	1,14 %	16,62 %	
Decrease in price	15,2 %	1,0 %	2,7 %	

Table 5. Second round of prices

After the second round we had a meeting to discuss the offers, and it was quite clear that company 2 had the best offer by 28%. Fuel surcharges bring company 3's price quite far from company 2 also.

After reviewing the offers and contacting company one about not continuing business, company 1 asked 24 hours to review their numbers one more time as we were calling them about not continuing with them anymore, we decided to give them one more day as they were the current service provider, and we were rather happy with the service.

Their last offer can be seen on appendix 1. the drop was quite a lot even from the second price. After this offer the gap between service providers prices was smaller and decision of who to do business with not as clear. New total cost of service can be seen on table 5.

	Company 1	Company 2	Company 3	Old pricing
Cumulative pricing with given volumes	53 743,25 €	47 449,33 €	62 200,86 €	187 388,97 €
Fuel surcharge (included in price)	1,23 %	1,14 %	16,62 %	
Decrease in price	18,1 %	0,0 %	0,0 %	

Table 6. Prices after 3rd round.

## 6.7 Choosing the best alternative

If we would only look at price it would be quite clear to go with company 2 as they are still over 10% cheaper than the second cheapest, but when considering other factors such as sustainability it would be smarter to go with company 1 or company 2 as they had more drivers in the field of sustainability as seen on table 2. Adding another factor to choosing the supplier we haven't had any major issues with company 1 as they are the current service providers. Changing service provider always has small risks such as customer service quality and response time during issues. After negotiating with Supply Chain Manager, we decided to continue with the current service provider as it would be the easiest move, and both are familiar with each other's companies.

## 6.8 Contracting and starting the business

This part was rather easy as we just continued with the current service provider. The risks were minimized and there was no change needed, other than signing new contract for the next 12 months. Contracting was made by a third-party contractor as e-contracting and we went with the supplier's form but added our code of conduct and supplier code.

## 7 Development proposal

Now that I have taken part in case company's logistics tendering, I can give qualitative proposals to develop parts of it. As Bergman & Lundberg (2013) mentioned in chapter 4.2 the scoring rules and supplier evaluation are often poorly designed, this was no exception. Executing a tendering, price doesn't have to be 100% of the valuation, but closer to 50-90%, depending on other factors. Companies main goal is to grow or generate wealth to its stakeholders, therefore price should have major weight, but as years go by sustainability and emissions gather more space in evaluation process.

### 7.1 Evaluating tendered companies

As we can say from theoretical basis, selecting a supplier is not easy and shouldn't be overlooked. You have multiple things to consider such as, time tied to procurement importance, evolving supplier criteria, not having single best way to evaluate suppliers and strategically aligned supplier to mention few. Therefore, case company' should include an evaluation matric in the process, to clear the structure of evaluating.

As Barmuta et al., (2022) mentioned, using clear evaluation matrix makes tendering a lot easier. Something like that should be adopted here to save time, to make easier decisions and in best case scenario to duplicate in procurement team. By comparing gotten quotations and information and using a simple valuation matrix, it would be rather easy to see how different companies compare to each other in the tendering process. This would also mean that the goal posts cannot be moved after agreeing on the evaluation matrix for tendering beforehand.

#### 7.1.1 Cost savings

Cost savings were the number one priority for this tendering case, which aligns well with the argument from Desmuhk & Chaudlkari (2011, p.283) it being the most used metric. During the case company's phase of evaluating offers from possible logistics service providers the offers were well opened so we could see the total cost of ownership and compare the prices to each other, as seen on table 4. These prices could be evaluated on criteria 4-10, where depending on the price range 10 could be the cheapest and every 10% increase in TCO would drop the rating by one. Table 7. shows an example of this.

	TCO	Difference	Grade
Company 1	145 000,00 €	Cheapest	10
Company 2	230 000,00 €	59 %	4
Company 3	175 000,00 €	21 %	8
Company 4	215 000,00 €	48 %	5

Table 7. TCO matrix example

### 7.1.2 Sustainability

As Merchel et al. (2017) points out third party logistics industries are having difficulties with growing and standing out from their competitors, on the contrary seen on table 3. one company stood out from others with their net zero emission goal by 2030. Lieb and Lieb (2010) brought up issue that tendered companies have as they are asked for a competitive price, but also sustainable actions, so slightly bigger price should be compensated by sustainable actions. As Inkinen and Hämäläinen found out in their study that EV-trucks total cost of ownership is almost 8% higher than a diesel truck, of course we must remember that in this tender case, there were no claims to use EV-trucks or zero emission vehicles for our deliveries, but actions towards the zero emission should be evaluated besides the pricing. There wasn't any clear way to evaluate the sustainability of the companies during the tendering process, so therefore it should be included better next time.

Therefore, I suggest that amount of zero emission vehicles should be used as an evaluation matrix for the companies. Most zero emission vehicles owning companies gets 10 and points dropped as number of vehicles drop. Example calculations seen on table 8. Amount of fleet probably grows as zero emission goals gets closer, so the grading system should adapt to the change.

	Amount of zero emission vehicles	Grade
Company 1	6	10
Company 2	3	7
Company 3	0	4
Company 4	2	6

Table 8. Sustainability grading example

### 7.1.3 Financial stability

Benton (2020, p.168) stated that financial stability is considered as an important characteristic to use in supplier evaluation. This was not so clearly a criterion used in this tendering. Collaborating with a company that might not be around after few years might not be good thing for secure supply chain. If the company isn't profitable there could be other reasons for it such as larger investments in fleet or warehousing, when talking of logistics services, otherwise I would think twice before doing business with them. When evaluating profitable or not it is not a vital criterion so a point for being profitable and zero for not benefiting works fine.

	Profitable or not	Grade
Company 1	Yes	1
Company 2	Yes	1
Company 3	No	0
Company 4	Yes	1

Table 9. Financial stability

### 7.1.4 Turnover

What comes to tendering companies purchasing power and service providers turnover, it has it good and bad sides. As Lehtikoinen & Töyrylä stated, one must select a service provider that can answer to your needs but also keeps you as an important and meaningful client, therefore you must investigate the company's turnover and contrast it to your buying power. Evaluating again with scale from 4-10, this isn't as easy to evaluate as you have multiple variables, but estimating the capability and importance by turnover is the best guess. Example calculations on table 10. where the buying power is calculated based on percentage of the company's' turnover.

	Turnover	Buying power	Grade
Company 1	21 000 000	6 %	9
Company 2	27 000 000	4 %	10
Company 3	63 000 000	2 %	7
Company 4	7 000 000	17 %	5

Table 10. Buying power example grades

### 7.1.5 Risk assessment

As Benton (2020) stated supplier should be evaluated on their capabilities in the future and not so much by their past performance. Unfortunately, it isn't that easy to see how different companies perform by not being their client. New supplier has always its own risks and if the change is about bad performance from a supplier you might happily pay more to have more secure supply chain, therefore evaluating this depends on various metrics, but is an important part to consider during supplier evaluation. For example, if the current supplier has performed well, but you would like to check the pricing through tendering you might take this into account as done in table 11.

	Current service provider
Company 1	0
Company 2	0
Company 3	1
Company 4	0

Table 11. Risk evaluation

### 7.1.6 Example calculations

Now to bring all these examples together we can give them a weight which still gives the final grading some weight. On table 12. you can see that slightly more expensive would-be company 1, but they are a lot more sustainable, by changing the weight of cost to more sustainable they would be the winner, but after all company 3 should be chosen by this example.

Weight of the question		15 %	15 %	60 %	10 %	100 %
Company name	Total	Number of zero emission vehicles	Profitable	Total cost of ownership	Turnover	Current service provider
Company 1	6,75	10	1	7	9	0
Company 2	4,6	7	1	4	10	0
Company 3	7,1	4	0	8	7	1
Company 4	4,55	6	1	5	5	0

Table 12. Evaluation matrix

As there is not one correct way to do this and these should stay easily changeable based on tendered process or service, this would be something that agreeing on beforehand and adjusting it with current company strategy would make evaluating tendered companies a lot clearer.

## 8 Discussion

Objective of the thesis was to improve the sourcing process for a 3-PL service provider. Being able to fully understand the whole process internally and the tendered process requires profound knowledge of the company's procedures, products and supplier relationships. Data to support the need for tendering based on two years of sales data gave a good base for the need and the last year's sales data was used to provide tendered companies with volumes for the offers. I began working at the case company on March 16, 2024, so I had plenty of time to gather a good knowledge of the case company and its procedures regarding logistics solutions. Former work experience supported my knowledge of 3-PL operations in addition to former studies. The topic of the thesis was relevant to case company as the need for tendering and case company wasn't too invested in the process as it wasn't that big of a cost.

During the tendering I focused on any case company's processes that I could learn and develop, but what made it rather challenging was that there weren't any strict processes for logistics tendering and therefore the development could have expanded too much, but I chose to focus on the evaluation. Process chart for intangible procurement would bring good structure for tendering as these are not made by procurement team but every team has their own responsibility for tendering, such as marketing agencies. Positively there wasn't too strict schedule, and we had possibility to adapt to it, on the other hand sometimes it would have needed some strict scheduling to not slip from the process. By the end of the tendering, knowing how the whole process goes from selecting possible suppliers to contracting gave me the opportunity to analyze where things could have been done better. The proposed development idea is valid and brings structure to case companies' tendering evaluations.

Second research question was about what type of criteria case company should use when tendering for a logistics service provider. The example calculations show good options for evaluation criteria, but as there is not one right way to select the criteria it should be adapted when necessary, depending on what the tenderer is looking for. As the sustainability becomes more vital, should the weight be adapted. If case company would get more detailed boundaries from group level it would also clarify what should be looked in tendering besides costs.

Thirdly how important should sustainability be for the case company. There is not one right answer for this as the importance of sustainability increases year after year. It is good to see that it is included, and it should be. Case company's sustainability goal is in line with European Union's goal for climate neutrality and showing interest in this shows suppliers that what is the direction big companies are going in, and it raises suppliers' interests in sustainability.

Used research method was action research which includes research and development parts therefore it was good choice for the thesis. Research included taking part in the tendering and theoretical basis and development was conducting a proposal for evaluating the tendered companies. Study method was practical for the research and gave the possibility to understand the processes more deeply and therefore was a good pick.

The reliability of the study is supported by clearly documented analysis process. Being aware of my role as a researcher, I aimed to critically examine my own assumptions, even though they would've conflicted with the results. Ethical principles were followed throughout the research, written consent was obtained from the participants, and their anonymity was ensured throughout the entire process. The data was stored in company computer and schools cloud computing. Reliability of the study is affected by being first research for me and I would do some planning more precisely next time. The work followed good scientific practice and took ethical aspects into account. Information was not plagiarized or copied in the work. The sources were marked in accordance with JAMK's reporting guidelines.

Thesis gives case company good starting point to develop evaluation criteria for intangible procurement which subcategory logistics services are. Case company should have a common criterion what things should be evaluated, but not to narrow the "how" -part too strictly to give room for different ways depending on tendered service. Evaluation criteria should be taken seriously in the future as bigger companies often show the way when it comes to sustainability or development.

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## **Appendices**

**Appendix 1. Prices 2 Company 1 (confidential)**

**Appendix 2. Prices 2 company 2 (confidential)**

**Appendix 3. Prices 2 company 3 (confidential)**

**Appendix 4. Prices 3 company 3 (confidential)**

**Appendix 5. RFP Company 3 (confidential)**

**Appendix 6. Prices company 3 (confidential)**

**Appendix 7. Prices 1 Company 1 (confidential)**

**Appendix 8. Prices Company 2 (confidential)**

**Appendix 9. Request for information (confidential)**

**Appendix 10. Request for quotation (confidential)**

**Appendix 11. Case company Code of conduct (confidential)**