



Purchasing within Food Truck Business

Stephan Esselbach

DEGREE THESIS	
Arcada	
Degree Programme:	International Business - Logistics
Identification number:	8214
Author:	Stephan Esselbach
Title:	Purchasing within food truck business.
Supervisor (Arcada):	Robert Henriksson
Commissioned by:	
<p>Abstract:</p> <p>Purchasing is with the greatest expense in the mobile restaurant industry. The food truck business model is cost driven and very sensitive for any disruptions. Since purchasing stands for a significant part of the expenses, it is desirable to minimize the overall costs and associated effort for them. The aim with this thesis is to show how food truck companies handle their purchasing processes and supplier selection. This study has been taking into account arguments and theories within supply chain management, supplier dependency and cost reduction. Very little literature and research has been performed within the food truck industry. The empirical part of this thesis was conducted as quantitative research, by interviewing four different companies. Interviews were held in person or via video-conferences. The results show that each company has different ways to plan and process their purchases, as well as selecting suppliers. Greatest differences were shown within the purchasing processes itself, where opportunities for improvement were discovered. The study shows that most mobile restaurant companies use little or none documentation to analyse and optimize their purchasing processes and I would recommend for further investigation to extend the study's scope.</p>	
Keywords:	Procurement, purchasing process, supply chain, food truck, mobile restaurant, supplier, requirements,
Number of pages:	53
Language:	English
Date of acceptance:	

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1 INTRODUCTION

Food Truck Industry

The idea of serving warm food outside a traditional restaurant on wheels is not new at all. Especially in Asia and the US, selling prepared meals from push carts has been existing for hundreds of years. Already in the late 17th century, the City of New York started to set up the first regulations for street food vendors due to their growing amount. In 1866 Charles Goodnight invented, what can be called the first food truck today. He converted an army horse wagon into a portable kitchen including all needed equipment. Goodnight became after the civil-war a cattle drover and needed on his long routes a place to properly serve meals for him and his helpers. (Myrick n.d.) With the development of the first auto mobile vehicles the industry began to advance further. Armies recognized the potential and effectiveness of being able to provide their soldiers food at different places and developed in the early 20th century the so-called field kitchens. (Myrick n.d.) The boom of serving mobile food among civilians came back in the 1950's with the invention of the Ice-cream truck. About 30 years later, the first Ice-cream trucks were converted to food trucks but gained a negative image due to lacking health regulations. Back then the term "roach coach" came up. Today, the food truck business is operating within strict health regulations and has earned back a positive image. (National Geographic 2021)

A food-truck is a fully mobile restaurant without seating areas, and therefore also equipped as one. Machines, electricity and gas supply, truck leases, restaurant and selling permits, health certifications, insurances, location leases, gasoline, labor and maintenance, as well as groceries, are just some of the main costs. With the food truck industry growing globally, according to Eurostat, to a revenue from 2011 to 2019 with over UDS 1.346 million to USD 5.118 million in Finland (Restaurants and mobile food service activities in Finland) (Sánchez García 2021) and Sweden with over USD 3.220 million to USD 11.960 million, (Sánchez García 2021) we can clearly see here a trend.

Also, other Nordic countries show growth in that sector:

- Denmark with + USD 1.073 million to USD 4.266 million and (Sánchez García 2021)
- Norway with + USD 469 million to USD 4.553 million (Sánchez García 2021)

It is visible that food trucks are helping to push the growth of this traditional sector. The resurrection of the branch has sloshed over from the US to Europe, where entrepreneurs with a great idea cannot afford to open up a restaurant in the first place. This industry relies on the reinvention of the original concept. The times that trucks served only over-priced hot-dogs and french-fries, are gone. Many serve high quality or even gourmet-food to go. Which shifts the focus for food-truck-entrepreneurs now more than ever towards the profitability of their business. In the US has the growth been the biggest and developed into an industry that was in 2014 already over USD 828 million worth.

1.1 Problem description

Running a food truck seems to be simple but turns fast out to be very complex. Having fewer initial costs, and a small budget, opening a van instead of a restaurant are for many entrepreneurs the key factor to start. Therefore, it is very important to plan and calculate your exact costs and to constantly follow them up. If this is not done properly it will create financial issues that might not be visible at first but will be when its already too late. The importance of accurate planning is essential, since the business is mobile and therefore very sensitive to any disruptions. If anything happens the truck might not be able to open and loses at least one day of sales.

For mobile businesses, purchasing is only one, but a big part of effectively reducing costs. What this investigation shows is, how food truck businesses should properly plan their procurement based on experiences, statistics and the area they are selling in. Most potential sales spots for food trucks are festivals and happenings. The Flow festival in Helsinki is good example. The festival had in 2019 40 mobile food vendors and over 20 bars.

1.2 Aim of the study

The aim of this study is to perform research about the purchasing habits and supplier selection within Food Truck business.

The study looks for answers to the following questions:

- How does the purchasing process look like?
- Based on what criteria are the suppliers selected?
- Are the suppliers categorized in any way?

1.3 Requirements

The food truck industry in Finland falls under the restaurant law and is well regulated. It needs to follow several requirements. Those include selling permits, restaurant permits and passing the health restrictions. The requirements do not vary much from those for stationary businesses, further are they seen as slightly more strictly because the mobile van or trailer has to apply to restaurant specifications.

1.4 Demarcation

This study is going to focus on the food truck businesses purchasing process, the supplier criteria, governmental requirements and the aspects of them studied. Food truck companies do not only purchase food and beverage items but a great number of various products. The author has personal experiences within the purchase in this industry which helps within analyzing and discussing the gathered information. The author of this thesis will focus on the key elements within the purchasing process and the governmental requirements.

1.5 Relevance

This thesis work has relevance for mobile businesses that move between different selling spots. The motivation for choosing this theme is the assignment of the client “Berlin Döner” in combination with a knowledge-gap in Europe. The food-truck-business is much

further developed in the US than in northern Europe, there exists a lack of experience here, which offers lots of room for improvement in this branch.

1.6 Thesis structure

In this chapter we briefly describe the structure of the Thesis. Naturally the first chapter is the Introduction where background, scope, presentation of the client and most interestingly the aim of the study as well as the problem description. The Introduction chapter tells the reader what to expect from the Thesis overall.

Theory is the second chapter and it is based on literature broadening the readers perspective of the purchasing process and supplier selection. We are taking a deep dive into the requirements of food truck business in the Finnish market, given by the state. These are vital for companies to be able to operate in the Finnish market according to all needed permissions.

The third chapter is Method where we take a closer look of how the qualitative research will be conducted. This includes also the description of the analysis of the results and the tools that we are going to use.

The found results are presented in the fourth chapter. Those involve the results produced by the interview conducted and its presentation of the different statements. The results will be discussed in the fifth chapter and we finish the thesis with the Conclusion chapter.

1.7 Presentation of the client

Berlin Döner or „Original Berlin Döner Kebab Oy“ is a company which started to sell Berlin-style Kebab in Helsinki, Sörnäinen in a food truck. The founders are from Germany and have been living for over 10 years in Finland. Since 2019 they have been operating a digital agency for online marketing and market research. But during their time here they kept on missing the Berlin-style kebab badly. By the end of summer 2020 the decision was made to give that concept a chance, further, to try if it works during the worst possible time of the year. The official start was in November 2020.

Berlin Döner has at the moment (February 2021) five employees, including the two founders and three workers. The office is located in Orioninkatu 4 in Helsinki and the food-wagon is positioned in the heart of Helsinki, Kallio, at Vaasanpuistikko. The company is planning on to expand further during the spring and the summer, also to other cities inside Finland. Their vision is it to bring Berlin-Döner to every bigger city in Finland. Those would include for the beginning the areas around Tampere, Turku and Lahti. Therefore, the company is now in need of consideration how to improve the procurement process and supplier selection to remain profitable.

In this thesis, Berlin Döner observes the general planning of food truck business, since costs are the greatest factor, purchasing is an important part of planning. This research would like to understand better how food trucks are planning their purchases and what impact the decision on the planning has on the profitability. This thesis research will observe and interview other food truck businesses from the capital area of Finland.

2 THEORY

2.1 Definition of purchasing

As purchasing can be described all processes necessary to exchange goods between a company and its suppliers. It can be seen as a structure that organizes the activities needed to buy materials and services. A purchaser has as its main responsibility to buy the right product to the right quality at the right time in the right amount to the right price. (Storhaugen 2003, P.74)

Within purchasing exist short and long-term approaches. Short-term approaches are usually transactional and used to purchase regularly used goods. Long-term approaches are of greater quantity and will influence the company's future business. (Badenhorst-Weiss, Cilliers, Dlamini, Ambe 2018, C.1.1.1) Those can be e.g. long-term contacts or very expensive machinery and need therefore to be thought through well.

Purchasing has grown to a central, strategic function inside most organizations. This group has to deliver maximum value to the company. (Jonsen, Howard, Miemczyk P.42)

During the last decades purchasing has become a much broader and complex concept and should therefore be seen as procurement. Procurement is the modern way of buying, seeing purchasing as an element of supply chain management. (Badenhorst-Weiss, Cilliers, Dlamini, Ambe 2018, C.1.1.1)

2.1.1 Purchasing process

According to UKEssays, the purchasing process varies if the company requires a totally new product or service (**new task**), or if earlier supplied goods are reordered (**straight** or **modified rebuy**). The most common one in the food truck industry is the modified rebuy in terms of quantity adjustment.

A **new task**, is an order that is placed for the first time at a new supplier. Those orders can be more time consuming because the buyer has no earlier experience of the product or the supplier and needs to conduct full research.

The **straight rebuy** is a recurring order that is placed without changing any modifications or the supplier. A straight rebuy is most beneficial for the supplier because it is fully predictable and plannable. The customer expectation at straight rebuys is usually very high because the customer knows exactly what he wants, has done the research earlier and therefore likes to minimize the effort that has to put into placing an order. Those type of customers can be considered loyal customers.

Modified rebuys are reorders with adjustments. Those adjustments can be regarding the quality, amount, price, customer service, or delivery etc. A modified reorder can be also a change of supplier.

According to Johnsen, Howard and Miemczyk, there are six major steps in a purchasing process, the author added based on experience budget approval and order monitoring as two extra steps:

1. **Determination of needs.** In this step the company tries to find out how much of a certain product does it actually need.

If the company requires a new product, it would start with the identification of requirement. It would first need to recognize that there is a certain need for this product. Then the exact specifics need to be decided on. Afterwards starts the sourcing where possible vendors will be checked and product samples tested.

2. **Inventory control.** Storage staff or the responsible person checks if the company has any of the required product left and how long that will last and how much the company would need to order. Based on those information's an order amount and the associated costs can be calculated.
3. **Budget approval.** Before anything can be ordered it is of importance to get the budget approval or to check if the company has enough resources to be able to purchase the required goods. If resources are not sufficient enough the order should be put on hold or scaled down.
4. **Supplier Selection.** Also in the food truck business are many suppliers available to source products from. The selection should be based on a number of criteria:
 - What and how many goods are needed from a certain supplier?
 - What else is needed from the supplier (delivery option, special opening times, payment terms etc)?
 - How far is the supplier away?

Based on the selected criteria that are important for the company, it will choose the best possible supplier for it. Depending on the amount a food truck company needs, it can decide if it is better for them to buy smaller quantities from the supermarket to a higher price, or greater volumes from a wholesaler, to a lower price.

The latter also plays a role in the food truck company's available storage capacity.

It is in general wise to state that a firm should try to have as few suppliers as possible to keep the expenditure and costs of procurement effort as low as possible.

5. **Order or buy.** In the fifth stage a company does the actual purchasing of the needed goods. To do so, the company signs a contract, visits the wholesaler or places its order via phone, email or website.
6. **Order monitoring.** If goods are delivered or need to be prepared by the supplier before receiving them, it is important to monitor and follow up the order. The reason behind is to control the compliance with delivery times.
7. **Order receiving.** No matter if the goods are delivered or just compiled for pick-up, the goods must be checked upon delivery with the note or invoice. If the quantity or quality is not as ordered, it's the chance to file a complaint and to not accept the order.
8. **Payment processing.** This depends in most cases on the type of payment chosen. When supplying from a wholesaler, the company receives an invoice that needs to be paid on the due date. If an order is placed online or by visiting a physical wholesaler, the goods need to be paid usually direct.
The customer should always be vigilant regarding the payment terms and keep in mind to handle the cash flow well.

2.1.2 Purchasing price

The price is the charge, asked from a supplier, for goods or services. (Bamford, 2013) Purchasing prices of groceries are especially in the food truck business crucial, because they stand for one of the biggest expenses. Further are the goods perishable and therefore often only usable for a short period of time. To avoid losing capital and keeping the costs low, it is necessary to compare prices and quality between different suppliers before making a buying decision. Also, quantity can be an argument when comparing and negotiating prices between different suppliers. Sometime it can be wise using the supplier with a higher price but and the same time being assured that the requested product will always be available in the requested amount at the right time. (Storhagen 2003, p.77)

It should be taken into account that prices for seasonal products can change during the year.

2.1.3 Negotiation power

The negotiation power of a Food Truck operator can be best shown with the help of the Kraljic Matrix. The Kraljic Matrix is a graphical method used to analyze the dependencies for different products or services between the customer and the supplier. The matrix sets the influences on the profit into relation with the risk of purchase. The products are categorized in:

- **Leverage suppliers** – are suppliers that sell products that have a great impact on the business profit and stay for a great part of the total costs but are at the same time widely available. With items in this category there exists room to compare and negotiate with different suppliers.
- **Strategic suppliers** – sell goods that have a very high influence because the business relies on them. At the same time are those products very rare or individual and can often be acquired only from one supplier. Those items are a high risk for the company and their supply should be secured by e.g., forming a partnership with the supplier or by building up a long-lasting stock.
- **Non-critical suppliers** – are suppliers that trade items with a very minor or none influence to the business and its profit. Those products have many providers and are widely available. The classical example here are office supplies or materials like standard screws. Orders for those should be automated or designed to be as effortless as possible.
- **Bottleneck suppliers** – provide goods that have a minor influence to the business but are difficult to supply. The number of suppliers is very few and the procurement should be (as for the strategic items) secured by forming partnerships with the suppliers, or by building up a long-lasting stock. (Laurent 2019)

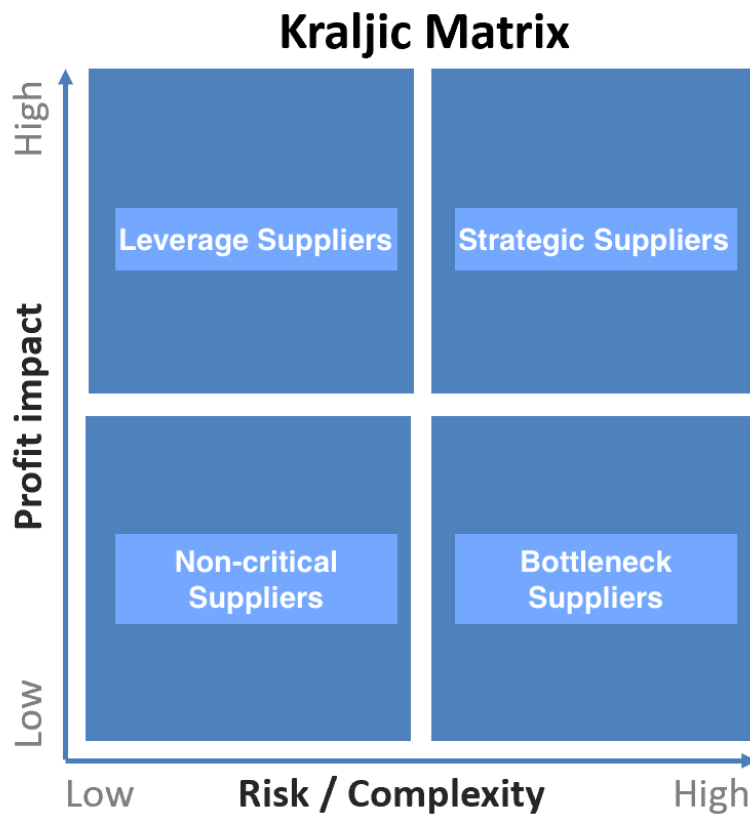


Figure 1: Modified Kraljic Matrix, original from Wikipedia. (7804j 2019)

Most of the suppliers, like wholesalers, inside the food truck business offer food products which have a great impact on the customers profit, but are usually widely available, therefore they can be seen as leverage suppliers. In a Kraljic matrix, the profit impact is influenced by the material costs, the products volume and the quality. The supply risk depends on factors like possible shortages, raw material alternatives, market structures (e.g. monopoly) or thresholds etc., but is quite low for most of the products in the food truck business. (The Kraljic Portfolio Purchasing Model: Assessing Risk and Maximizing Profits n.d.)

Supplying mainly from leverage suppliers means that the logical conclusion for the customer should be to apply a purchasing strategy where the customer is exploiting its purchasing power. The buyer is due to the great amount of suppliers more powerful and has only a medium dependency on them. Because, as mentioned, most needed goods are standard products, which makes it easy to switch between suppliers. The food truck business's negotiation power within leverage suppliers depends also on the amount of goods

purchased. As greater the purchased amounts, as better is usually the position for the customer to negotiate further. If only smaller amounts are purchased, a price and quality comparison between different suppliers is the easiest choice.

2.1.4 Goods cost reduction

As mentioned above is the price of purchasing goods a critical factor. But the price of a product e.g., at the wholesaler market, is just a part of the actual purchasing costs. The costs to actually get the products, how effective they are later on used and also the quality of the products are factors that determine the real price.

The goods cost reduction is the summary of taking the mentioned factors into account and to make a purchase decision subsequently. (Storhagen 2003, p.75)

2.2 Definition of a supplier

A supplier is a company that sells products or services that other companies or people require, often with an added service. (supplier n.d.) The supplier is a part of the supply chain and does not necessarily need to be the manufacturer of the goods. He can be also a distributor or an importer. It can therefore be cheaper to purchase goods direct from the producer instead of a supplier. A supplier is simply responsible for obtaining and offering goods or transporting goods. (Definition: Lieferanten n.d.)

2.2.1 Supplier selection

In order to select the right suppliers, it is needed to have done research regarding the needed goods, their quality and quantity and the available budget. A great start is to create a list of available suppliers, with for the company important criteria, like:

- Price,
- Quality,
- Availability,
- Size of selection,
- Delivery and
- Distance, geographical location. (Jonsen, Howard, Miemczyk 2018)

Based on the available analysis it is easier to evaluate future suppliers and to make a reasonable decision. Evaluating and selecting suppliers can also be called sourcing. Sourcing contains all actions needed to identify the best possible supplier.

A criterion that is of importance in the sourcing process, is the number of suppliers needed. To streamline a company's supply chain and to reduce costs, the number of suppliers involved should be at a minimum. This leads at the same time to less effort in managing supplier relationships but requires an even more extensive selection process.

2.2.2 Order planning

Order planning or also demand planning is the activity to foresee what the company's out will be. The company tries to forecast and schedule how many goods will be needed. In theory, it would be beneficial to purchase the required items in EOQ's (economic order quantities). But that would require a constant demand and equal deliveries. In reality that is not possible. Therefore, are those forecasts based on data that is already available, like pre-orders, historical data and experience. (Patterson, Giunipero, Handfield and Monczka, 2015)

2.2.3 Reorder quantity

The reorder quantity is the product amount ordered or bought from a supplier, to stock up the company's inventory. The total purchase should be in balance with a safety buffer, to avoid, running out of any product too early, and not too large to avoid food waste and tight up capital. The reorder quantity can be calculated with simple formula: Average sold units per day X Average lead time. Having planned the reorder quantity, also the reorder point needs to be set. A reorder point is a pre-defined mark in the stock amount, which lasts until the placed order arrives and is ready to use. The reorder point (ROP) can be calculated with the formula: Demand during lead time + safety stock.

(Lopienski 2020)

2.3 Governmental requirements

The Finish government requires for food trucks similar restrictions as for normal restaurants. According to city of Helsinki, mobile food establishment refers to any movable or temporary point of sale or handling of food, or food equipment (which can be assembled and disassembled and moved to another location), such as a mobile kiosk, sales vehicle or stand. (Outdoor food sales and mobile food premises, 2021)

A new mobile food establishment must be notified to the municipal food control authority. The food control authority will conduct an inspection to the premises in case of regular operation, which means that activities occur more than 12 times per year. In case of regular activities, the operation must be also registered via an electronic online form. Electronic notification of the establishment must be submitted to Environments services' Food Safety unit, no later than four weeks prior to the commencement of operations or a significant change in operations. Sometimes the business operator is be requested to supply further information, if necessary. When the notification has been processed, the Food Safety Unit sends a certificate to the business operator, which is subject to a processing fee, this service is not free of charge. (Outdoor food sales and mobile food premises, 2021) The forms for notification can be found from a web-page of the City of Helsinki.

The processing of a food premises notification includes the registration of the premises' information in a control database maintained by the food control authority and a preliminary risk-assessment of the food premises. The premises are inspected within a time frame based on the risk-assessment and must meet the requirements set for food premises.

In case of planning a service at marketplaces, trade fairs or large public events this must be notified to the Food Safety unit no later than four business days prior to the date of the sales event. Notification of the sales event should be submitted electronically via the city's eServices. (Outdoor food sales and mobile food premises, 2021)

2.3.1 The requirements from the Finnish Food Authority for outdoor food business

The requirements set for the food premises can be found from Finnish Food Authority. There are specific instructions concerning “Ulkomyynti”, businesses that are selling, offering food outdoors. Outdoor food premises cover for example selling of fruits or berries in the halls of shopping centers and movable food premises (food trucks, tents, small kiosks). (Koimäki, 2018)

Outdoor food sales and other similar activities are of nature and purpose generally riskier and more different than similar activities in fixed indoor food premises. In indoor food premises, where the special needs of food handling and sales are important when designing the premises, the management of the possibilities is much easier, the possible temperature control, the washing facilities or cleaning work surfaces. It should be noted, however, that it is the responsibility of the operator, that food safety is properly executed, so he must play a major role in invoking this duty. (Koimäki, 2018)

Any outdoor facility must pay special attention to the conditions of sales, preservation and handling of food. If there are specific risks to the operation, such as the handling of raw fish or other perishable food production, this should be noted accordingly with similar opportunities and management. The main rule is that the more demanding and the riskier the food, that is handled, the stricter the conditions. (Koimäki, 2018)

In principle, all kinds of outdoor sales activities for food handling, preparation, serving, etc. are possible as long as conditions are organized in such a way that the safety of the products for the customer can be ensured. Ultimately, the Food Authority will assess whether the operation meets this requirement in the circumstances. (Koimäki, 2018)

More information on the specific requirements for the outdoor food facilities can be found from Finnish Food Authority’s “Ulkomyyntiohje” document. (Koimäki, 2018)

2.3.2 Purchasing restrictions

Global markets allow companies to purchase their groceries worldwide. In fact, many goods that restaurant business use, like fruits, fish and vegetables, come from outside

Finland and even Europe. Importing and Exporting food products within the EU-states, including Norway and Switzerland is trading within the internal market and therefore less restricted. Despite the temperature restrictions that are to follow for each food group, the Food Authority can require other documents like salmonella tests or origin documents. The latter is important to avoid bringing in different diseases from other EU-states into Finland, like the African swine fever. (Topical issues concerning import of food of animal origin, n.d.)

There exist further purchasing restrictions for packaging and food contact materials. Food contact materials are all things that somehow at some point come into contact with foodstuff. That can be everything from kitchen appliances, dishwashers, utensils, bowls, cutlery to disposable lunch boxes and more. Everything that gets on a direct or indirect way into contact with foodstuff cannot emit any harmful or composition changing substances. It is therefore often easier to purchase those products from local suppliers, rather than importing them self. (Food packaging materials and dishes, n.d.)

2.3.3 Transport restrictions

The products are required to arrive in great quality and need therefore to follow temperature and recording restrictions.

If a company has to transport raw or frozen meat products, the delivery car needs to be equipped with an appropriate cooling system, to be able to keep the correct temperatures between -18 and +2 degrees °C. If the transportation lasts for more than two hours, the temperature has to be properly recorded with a corresponding control system.

(Examples of food storage temperatures in restaurants n.d.)

2.3.4 Storing restrictions

When storing products, especially food related items, a great amount of restrictions come ahead. Those restrictions are mainly regarding the temperature, to ensure food safety. Most bacteria and microbes spread fast between +20 to +40 degrees °C. Therefore, it is important to control and monitor the temperatures, in storage facilities, such as storage rooms, fridges, freezers and warming areas. (Controlling temperature n.d.)

The Finnish Food Authority has therefore set temperature limits for different food categories and conditions.

- Food that needs to be stored cooled, for example in a fridge should be stored at temperatures not over +6 degrees °C.
- Food that needs to be stored frozen should be stored at least at temperatures of -18 degrees °C, while a short-term deviation of up to -15°C is still acceptable.
- Warm food that has to be stored, should not decrease to a temperature below +5 degrees °C. The optimal temperature is +60 degrees °C.
- Food temperature for easily perishable good like raw fish (e.g. Sushi) should be stored under +6 degrees °C and then served at no warmer than max. +12 degrees °C.

Easy perishable food products that are stored outside those temperature ranges run the risk of spoiling quickly or causing food poisoning when consumed.

(Controlling temperature n.d.)

2.4 Definition of a Supply Chain

Supply chains are constellations of at least three directly connected companies. Each organization exchanges information and/or goods, up and downstream. Those interrelated actions are created whenever a transaction between those companies is made.

(Monczka, Handfield, Giunipero, Patterson 2015)

2.4.1 Supply Chain Management

Supply chain management is the strategic alignment and synchronization that manages all activities including the material and information flows within the chain. It coordinates in a proactive manner the flows of the chain, according to the organization's values. Other aspects of supply chain management include supplier evaluation, new product development and customer fulfillment. (Monczka, Handfield, Giunipero, Patterson 2015)

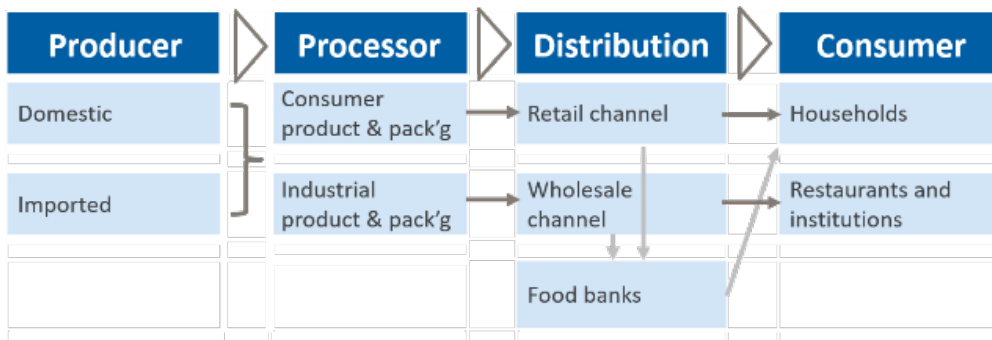


Figure 2: A simplified food supply chain. (New Harbor Consultants 2020)

2.4.2 The six supply chain models

Since businesses are differently structured and each company has other requirements regarding their supply chain and how it works, there exist businesses where a very flexible supply chain model is an advantage and others who can be optimized to the just-in-time principle or to a very low-cost structure.

There are in general six different models, which cover all kinds of industries depending on their supply chain requirements. (Supply Chain Modeling 101! Understanding the Different Types of Supply Chain n.d.)

The different models are:

- **Continuous flow model.** This specific model is used in industries that have a very steady demand and almost none variation in it. The company produces the same product without any customization over and over again and can therefore almost absolutely predict its demand. The advantage in the continuous flow model lies in its possibility to cut costs on your inventory. Because the company knows exactly how much raw materials are always required, it can easily adjust the purchases with e.g. the EOQ-formula. (Boutchard 2021)
- **Fast chain model.** That supply chain model is designed for companies that produce goods with a very short life cycle. Those can be trend-products like finger-spinners were, or today's fast-fashion. The producer has to adjust in short periods the supplies to the goods he manufactures and needs therefore exact sales data to

sell them before the trend or life cycle is over. (Supply Chain Modeling 101! Understanding the Different Types of Supply Chain n.d.)

- **Efficient chain model** is used in markets with very high competition. This model is trimmed down to create as low costs as possible. A company using this model produces goods, which do not differ very much from their competitors and its main advantage therefore, is the price. One example can be budget delivery services such like Postnord. Postnord saves costs e.g. by providing only for some shipments a very simplified tracking system. (Boutchard 2021)
- **Custom configured model.** Is a mix of the continuous flow supply chain model and the agile chain model. It is for manufacturing companies that produce products with a huge amount of possible configurations. This means that the company produces goods, customized individually for each customer. The continuous flow model administrated the ground product before its customization and the agile model finishes the product with the customer's individualization. Great examples are car-manufacturers. They offer a ground model, which can be widely customized by the customer, from color, via interior, electronic extras etc. (Boutchard 2021)
- **Agile chain model** is the best solution for companies who offer customized products on order. That circumstance brings volatility in their market and they have to be able to adapt to the changing demand. The agile chain model is focused on speed, cost efficiency, and productivity, which makes it possible to react fast to the demand changes while meeting the customer's schedule. (Supply Chain Modeling 101! Understanding the Different Types of Supply Chain n.d.)
- **Flexible chain model.** This model is focused on flexibility for a very changeable demand. The difference between the agile chain model is, that flexibility refers to the ability to arrange or plan for unanticipated events, whereas agility means to be able react to unplanned external events. A flexible chain is focused on different scenarios that might happen and keeps for each scenario a planned strategy. This includes storing enough resources for each strategy (like seasonal peaks). (River Logic n.d.)

2.5 Problems within purchasing

The main issues within purchasing are often related to costs. Problems can occur within different areas. Supply chain interruptions are a major issue and can occur under various circumstances. An interruption usually results in the absence, the wrong quality or wrong amount of the requested goods. One solution and issue at the same time, is the right storage capacity. A company should plan its storage facilities according to their needs of certain products in combination with reorder times. Often have suppliers with lower prices also longer lead-times. It is therefore beneficial to find the balance between them. If the supplier is not able to deliver good within certain times, the firm should consider either greater storage capacities or a supplier change. To reduce supply chain interruptions to a minimum, a company should, as mentioned in 2.2.1, choose a supplier carefully. If goods are specifically ordered or produced, all details need to be clarified unambiguously, including capacities and lead-times. Those details and necessary consequences should be stated in a contract, signed by all parties involved. (Ahmed, 2019)

3 METHOD

3.1 Introduction and choice of the method

Empirical research refers to conducting planned observations. Those observations need to be done in a systematic and well-defined and documented process. Empirical research is either based on quantitative or qualitative research methods. (Formplus Blog, n.d.)

The systematic collection of data to gain knowledge will be conducted in this thesis with interviews, which is a type of a qualitative research. This thesis work requires answers to questions, which cannot be answered with quantitative research. The information we want to get regarding the food truck business can be only collected by interviews, as this data is not available from any public sources regarding Finnish food truck industry. Qualitative research is the process of collecting, analyzing, and interpreting non-numerical data, such as language. Qualitative research can be used to understand how an individual subjectively perceives and gives meaning to their social reality. Qualitative data is defined as non-numerical data, such as text, video, photographs or audio recordings. This type of

data can be collected using diary accounts or in-depth interviews, and analyzed using grounded theory or thematic analysis. (McLeod, 2019)

3.2 Procedure of the research

The qualitative research for this thesis, was planned in four steps:

- The first step defines what do we want to observe and why. This indicates the definition of an area, a skill, an object, a feeling etc.
- The second step is to plan whom to observe. This means what people or companies will be our target group.
- Step number three is to plan how to carry out this research. By conducting interviews, using already available data, or sending out surveys?
- The last step answers the question to “When to observe?” (Patten and Galvan, 2019).

As mentioned in Chapter 3.1, the research is conducted via interviews. The interviews were held via email, phone calls or videoconferences. The observing process starts now during summer and continues collecting answers until the end of August, as food truck businesses are not mainly operating during winter. The risk of an interview method is whether to get enough answers from food truck companies or not. Sending more interview requests than required interviews can mitigate risk. The plan is to send interview requests to 10 food truck companies and receive answers from four in minimum.

3.3 Interviews

Within the qualitative research is the interview seen as the most used method, due to its flexibility. Interviews can be held in an unstructured or semi-structured way. (Bryman 2011, 465) The difference between them is that semi-structured interviews are based on determined and selected questions, while unstructured interviews tend to be more open and similar to a conversation. (Bryman and Bell 2011, p.465)

To get a full overview and as many information's as possible about the interviewee, the interviews will be conducted in a semi-structured way. The questions will give the

interview a certain direction and avoid any disremembering of questions. At the same time has the interviewee much leeway in his answering and the interviewer can easily ask follow-up questions. (Bryman 2011, p.467)

The interviews are voice-recorded and in writing. The interviews will be transcribed to be able to analyze and maximize the information output. (Bryman 2011, p.476)

3.4 Participants

Using search engines, online map services and social media services will help to collect the list of expected interview respondents. There is no focus on any certain food-truck type, but rather to get an as broad branch overview as possible. The companies were randomly chosen but they varied in size and duration they have been active in the market.

3.5 Intervention, data analysis

Questions to the interviews (attachment 1) were created by keeping in mind the problem description chapter 1.5. Instruments and tools used for data collection are very much steered by the way the interview is conducted. In this thesis it is assumed that it is easiest to collect the data received into an excel file for further analysis and comparison. The room for improving of planning the purchasing process and selecting suppliers, are to be evaluated. Understanding on do other businesses have different concepts regarding supplier selection and categorizing, is wanted. Excel is a great tool for collecting data, analyzing and for visualizing the data, while the data amount is relatively small like in this survey. The results of the analysis of the interviews will be visible in chapter four.

Possible relationships between planning of the purchasing process, selecting and choosing the right supplier and, their impact on costs and profitability are to be shown. (Bryman 2011)

3.6 Reliability and validity of data

Data is believed to be reliable as if asked the same questions again from same business representatives they would give very similar answers, unless situation has changed from their behalf as time has passed. According to Bryman and Bell reliability is a

measurement that suggests if the study is to be replicated by other researches to which extend the results would be similar. The factor of quality criteria is replication, which suggests if the study can be done again, replicated. (Bryman 2011, p.395)

Validity of a study quantifies if the research measures what it is supposed to. Furthermore, it also indicates the value of the material collected. Out of construct, content and concurrent validity content validity fits best to the survey method used in this thesis. (Bryman 2011 p.395-396) In content validity researcher need to ask experts who have extent knowledge about the topic to evaluate the measure. In this thesis before conducting the interviews, questions have been carefully evaluated to make sure they are easy to understand.

3.7 Interview procedure

The interviews were held in person or via video-conferences, based on the created interview guide. The guides questions were chosen based on the research questions 1.3 and the theory. All interviews have been recorded and transcribed.

For this research were four different companies interviewed.

4 RESULT

This chapter shows the results from the interviews held with the food truck companies, regarding questions about their purchase habits and processes. Four interviews were held and all interviewees remain anonymous. Instead, they will be named after numbers 1, 2, 3 and 4. None of the responders left questions unanswered.

4.1 Suppliers and products

4.1.1 Supplier selection, categorization and loyalty

Each company was asked how they choose their suppliers and to justify their decision.

Interviewee 1 answered that they choose their suppliers after the best product quality in relation to price. Suppliers for regular purchases need to be able to offer them a wide range of products to reduce the amounts of visits.

Interviewee 2 answered that for them a lot of factors play a role in the supplier selection. The choice is made by taking the best price, nearest wholesaler, best quality and product availability into account. In urgent or exceptional situations, compromises in terms of price or quality have to be made. It was further mentioned that sometimes price compromises are made to avoid further visits at other suppliers, to save time.

Interviewee 3 answered that the main point for them is quality. Quality is for them the number one and stays above other factors like price or wholesaler distance. The raw product quality is for them so important because the taste of the product will be better and it lasts longer. The latter one saves in the end more costs than purchasing a cheaper product with lower quality. A high raw product quality helps to provide a consistent end product.

Interviewee 4 answered that suppliers have been chosen after the best price in combination with great product quality. Before opening their business, research among different suppliers was conducted and the company base was opened in the area with the best suppliers and shortest distances to them.

During the interview was discussed if the firms categorize their suppliers and how they are classified.

Interviewee 1 answered that all their suppliers are equally important for them in order to be able to run their business and no categorization has been made.

Interviewee 2 answered that they categorize their suppliers after the most used products and focus on rebuying most of the needed goods from the same suppliers.

Interviewee 3 answered that there exists no categorization of their suppliers. All of them are equally important and connected to each other because every single of them needed in order to be able to operate the business.

Interviewee 4 answered that suppliers are categorized, and the time spent with them, after importance. The most important supplier is the one that produce one single main product. Both companies have been forming a kind of alliance to develop and produce that product. It would be very complicated to break up that alliance and find another supplier for it.

During the interview was discussed how loyal the companies are towards their suppliers.

Interviewee 1 answered that all purchases are made at the same suppliers, because of own convenience, the selection and the places where products are stored are known. That saves a lot of time.

Interviewee 2 answered that they have a number of suppliers they know and usually buy from the same suppliers unless the product is out, they switch to any other market.

Interviewee 3 answered that they do not purchase from the same suppliers, switches happen on a regular base depending on quality, availability or price.

Interviewee 4 answered that purchasing is always done from the same four suppliers. One supplier is very difficult to replace because they manufacture a very specific product only for the interviewee. The other three suppliers can in theory be replaced, but something major would need to happen, because the company is interested in keeping a well and tight partnership with the suppliers.

4.1.2 Number of suppliers

Each company was asked from how many suppliers their purchase and what effects the amount has.

Interviewee 1 answered that the firm purchases from three different suppliers, one wholesaler and two supermarkets, one of them a supermarket chain. The purchases from the

supermarket chain were justified with the answer that this specific chain has the best quality in relation to price, for vegetables, better than the wholesaler.

Interviewee 2 answered that purchases are made from less than 10 different suppliers. For a food truck business are just under 10 suppliers already a greater amount. This statement has been reasoned with the explanation that several niche products have to be sourced from various suppliers, some of them from special suppliers, to ensure authenticity.

Interviewee 3 answered that there is no limitation. Whoever is offering a needed product with the right quality and an acceptable price can become a supplier. It was further mentioned that it is beneficial to build up a network with as many suppliers as possible in order to be able to switch between them according to quality, price and availability. Products are sourced in general from three to four active suppliers.

Interviewee 4 answered that the company has four suppliers they purchase everything from and that a very good and close relationship is maintained to them. That is important to develop certain products further and understand each other better. The latter leads to more efficiency, helps to keep a high quality and sometimes better deals.

4.1.3 Number of products and product availability

In order to set the numbers of suppliers into any relation, it was discussed how many products each company needs to supply.

Interviewee 1 answered that at least 30 different products have to be purchased for their menu of seven different main dishes. Those products include everything necessary to produce and sell their meals.

Interviewee 2 answered that at least 100 different products (can be more) have to be purchased to provide a menu with almost 30 different meals.

Interviewee 3 answered that about 60 different products have to be purchased, which includes all needed components from spices to packing material.

Interviewee 4 answered that exactly 52 products are needed to operate their business. Those products include everything, including drinks. The exact number is known, because all products that need to be purchased are monitored to gather data and changes about them.

During the interview was discussed how product availability is taken into account during the purchase planning

Interviewee 1 answered that product availability is not taken into account while planning the purchases. In case the supplier cannot offer the requested product, a substitute product is chosen or the product will be purchased from a different supplier, like a grocery chain.

Interviewee 2 answered that the meals are so designed that if one ingredient is not available, it can be replaced with a substitute product without changing the result of the end product towards a negative side. For one main product was a second supplier in Lohja sourced that can always deliver within 12 hours, but this comes with a 30% increase in price and is only used in rare emergency situations.

Interviewee 3 answered that product availability is not taken into account, which brought the company in early 2021, due to the consequences of Brexit and further delivery problems, a bit into trouble. Some goods had to be replaced with substitute products that changed the original taste of the meal. In spite of this, no further measures have been taken to prevent this from happening again.

Interviewee 4 answered that product availability is taken into account for products where the accessibility is fluctuating and where suppliers are very few. At the moment this only affects one raw-product. All other goods can be in an emergency case sourced from different suppliers.

4.2 Purchasing

4.2.1 Purchasing types, planning and planning time

During the interview was discussed how each food-truck company purchases their goods, if third parties deliver services are involved and the reasons associated with it.

Interviewee 1 answered that most of the products are purchased by themselves. Some non-perishable products that are cheaper outside Finland are ordered once per month and delivered to the company's storage facilities. One example can be packing materials.

Interviewee 2 answered that both purchasing methods are used, very heavy or bulky things are being delivered to the headquarter. Certain products that are long lasting are ordered in a greater amount to receive free delivery for them. But most of the needed goods are purchased by the staff themselves.

Interviewee 3 answered that for most and large orders, delivery services are used in order to minimize time and effort spent on the purchasing of the goods (as also mentioned in the answer for question 4.11).

Interviewee 4 answered that only for one product a delivery services is used. Otherwise has the company its location chosen to keep the distances to the main suppliers short and to be able to enable efficient purchasing.

During the interview it was discussed if and how the different companies plan their purchases.

Interviewee 1 answered that all purchases are planned in a raw version on paper and then properly with an Excel-tool to be able to keep track of the different product amounts in stock and to avoid to purchase too much.

Interviewee 2 answered that no list is needed and that purchases are not planned but made based on demand. All products are stored in the food-truck and a product will be

purchased when it is about to run out. Dry and long-lasting products will be purchased and stored for a longer time, fresh goods are purchased every day or every second day.

Interviewee 3 answered that because the company just started and is still very small, pen and paper lists are used. The exact amount of a stored product is not monitored, shopping lists are made when a certain product is about to end. Other planning methods are difficult to use because customer demands can vary a lot (are difficult to predict), therefore are most products purchased on demand.

Interviewee 4 answered that based on the company's storage, a weekly shopping list is written manually and purchases planned according to customer demands which are based on previous experiences.

During the interview was discussed how long in advance the purchase planning is made.

Interviewee 1 answered that the actual purchase planning is made once a week for the main ingredients. Dry or long-lasting products are stored in larger amounts and need to be less frequently purchased.

Interviewee 2 answered in relation to the previous question 4.5 that no planning is made and products are purchased on demand, beside some dry and long-lasting goods. The purchasing on demand behavior is due to the limited space available.

Interviewee 3 answered that it depends on the product but most of the purchases are made on demand and therefore not planned. The reason is that this company wants to keep the inventory as small as possible in order to save costs and to avoid waste and therewith loss of capital.

Interviewee 4 answered that it depends on the product. For most of the products the planning is made and executed in the beginning of the week with the goal that all purchased ingredients last for each specific week.

During the interview was discussed how much time is involved in the purchase planning.

Interviewee 1 answered that purchase planning takes about thirty minutes because all product stocks are checked on their best before date and compared with the earlier recorded values in Excel.

Interviewee 2 answered that the planning does not require any time since there are no plans made. The company purchases exclusive on demand.

Interviewee 3 answered that because of years of experience in restaurant business it does not take much time to scan the storage and prepare a purchase list.

Interviewee 4 answered that purchase planning takes about 10 minutes since the storage and purchasing behavior is organized on a weekly basis. Amounts have been calculated based on experience that they last one, maximum one and a half weeks. Beside one main product that is delivered every two weeks. Otherwise, are only product additives like spices purchased in longer intervals.

4.2.2 Purchasing costs, cost and price monitoring

During the interview were each company's purchasing expenses discussed to get a better overview of the size of operation.

Interviewee 1 answered that the purchasing costs per month are between 1000-2000€. Variations can be due to customer demand which goes often hand in hand with the current weather situation.

Interviewee 2 answered that purchasing costs depends on the time of the year, for example in winter it can be less, but they are exceeding 3000€ per month.

Interviewee 3 answered that the purchasing costs are definitely higher than 3000€ per month.

Interviewee 4 answered that purchasing costs are between 2000-3000€ and because of a well-managed stock, food waste is almost not present and costs could be reduced with about 15% compared to the beginnings of their operation.

During the interview was discussed if the firms keep track of their overall purchasing costs and price changes for the products in the market.

Interviewee 1 answered that product purchases are monitored in an excel file but only regarding the amounts purchased and not according to price changes.

Interviewee 2 answered that no records of changing prices are kept in any kind of form beside own memories from the owner and the employees.

Interviewee 3 answered that the prices of the purchases are recorded. The food-truck company has a lot of contract-suppliers which have to inform them in case the price for a product change. If the price change seems not acceptable, a new contractor will be searched for.

Interviewee 4 answered that the price development of each product purchased is kept in an excel sheet, according the received receipts.

4.2.3 Purchasing time, frequency and experiences

During the interviews was the overall purchasing time discussed.

Interviewee 1 answered that the total process takes about 3 hours per week and can slightly variate, depending on if and where the needed goods are available.

Interviewee 2 answered that due to their purchase-on-demand-model, each purchase takes between five to twenty minutes. Sometimes even less then 5 minutes.

Interviewee 3 answered that all purchases together within one week take about three to four hours. Many things are ordered online and delivered directly to the company's base, that saves them a lot of time and the costs are minimal higher.

Interviewee 4 answered that the weekly purchase takes about two to three hours and is very well organized and very seldom outside the predicted time frame. Orders are done partly via pre-ordering and partly by picking the goods self at the wholesalers.

During the interview was discussed how frequent purchases are made.

Interviewee 1 answered that goods are usually purchased on a weekly basis, occasionally also twice per week. Variations can be caused due to changing demand in sales.

Interviewee 2 answered that because the company purchases goods mainly on demand, shopping's are made on a daily basis and can reach up to 20 single purchasing processes per week.

Interviewee 3 answered that good are purchased three to four times per week to keep the inventory low and perishable products fresh.

Interviewee 4 answered that goods are purchased once per week, everything is planned and calculated accordingly. In very rare occasions some goods have to be re-purchased within a week, if the demand despite, all the calculations and contrary to expectations, takes over.

During the interview was discussed what kind of previous purchasing experiences the firms have and how they might differ from the mobile restaurant business.

Interviewee 1 answered that purchasing experiences from other branches are existing but they differ from the mobile restaurant industry. Differences are that other branches have highly automatized procurement while in the restaurant or mobile restaurant business, most of it is still manual and more time consuming.

Interviewee 2 answered that no purchasing experiences from other branches or businesses are existing and that all people involved are career changers.

Interviewee 3 answered that purchasing experiences from earlier employments in the restaurant business are existing and there are certain differences between a fixed and a mobile location. One major difference is that with a mobile food truck, you are limited to the number of products and their scope.

Interviewee 4 answered that experiences regarding purchasing are existing but not with food related items. Experiences were here gained in the non-food sector which makes the purchasing itself much more uncomplicated because products there were non-perishable and did not need to be stored, handled and monitored that carefully.

4.3 Additional information

As the last question of the interview, the interviewees were asked if any additional information, regarding purchasing for a food truck, could be provided.

Interviewee 1 answered that nothing additional regarding the supplier selection or purchasing process can be added.

Interviewee 2 answered that it is always beneficial to compare the prices between different suppliers before making a buying decision, however, due to limited space in their own food truck, which also serves at the same time as the storage facility, they will stick to their buy-on-demand model. Nothing additional could be added regarding the purchasing process.

Interviewee 3 answered that it is important to just purchase enough and to keep the inventory on a minimum level in order to both avoid capital tightened up in it and food waste. Fresh products should be purchased every 2-3 days and longer lasting products every 1-2 weeks. Nothing further was added regarding supplier selection or categorization.

Interviewee 4 wanted to point out, that before setting up the kitchen or headquarter for the preparations, it is important to make the research what different suppliers and needed services are available and especially from where. Because driving time to pick up goods from different suppliers, or delivery costs, should not be underestimated. Nothing further was added regarding supplier categorization or the purchasing process.

5 DISCUSSION

The aim with this study was to conduct research regarding purchasing habits and supplier selection within the food truck industry in the southern area of Finland, focused on the municipality Uusimaa. The art of how the different companies purchase goods varies a lot but depend on the individual circumstances.

5.1 Method discussion

To collect the needed data, this empirical research was based on interviews.

To gain the knowledge, the qualitative research was conducted with interviews. This thesis work required answers to questions that quantitative research cannot provide. Because requested information regarding the mobile restaurant (food truck) industry isn't available from any public sources, we had to rely on interviewees to gather it.

Qualitative research is often criticized for that samples might be small and not always representative for the whole industry or population. Further can it be difficult to understand how results are interpreted or if they can be generalized. (Qualitative Research and Writing: Qualitative Methods, 2021) It is therefore necessary to emphasize that the author tried to thought up questions that give clear answers with minimal room for interpretation. But the presented results are due to the research method based on the collected data and authors analysis and judgement.

All interviews were recorded and transcribed. The interviews worked out well, and took on average about 30 minutes each. Two interviews were held in person, one interview was held via telephone and one interview via video-conference. All interviews were held

in English, since all interviewees have a migration background, including the author. The interview guide is accessible under appendices as appendix 1.

Interesting was that only one of the four questioned food truck companies had experiences in the restaurant business. The other three participants were career changers who got into the food business when they moved to Finland, or because they wanted to turn their hobby into profession. The respondents were, after accepting the interview, willing to answer all questions. The difficulty was to get the respondents interested in the participation for the interview. All interviews were held with the founder of each company and their answers seemed reliable. All founders work themselves together with their co-founders or employees in their food trucks.

5.2 Result discussion

The results of each interview question can due to the affiliation of the research questions appear in a different order.

5.3 Suppliers and products

5.3.1 Supplier selection, categorization and loyalty

When asked how each company chooses their suppliers, the answers were varying. For two companies are the most important factors price and quality. Those companies purchase from a popular wholesale chain, a private grocery store and a supermarket chain. The latter because especially within vegetables, the price-quality-balance is much better than at the wholesaler. Another company chooses the suppliers after the nearest market, with the best price and best quality as well as product availability. This company purchases also most of their ingredients from a wholesaler chain, sometimes even products that are more expensive at that store to reduce the amounts of visits to other suppliers.

When asked if the companies categorize their suppliers, the answers were varying. One company is categorizing them after the most important ones and keeps a very close and frequent contact, especially because they work in an alliance with one of their suppliers.

The supplier produces one special product only for them and both companies develop it together further on a regular basis. Another company categorizes its suppliers after the most important, most used ones. For both of the other companies all suppliers are equally important.

When asked if the companies do purchase always from the same suppliers, the answers were varying. Three companies purchase always from the same suppliers. Interesting here was that not especially the quality or price was named, but the convenience-factor, because the selection and places at the wholesalers or supermarkets are well-known. One company changes suppliers frequently, depending mainly on price and quality.

5.3.2 Number of suppliers

When asked from how many suppliers each company purchases, the answers were varying. One company has just under 10 suppliers. One other company has three suppliers. Another company has 3-4 suppliers and one more company has 4 suppliers. Interesting was that the company with the purchase-on-demand-model also has the greatest number of suppliers.

5.3.3 Number of products and product availability

Regarding the question of the number of products that each company needs to purchase to run their operations, the answers were varying between the different Companies. The number of products needed depends more on the complexity of the end-product than the size of the menu. One company purchases about 100 different products and offers 27 different dishes out of them. Another company has only two end-products on its menu and needs about 50 different goods to purchase. The mobile restaurant company with the least products needed in this research (30), offers seven different dishes out of them. The fourth company requires about 60 different raw-materials and offers the hungry customer seven different products. The number of products mentioned include everything from food-stuff to packing materials.

When asked if product availability is taken into account during purchase, the answers varied between the companies. One company replied that products where the availability can fluctuate, an extra amount is kept at the storage. It was only one product at the time of the interview. Another company answered that product availability is not taken into account during the purchase planning. But if during the purchase a product is not available, suppliers are switched immediately. This can lead to longer purchasing times and higher overall purchasing costs, due to longer pick-up and transportation ways. The company admitted that it can use substitute products but they will influence the taste of the end-product. The company that purchases most of the raw-materials on demand stated that product availability is not taken into account at all because most of the products can be easily swapped with other products. One other company answered that it is not necessary for them to take product availability into account since so many suppliers provide the same products. If one supplier is not able to provide a product, a wide range of other suppliers are available.

5.4 Purchasing

5.4.1 Purchasing types, planning types and planning time

When asked, if the companies do purchase the goods themselves or if they use delivery services, the answers were similar. Three out of four companies replied that they do use both ways to purchase their products. One point that stuck out in the replies was that delivery services are mainly used when having very big, bulky and heavy orders. One company does use delivery services for one product due to the supplier's distance.

The results of the question regarding how purchases are planned, did vary between the interviewees. The interviewees were questioned if any purchasing software, spreadsheet programs or other tools are used for the purchase planning. Two out of the four interviewed companies replied that they use manual paper-lists to plan their purchases. One company does not use any kind of planning tools, because they purchase all goods on demand. As soon they recognize that they are running low on one product, an employee is sent to purchase it. Only one company uses Excel spreadsheets to plan their purchases.

When asked for how much time the purchase planning is done in advance, the answers varied between the companies. Two companies answered that the planning is made for one week in advance, also most of the necessary preparations (pre-production) are done for one week in advance. One other company replied that those information's are not recorded and unplanned, since everything is purchased on demand. Earlier noticed and interesting was, that a restaurant business, even a mobile one, purchases a product first when they are running out of it. That is something unusual and could cause a serious interruption if the needed product might for some reason not be available or difficult to replace. Another interviewed company answered that the purchase planning depends on the product. Certain goods are bought first when they are needed. Most of the goods are purchased two to three times per week and others pre-produced once per week. The purchase planning is made according to that schedule.

When asked how much time it takes to plan the purchasing, the answers varied between the companies. For one company it does not take any time at all because they purchase almost everything on demand. For another company it takes about 30 minutes, because the goods left in stock are checked regarding the best before date and the stock value is compared with the digital recorded value in the company's excel-sheet. One company needs about 10 minutes to plan all purchasing. That company bases its purchasing's on a strict one-week-rhythm. Based on the experience, the needed time is therefore minimal. The fourth Interviewee stated that due to the grown experiences during the years in the restaurant business and the experience gained with the food truck, the purchase planning is done within a couple of minutes and allocates not much time.

5.4.2 Purchasing costs, cost and price monitoring

When asked what amounts are spent on purchases every month, the answers given could be divided into two groups. Two companies stated that their purchasing costs per month are more than 3000€ and the other two companies replied that they are between 1000-2000€ per month.

When asked if each company has any system to keep track of the overall purchasing costs and price changes in the market, all answers supplied were differently. Only one company

keeps track of the total purchasing costs, which includes the average gasoline usage and the calculated work time for the driver. A second company does keep track of the amounts that are purchased and left in stock, via Excel, but not the current prices of the products or the total purchasing costs. Both other companies do not record any data regarding the overall purchasing costs, price changes or anything related. According to Storhagen (2.1.2), a company should, to avoid losing capital and keeping the costs low, compare prices and quality between different suppliers before making a buying decision. But if no prices and their changes are monitored, it is in practice very difficult to compare them. Unless a lot of extra time is spent to visit or contact different suppliers to compare prices. It seems to be a great amount of extra work to combine and analyze those data but from the authors perspective it can be very beneficial in finding cost saving opportunities.

5.4.3 Purchasing time, frequency and experiences

When asked how much time the actual purchasing process takes, all answers given were varying. Two companies replied that it takes about 3 hours in total to purchase all goods. One company needs between 2-3 hours for the whole purchasing process.

Another company, who uses a purchase-on-demand-model, stated that each purchasing process takes between 5 to 20 minutes. Interesting was that the same company can have up to 20 purchases per week. On an average time of 12,5 minutes per purchase, this company spends with their system 4,16 hours in total and therefore, on average, more than 1 extra hour per week on purchases, then all the other questioned companies.

When asked how many times the companies to purchase goods per week, all answers supplied were differently. One company does purchases on a daily basis, sometimes several times per day. Up to 20 purchases per week are possible. This is a risk for interruption and increasing purchasing costs. It shows (like in 2.5), how important it is that a company should plan its storage facilities according to their needs in order to reduce costs and risk of failure. The same company had also one of the highest purchasing costs (5.4.2). Another company purchases most goods needed once, occasionally twice per week. One other company replied they apply a very strict concept of purchasing goods only once per week, based on earlier experiences in combination with the weather and different selling-spots. That seemed very interesting because it shows that this company put some effort

into developing an own way of trying to forecast their customer's demand. This seems to be rare in the food truck industry. A different company said that goods are purchased three to four times per week, partly due to the lack of space and partly to maintain a high quality within the fresh food-stuff.

When asked if the companies had purchasing experiences from the restaurant business or other branches, the answers varied between the companies. Three out of two companies had earlier experiences within purchasing, but only one out of those three had earlier experiences gained in the restaurant business. That company switches often between suppliers and maintains a supplier network. One other company had no earlier experiences at all, the founder has been earlier a teacher and workers have also different backgrounds. Some kind of purchase experience can always be seen as a merit in a business where purchasing costs are with the highest factor.

5.5 Anything important to add regarding purchasing or supplier selection on the mobile food industry?

All Interviewees were asked as the last question if any additional and important information regarding suppliers or purchasing could be provided. One company answered that they recommend to create a supplier pool and purchase within that pool from the supplier that currently has the best quality/price offer. Another company stated that the storage should be kept small, just enough be purchased in order to not waste liquidity on the inventory.

6 CONCLUSION

The aim with this study was to find out more information about the purchasing and supplier selection processes in the mobile food truck industry and to shutter light on a business that has been growing a lot during the past years but where not much research has been done.

The mobile restaurant business is an industry that keeps growing and has also in Finland during the last two years being more and more present.

This study has been very interesting because the expectations were that all companies would operate similar, since they are all providing meals out of a mobile kitchen – and that only the type of meals would differ. To the authors surprise are some of the purchasing concepts very different from each other – but seem to work.

Once the companies agreed for the interviews, they were very welcoming and generous in supplying the requested information. The greater difficulty was to actually get companies for an interview. Why this was so difficult depends on two main reasons that repeatedly came up during all interviews. The days in a food truck a very long, a normal day lasts about 12 hours or more. And the second reason was the dread that someone would try to spy on the competition to get valuable information about them. Therefore, all companies had to be contacted repeatedly (up to five times) in order to receive a reply or an appointment for an interview.

The research questions were:

- How does the purchasing process look like?
- Based on what criteria are the suppliers selected?
- Are the suppliers categorized in any way?

6.1 How does the purchasing process look like?

The purchasing process in theory is divided in 8 different steps (2.1.1) and has been from all companies, partly unknowingly, conducted in that way. Most of the companies are not seriously monitoring, analyzing and evaluating their purchasing processes – even though the results and possible adjustments, including cost savings might surprise them.

One example is from one company that purchases only on demand, where a very rough calculation (5.2.1) showed that this company spends, because of its purchasing behavior, more than ¼ extra time per week, than all other interviewed companies. I think therefore the purchasing-on-demand strategy is inefficient and might in the end be more

risky and costly than obtaining or expanding storage possibilities. Those could be created or extended at least for “endangered products” to tackle supply chain interruptions. All companies conduct straight or modified rebuys, which with a deeper collection of data and better follow ups could lead to cost reduction through lower purchasing frequencies.

Order and demand planning is only from one company (interviewee 4) in a larger scale implemented. That company specifically mapped out the demand for each selling spot, during different days, selling times and seasons of the year. It was further mentioned that the weather can have a great impact and is as well taken into account.

6.2 Based on what criteria are the suppliers selected?

The criteria how suppliers are selected varied a lot between the different companies. For three out of the four companies were the price in relation to the quality the major criteria. For one company the price is not neglected but plays a subordinate role. That company wants to ensure that it offers only the best quality to their customers and purchases only products of top-quality, they state that those products taste better and last longer and the company saves the extra money spent on the quality by avoiding food-waste. This perspective seems very interesting because it is a win-win situation for the company and their customers. The company could not provide any numbers regarding this statement but it would be interesting to investigate the exact impact.

What stands out was that actually only one of the four companies had been doing any research regarding the geographical distance to the suppliers – and chosen its place of operation based on that. From the other three companies none of them had been doing any similar research. For them the focus laid more on the selling spots.

Regarding the supplier loyalty so do most of the companies perform straight or modified rebuys from the same suppliers. Only one company stated that they see for them a supplier-network more beneficial where they frequently switch between the different suppliers, according to the current price and quality situation.

Interesting was that one of the companies created with one of their suppliers an alliance. This is a great risk taken, if the relationship between the companies starts to struggle due to performance issues or disagreements. Usually need also internal secrets to be

shared. It is therefore an advantage, that significantly reduces risk, if a company relies on fewer suppliers. Further can the company focus and concentrate on to strengthen the trade relationships within a small number of suppliers.

Beside one company, were the expected number of active suppliers used quite low (between 3-4) per food truck company.

6.3 Are the suppliers categorized in any way?

Supplier categorization was within the companies not very distinctive. Most of the suppliers within the mobile-food industry are, according to the statements of the interview partners, can be assigned to the leverage or strategic category. This because most of the supplied goods have a great impact for the business and stay for a great part of the total costs.

During the interviews stated two companies to categorize their suppliers according to importance, but the answers seemed a little vague because it didn't fit one company's supplier selection system and further information regarding the subject was not provided.

Categorizing suppliers can also for small companies be beneficial. Done right it can minimize risks by maximizing the supply security and minimize costs. This can be done by using the purchasing power, establishing long term business relationships, instead of switching (between) suppliers frequently. Especially in the purchasing and further food processing routines can standardization, instead of frequent adaption to supplements, save time and procurement costs. Categorization might be further beneficial to really find out if the suspected suppliers are actual the most important ones and spend time on them accordingly. Once categorized it is also easier to measure each supplier's performance and to address occurring problems early enough.

The overall insights in the mobile-restaurant businesses have been instructive and shown that companies in the same industry, of only slightly different sizes, providing mobile food services, function, from the procurement point of view, in different ways. All companies are doing well and have enough customers to survive. It was recognizable that most of the founders and workers have backgrounds in other industries and that

the owners and workers passion is clearly good food. Therefore, the focus seems to rely mainly on the end-product and not as much on the entrepreneurial processes.

6.4 Continued research

This research has been limited to companies inside the area of Uusimaa. It would be interesting to conduct country-wide research, in order to gather more data and compare further statements in comparison with stationary restaurants and the differences between them. During one of the interviews came the statement up, that higher quality products, which are usually purchased at greater costs, lasts longer and therefore relativate the additional costs. It would be interesting to find out what the actual impact is and how great it would be.

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APPENDICES

INTERVIEW GUIDE

The purpose of this interview is to reveal insights of the food-truck industry in Finland to show the importance of purchasing and processes associated with this business and to provide optimization possibilities.

This interview will be documented in writing (digitally) and voice recording.

You have the right to be anonymous, to refuse to answer to individual questions and to be informed about the final results of this study.

- 1) How do you choose your suppliers? – please justify
 - a) After best price
 - b) Nearest market/wholesaler
 - c) Best quality
 - d) Product availability
 - e) Other – by what?
- 2) From how many suppliers do you purchase, and does the number have any effects for you?
- 3) How many different products you need to purchase?
- 4) Do you plan your purchases and if, how?
 - a. With purchasing software?
 - b. Excel? Other?
 - c. Manually?
- 5) How much time does it take you to plan your purchases?
- 6) When do you make your purchase planning (how long in advance)?
- 7) Do you take into account product availability in your purchase planning, how?
- 8) Do you have purchasing experiences from other branches or restaurant businesses?

If yes, how does it differ to the purchasing for food trucks?
- 9) How many times are you purchasing goods?
 - a) several times per day

- b) daily
- c) weekly
- d) monthly

10) Do you keep track of your purchasing costs and price changes in the markets?

- a. If yes, how?

11) How much time does the actual purchasing process take?

12) What are your purchasing costs per month?

- a) less than 500€
- b) 500-1000€
- c) 1000-2000€
- d) 2000-3000€
- e) more than 3000€

13) Do you purchase the goods yourself or do you use any delivery services? Why?

14) Do you always purchase from the same supplier(s)?

15) Do you categorize your suppliers?

- a) If yes, how?
- b) If not, why?

16) Can you provide any additional information regarding purchasing or supplier selection within the food truck business?

We appreciate your support with our work! Thank you