## Customer expectations and current offers from food trucks in Helsinki

Is there a gap regarding diversity of products, selling price, time and place of operation?

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Abstract

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The aim of this thesis is to determine whether there is a gap between what customers expect and what the food trucks in Helsinki offers in term of diversity of products, price, time and location of service. Do the current offers match with what customers would like to have?

The food truck concept has a long history and since 2008 became an international phenomenon. However, it is still relatively young in Helsinki. There are concerted efforts from different parties included the city's authorities to support this type of business. The movement of the trend is also obvious with all the events for food truck which are recently held in Helsinki and the massive number of customers got attracted. Besides the all the success stories, the author's personal observations detect that there are still problems which could easily be improved. In addition to that, there have been no academic studies which lay attention on this type of foodservice business. For all mentioned reason, it is a good time to conduct this research to have better understanding and help with improving food trucks scenario in Helsinki.

Two flows of data are collected for this research. The information about products, price, time and place of operation are gathered from the food trucks. The second stream of data are the opinions of the public. Two data will be analysed and compared to answer the research question. The quantitative method is chosen to be the main approach of this study. However, since the two objects - food trucks and customers - have different characteristics thus two separate techniques were deployed. The data from the trucks are collected via mystery-shopper method where the author personally visit the trucks. The data from customers are gathered via an online-questionnaire. Altogether the final sample includes information from 20 trucks and 429 responses from the survey. The data is then analysed with Microsoft Excel and Webropol Analytic to answer the main question of this research.

The result of this thesis shows that there is a gap between what customers would like to have and what they are offered by the food trucks at the moment. In term of the diversity of products, many cuisine and products beloved by customers are missing in the market. With the popular products, which already existed like burgers, hot dogs, customers also express that they would like to have them with higher quality. In general, the public consider current prices as being reasonable. However, the amount of money they willing to pay is actually lower than the market prices. Customers affirm that they would like receive their service from food trucks elsewhere than the city center of Helsinki and in festival venues. The operational times of food trucks are suggested to be expanded, not only clustered for festival or weekend nights.

Even though the data sample is relatively big in the context of a Bachelor thesis, it is not appropriate to generalize the whole market. Moreover, the initial intention of this research is not to judge whether the food trucks in Helsinki are good or bad. The best use of this result is to help food truck operators have better understanding about customer wishes. The information is then can be exploited to improve or adjust their business accordingly.

## Keywords

Food truck | Helsinki | Customer Expectation

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## 1 Introduction

The author was born and raised in Saigon where the street foods play an important role, if not the main one, in the urban life and the cities' attraction. It is just a norm for all the city's residents that street foods are available round the clock in any given day and from every corner of the city. When the author moved to Helsinki to in 2012 to pursue a Bachelor Degree and live until now, it was quite a shock for her to realize that in Finland the street food culture rarely presents.

Back in that time the common channels for food include the traditional restaurants, fast food chains, pizzerias and limited offers from the convenient stores. Street foods most commonly appeared during the Ravintolapäivä (Restaurant Day) - a pop-up restaurants carnival - for four times a year. Besides that, there are a couple of food trucks operated nearby the central railway station. The turning point happened in early 2014 when from all of a sudden there were many food trucks in the city and their operational areas expanded to both sides of Kamppi shopping mall, the little square in front of Stockmann and furthest to Hakaniemi market square. The scenario got better and better when the trucks had chances to expose their businesses to large number of customers during the events which caught the media attention namely World Bites Food Festival in Teurastamo in August 2014, Streat Helsinki in March 2016, the series of Street Food Carnival every summer and the annually Block Party in Kallio. From there, it seemed like the worldwide phenomenon finally hit the Helsinki market and definitely changed the food landscape of the city.

The whole series of events above caught the author's attention. The curiosity about this specific field in the market has continuously arisen ever since. With the crave to learn and have better understanding, the author decided to choose the food trucks in Helsinki to be the thesis subject.

The food-on-wheel trend is relatively new in the culinary world. Yet the mobile food vendor concept has existed for centuries. New York in the 1600s was already filled with pushcarts which are considered the precursor of the food trucks nowadays. The historic context has effects on food trucks development all along its timeline of success. The invention of automobile and the advance of technology have embraced a wonderful development for food trucks from many aspects. They went from selling easy-to-store supplies to a full equipped kitchen on wheel which can functionally equivalent to any professional one. The trucks which were once stigmatized with the nick name "coach roach" and culturally recognized as "fixture of isolated workplaces like manufacturing plants and construction sites" now
become a worldwide phenomenon and marked a revolution in foodservice business history. In the US - where the trend was born - more than 3700 trucks are rolling creating an industry that worth 870 million dollars. (Food on a truck 2017; IBISWorld 2016; Coughlin 2016.)

The expansion is still going strong not only within the US but also reaching other parts of the world. Coffer (2012) states that the food truck trend along with other things from the states are alluring to European. Food trucks capture the European market and revolutionize its food culture. Finland, particularly Helsinki, was not an outsider even though the arrival of the trend was a bit later than the other countries. Arto Koskelo in 2014 says that street food was a part of city's strategy for a while back. Pekka Sauri - Deputy Mayor of Helsinki - also praises various types of efforts to lift up the red tape and ease the hardship of selling food on street. Both statement generally refers to "street food" which envelops the food trucks as well. Now as the joined forces from the authorities have paved the way for food trucks, the rest of their success story must be written by themselves and judged by their customers. ((Rantanen, P; Knorring, M; Relander, V; Nars, K; Koskelo, A; Sillanpää, M. 2014, 13, 32; Coffer 2012.)

### 1.1 Research question

The author's arguments are: 1) Each food truck operator decided what kind of foods they offer at what given prices, also when and where they will perform their services. Assuming that with those decisions they consider their offers meet the expectation from customers. 2) From personal observation, the author argues that the current offers are not good enough. What customers would like to have and what they currently get are not matched. Most of the trucks offer the junk-foods such as hot dog, burger, and Finnish-style comfort foods such as meat pie (lihapirrakka) or sausages and fries hence there is a lack of choices in term of the variety of products. The price is not reasonable. Distribution including time and place of service are too narrow namely only on weekend nights and during festivals.

Those two arguments form the main question which will be studied in this thesis:

- Is there a gap between customer expectation about products' diversity, price, time and location of service and what they are offered from the food trucks in Helsinki?


### 1.2 Aim of thesis

This research thesis will focus on the food trucks in Helsinki, Finland. The aim is to identify the expectations from customers toward food trucks. A comparison then be made to determine whether there is a gap between their expectations and the current available offers. Four mains point will be discussed include cuisines, price, time and location of service. Two flows of data will be gathered. The information from the food trucks will be collected from the customer stand point, which means using observation method. The main target is to find out what the variety of products are, what the prices are, when and where the services are. No further questions or justification about how or why the food trucks do what they do are needed. The second data will be collected using quantitative research method. A questionnaire will be designed based on literature review and spread under the form of an online survey.

### 1.3 Thesis structure

The introduction will set the theme for the whole study. The reason why this subject is chosen to be the thesis topic will be explained. The clarification about the purpose of the topic and brief explanation about the method is presented. Research question is introduced to the readers.

The theoretical framework includes two chapters. The first chapter includes two sub-chapters. The first one will introduce the definition and history of food trucks. More elaborated termination such as the categories, the advantages and disadvantages of food trucks comparing to the traditional types of restaurant and growth opportunity of food truck gives the readers the insights of the business concept. The second sub-chapter presents the history of street foods in the city and the last part focuses on what the current situation of food trucks in Helsinki is.

The second chapter focuses on customer expectation. The general termination about this topic will be presented to the readers, followed by the explanation about its importance and its use. Various aspects regard customer expectation will be explained to give the readers deeper insights of the topic.

Methodology chapter will take a closer look at the approaches, what observation method is, what quantitative method is and why they are both chosen for this study. The samples from which data is collected will be introduced along with the justification why they are chosen. The process of questions designed for the online survey is explained.

In the analysis and finding chapter, the data will be displayed. The results are visualized with graphs and charts. The data is then combined with the theory in the analysis

The final chapter will combine the theory and the empirical to find the final answer for the main research problem. There will be suggestions and recommendation for involved parties how to enhance the food trucks business in Helsinki. Clues for further research in the future will be pointed out.

### 1.4 Limitation

## The selection of discussion points

This study is a compound of two objects: the food truck and customer expectation. Frankly saying it is two researches merged into one. Each component of the topic has its unique level of complexity. There are various elements that have influences. Each dimension can be viewed under different angles and require distinctive approach to deliver the idea of the researcher. Together they would sum up to a huge and extensive study which is nearly impossible to execute with the limited amount of resources that the author can actually cope with. The top priority is to narrow down the topic and keep this study focus and simple, for the author as well as for the readers.

The discussion points were chosen based on several reasons. Firstly, they must play the role of a connecting agent which fuses the two objects of the study into one concerted entity. Secondly, they have to be the mutual interest points regardless if viewed from a business owner's standpoint or from customers' ones. Thirdly, this study will analyse all the food trucks in Helsinki as a whole frame rather than targeting a specific one so the chosen factor should be universal and can equally contribute from every food truck. Lastly, the author understands that a portion of the survey respondents do not have knowledge or experience about the industry at an academic level. Thus, the more tangible the factors are chosen, the easier it is to answer and higher accuracy of responses. For all that matters, the four discussion points about products, price, time and place of operation are selected. When talking about the products, there is only one feature chosen that is the variety of products that customers can choose from. Many other factors e.g. portion size, package, nutrition and the service process are neglected due to the reasons listed above.

## Time of conducting

The study is carried out from March to May, which is still during the Winter / Spring in Helsinki. Due to the weather condition, this is not the ideal season for food trucks to operate. This affect the amount of data that can be gathered from both food trucks and customers. Generalizing the whole situation based on limited data will affect the validity and reliability of the research.

## Theory framework.

The theoretical part regarding the food trucks could be considered as scratching the surface of the topic. The information gathered from the trucks are used as reference points to compare to the data from customers. Therefore, the target is to answer the question "What do they do" for instance: what are the cuisine they offer, what are the price and what are the time and location of operation; rather than digging into "why and how they do what they do". Consequently, this part will be presented in the manner that offers knowledge and basic understanding for people who are not yet familiar with it. It helps the reader to comprehend the concept.

The expectation of customers is also a complicated field to study. It belongs to the human psychology which in practical is often hard to verbally express. In addition to that, expectation is mostly studied in customer satisfaction related matters in which it goes hand in hand with customers' perception. Picking it out of the context and examined it on its own may weaken the arguments. In the worst scenario, it causes the risk of misleading the readers.

## Sources of references

Since the industry is relatively young, there is a limitation amount of source which the author can employ as reference for this study. The ratio of information comes from unofficial sources such as blog and other types of online platform which are significant more than from books. By nature, the reliability and academic qualities of those are questionable. A big part of the reference comes from two authors: Mr. David Weber - the founder of New York City Food Truck Association and Mr. Richard Myrick - founder of Mobile Cuisine Magazine. Both of them are based in the U.S, hence, their opinion is also nationally biased. Their ideas are used to understand the food trucks in Helsinki although the two markets are entirely different in many aspects. On top of that, this thesis is the first of its kind within the University of Applied Sciences in Finland. Also, the focal point is only Helsinki market makes the limitation even greater. Last but not least, the street food culture has long been prominent in Vietnam whereas still in its infancy in Finland. The existing perception of the author regarding this topic possibly form culturally biased opinions.

Previous studies regarding customer expectations mainly take traditional restaurants as the object and analyse the service process as a whole. Consequently, the theory for customer expectations in this thesis will face a dual stream of translation: from restaurants to food trucks and from the whole service process to specific chosen discussion point. There are possibilities of gap during translating process of those examples.

## Commissioning

A commissioning party is not included in this thesis. So far, there is no official association or such type of organization for food trucks in Helsinki. This creates the obstacles for the author to look for authoritative source about food trucks in Helsinki. However, this will give the opportunity for the author to express the ideas freely and keep the thesis as objective as possible.

## 2 Food truck

In this chapter the food truck concept will be presented. A brief history of food truck and what the current situation is are also introduced to the readers. Then the way food trucks are categorized will be brought into discussion and finally the advantages and disadvantages of the model comparing to brick-and-mortar restaurants are mentioned.

### 2.1 Definition and history

The term "food truck" is exactly what the word conjures up: a vehicle that sell foods. A food truck is a large van or truck which is equipped to prepare, store, cook and serve foods. The number or types of equipment needed depends on what kinds of products are offered. An ice cream truck will utilize its space for freezer while burger or other hot dishes may require a fully function kitchen on board. The second factor affects the interior of a food truck is whether the whole process is done in the truck or the preparation is at somewhere else.

The history of food truck is dated back to 1866 when Charles Goodnight had the Chuck Wagon to serve the cattlemen who had to travel across the country. The prototype of the Chuck Wagon is a modified Army wagon, which had simple interior and serve easy-tostored food like coffee, cornmeal, bacon and salted beef. The first traditional "food truck" which had similarities to the ones we see now was opened by Walter Scott in 1872 in Providence Rhode Island. He added a window to the wagon and sold sandwiches and pies to people who works nearby. The wagons got transform into food trucks in the 1900s with the invention of automobile. By 1950s the food trucks are popular among blue-collar society and construction site workers. At the same time, they got the nick name "roach coaches" due to unhygienic condition of the trucks. The food trucks continued to develop with that image until the mile-stone of Kogi truck - the first gourmet food truck. Opened in 2008 by Chef Roy Choi, the Kogi truck sells Korean fusion taco, got huge attention from the crowd and put the start of a revolution in food trucks industry. Following the success of Kogi, from 2009 onward, there was a boom of gourmet food trucks in the U.S. It changes the land-scape of the industry and also transforms the image of food trucks from low class roach-coach to a place where customers can get restaurant-quality foods. (Food On A Truck 2016; Myrick 2017; Saxena 2015; Weber 2012, 2-3.).

### 2.2 Characteristics of food trucks

### 2.2.1 Correlation between street food and food truck

The terms "Street food" and "food trucks" in some contexts are used interchangeably, yet in fact, they should not be. Street food is a larger, more general terminology in which food truck only constitute a section of it. The Food and Agriculture Organization (FAO) defines the street food, "'Street foods are ready-to-eat foods and beverages prepared and/or sold by vendors and hawkers especially in streets and other similar public places". The definition puts the focal on location of selling, which is "on the street", to distinguish the street from tradition types of restaurant. (Hilmi; Fellows 2011, 2.). The street food vendors then can be divided into three groups which are shown in the following figure


Figure 1. Types of street food vendors

Movable vendors are those hawkers who constantly move around to sell foods. The transportation could be done by walking, bikes or other means of transportation. The vendors from second type have their steady base on the street. The last type usually refers to people who already own a shop and widen their products / service to the pavement sides (Vietnam Online 2017.)

The food trucks certainly have symbolic reformation and transformation from their precursors which are also the influences to their success. The mean of transportation was elevated from walking or human-powered type of vehicles to automobile. Modern kitchen equipment on board provides the possibility to deliver more sophisticated foods. Modern food trucks are also branded with marketing plan. The person behind the business may have higher education level and better chance to get access to capital and other resources comparing to the old generation of vendors' owners.

Despite all the divergences and advances that food trucks have gained. The correlation between street food and food trucks has undeniable existence. Firstly, within the conceptual framework, the trucks are surely part of street food and fall into the "Mobile vendors"
category. Secondly, there are quite a few characteristics of street food that food trucks inherit and apply until today. Those factors will be discussed in the next part of this chapter.

### 2.2.2 Diversity of products.

The diversity feature is credited to all the people behind the concept of street food under one label: immigrants. They play both roles of being the drives and the demand of the diversity. Trace back to the root of the trend to the U.S, selling foods on the street has long been considered an immigrant profession. The influx of immigrants to the US creates a large group of people who have few language skills and qualification to get a job. They chose street vending as a form of self-employment to generate income. New York in the 1800s had iconic Irish "Apple Marys" selling apples or German women with their basket or Pretzel. In the same time point, Helsinki residents were also familiar with Jew selling baked goods, Russian hawker with ice-cream trolley. Even Chef Roy Choi - the one who marked the revolution of modern food truck with the Kogi truck - was Seoul-born American. All of these emphasize the vital role of immigrants on diversity of street vending and how it becomes the nature of the industry. (Brooks 2017; Basinki 2014; Rantanen \& al 2014, 46-47.)

Fast forward to the past, the immigrants also created the demand for diversity of products. Street foods were sold within the community who looked for the nostalgic flavour from their home country. So, each neighbourhood generates a typical product or group of products and when sum up it creates the beauty of the diversity in street food culture. To return to the presents, the situation is pretty much the same. There are immigrants everywhere and they bring their own cultures into the world of multi-culturalism which includes food. Besides that, people travel more and more nowadays. When they get hooked on a certain dish on a trip, there is chance that they will try to look for similar experiences in their homelands.

O'Neill (2012) expounds that in order to maintain the interest, the foodservice providers must diverse their offers and align them with customer preferences. The array of products in context of a restaurant will focus on how many options on the menu that customers can choose from. In the case of food trucks, however, it should be approached in a different way. Bargen $(2016,6$.) points out that street food in general and food trucks in particular have their limitations regard the resources, transportability and other constraints. Those restrict them from operating with a large menu consists of many offers. The diversity is then curbed and shifts toward simple-food-oriented.

Weber (2012, 32-33.) agrees that a truck would never win against a restaurant in the term of variation in one menu. Restaurants have more storage capacity. They are able to handle ingredients which are delicate like raw fish or required intensive labour. He explains the technique to overcome the obstacles. The trucks should capture the niche market. They ought to choose the type of products based on their formative experience, then stay focused on that product and attempt to be the best ones.

The contrary is clear. Restaurants have menus with something for everyone while trucks concentrate on one type of product. That does not sound like a competitive advantage for the truck, yet together they create a community that offers diverse type of products and keep luring the customers toward their sides.

In the context of food truck, what kind of products they offer and the type/ concept of that given food truck go hand in hand. The type of product / cuisine a food truck offers to its customers also a way to define its concept. More detail will be explained in the "Category" section.

### 2.2.3 Affordability

Throughout its own history, street food maintains its one special feature to attract the customer - cheap prices. The price levels are mostly influenced by the target customers that street food reaches. Tinker (1999) in her study about street food found out that in lower income countries in Asia and Africa, the poorer the family, the bigger portion of food budget spent on street food. In the U.S, this type of foods is the main sustenance mean for cattlemen, workers from construction site and immigrant communities. All of them are consider the impoverished class of the society. (Basinki 2014; Food on a truck; Coughlin 2016.). The street foods in Helsinki also portrait a similar trait. The customers were factory workers and people who could not afford the luxury of a private kitchen to cook their own meal (Rantanen \& al 2014, 43-47.). Being affordable has been the attractiveness of street foods and keep their customers happy until today.

Food trucks also have this nature of offering food for a reasonable, if not low, price. Their customers are not as poor as they were yet having more concern about their spending. The trend started to blossom in 2008 when the world facing the Great Recession. Consequently, customers pay more attention to every dollar they spend on food and look for more value. Without the "cheap" factor, food trucks would have lost all their market shares toward restaurants so they are more or less forced to keep the price low to attract customer. From the business technique standpoint, Weber $(2012,3$.$) says the operator can$
utilize the advantages of having low overhead cost to lay a pricing strategy, which then leads to products with higher in quality and lower in price.

### 2.3 Categories

This sub chapter will present the categorization of different models of mobile eateries and how food trucks are distinguished from them. The segmentation among the food trucks based on different measurements is discussed later on.

### 2.3.1 Food trucks vs other mobile eateries

In a bigger group so called Food-on-Wheel, there are five types of mobile eateries: food bike, food cart, food trailer, food truck and bustaurant. These are groups by size and its mobility.

A food bike is small. It is usually a bicycle or tricycle retrofitted to sell food. A food cart is slightly bigger. It is not motorized and needed to be towed by external force or handpushed by the operator. Food trailer and food truck are the big ones in group. Both can have relatively full equipped kitchen and working space for up to three persons. The main difference between a trailer and a truck is the truck has ability to move independently on its own power while the trailer need to be hitched and towed by a vehicle. The last form is quite unique where the form of a bus and a restaurant are merged in. A whole doubledecker buses is transformed to accommodate a kitchen and a dining area. (Food On A Truck 2016; Food Truck Builds Miami 2015.)

Within this study the food trailers and food trucks will be grouped into one and called food trucks. Most of their characteristics are the same. The only difference is the independence in mobility which does not affect the factors discussed in this thesis.

### 2.3.2 Categories among food trucks.

### 2.3.2.1 By process

The Entrepreneur uses the food processing as a measurement to divide the food trucks into two groups. A mobile food preparation vehicle (MFPV) accommodates the whole process on board. Industrial catering vehicle (ICV) on the other hand serves pre-packaged food. (Entrepreneur 2011.)

### 2.3.2.2 By type of food

Weber put the trucks into four groups based on the offers from their menu: savoury trucks sweet trucks, sweet and savoury combination and beverage trucks (Weber 2012, 33-34)

## Savoury trucks

There are 60 types of savoury trucks which are listed in order in popularity in the book. The list is reconstructed and presented in the following table by the author. The first group is cuisine which is regional or countries base. The second group is the specific products and last group consists of all other type which are not belong to any of the two-previous group

Table 1. Type of savoury food trucks

| By countries / region | Type of product | Others |
| :--- | :--- | :--- |
| Argentinian | Bacon | Barbecue |
| Asian / Latin Fusion | Burgers | Breakfast |
| Asian food | Cheese | Cajun |
| Brazilian | Chicken and waffles | Fusion |
| Caribbean | Dumplings | Health food and salads |
| Chinese | Falafel and pitas | Kosher |
| Cuban | Fish and chips | Organic |
| Czech | French fries | Stews |
| Filipino | Fried chicken | Vegan / vegetarian |
| French | Grilled cheese |  |
| Greek / Mediterranean | Gyros |  |
| Hawaiian | Hot dogs |  |
| Indian | Italian Panini |  |
| Italian | Kebabs |  |
| Jamaican | Lobster |  |
| Japanese | Macaroni and cheese |  |
| Korean | Meatballs |  |
| Latin, general | Philly cheesesteaks |  |
| Malaysian | Pickles |  |
| Mexican | Pizza |  |
| Pakistani | Sandwiches |  |
| Peruvian | Schnitzel and sausages |  |
| Polish | Seafood |  |
| Romanian | Sloppy Joes |  |
| Salvadorian | Soup / Chili |  |
| Southern food | Sushi |  |
| Spanish | Tacos |  |
| Sri Lankan | Tamales |  |
| Swedish | Wings |  |
| Thai |  |  |
| Turkey | Venezuelan |  |

## Sweet trucks

This truck is compile by 12 different type of products listed in order of popularity. They are: Ice pops / frozen treats, cupcakes, ice-cream, general desserts, bakery, frozen yoghurt, chocolate, doughnuts, gelato, churros, crème brûlée, nuts.

## Sweet and savoury combination

There are six variety of products categorized into this group. The order is also by popularity. They are: crepes, pies, waffles, empanadas, popcorn and peanut butter. , sweet and savoury combination and beverage trucks

## Beverage trucks

This group contain only two type of trucks which sell non-alcoholic drinks. The first type is Coffee / tea and the second one is juice / smoothies.

### 2.3.2.3 By class

The credit of the first gourmet food truck usually belongs to the Kogi truck from chef Roy Choi where the standard is described as restaurant quality and innovative (Saxena 2015.). From that point on, two new groups of food trucks arise: gourmet food trucks and normal food trucks. This is the most controversial way of categorizing the food trucks. There is no official standards or criteria to differentiate between a normal one and a gourmet one.

The term "gourmet" refers to the producing and serving method or the food itself that is very high quality (Cambridge Dictionary 2017.). Thus, when the term is put into use, it gives consumers a sense of high quality and in certain case could be translated into higher in price. Food Truck Guru (2016.) suggests that the gourmet trucks have higher sanitary condition, top-quality equipment and have more vibrant appearance with unique design.
Sandiego Food Trucks (2011.) agrees with that suggestion and expand the explanation to marketing aspect that gourmet is used as buzzword to imply quality or higher relative worth; it is also about hipness when a gourmet food truck is associated with being trendy and fun.

The discussion about what is a gourmet food truck is still going on but for at the moment it seems to be used more as a marketing tool than a classification. The truck wants to send a message about its quality to customers and simultaneously distinct itself from the equivalents as a competitive advantage.

### 2.4 Advantages and disadvantages of food truck

Every business concept has its up and down side. Food truck is not an exception. Comparing to the brick-and-mortar restaurant, the food trucks have quite a few advantages which help them to flourish and also face disadvantages that the trucks' operators need to keep in mind to avoid failure.

### 2.4.1 Advantages

The experts in the field agree that food trucks have two crucial advantages which are the affordability and the manoeuvrability. The two characteristics present throughout process from starting up the truck to the operation.

## Affordability

The beginning of the trend dates back to 2008 when the world economy faced a massive downturn. Consequently, the availability of capital was in short and entrepreneurs became more alert than ever about how much they put in and how big the risk was. From the financial point of view, a food truck requires less monetary resources than a brick and mortar restaurant. At the early stage of starting up a truck, the initial investment of food truck is smaller, hence lower in capital risk. The cost to operate a food truck is also rather low. Rent eats a big part of restaurant budget and food truck is free from this liability. The only exception is when the truck is rented and even then, the budget which goes for the rent is still lower than renting a location for a restaurant. Food trucks do not require a full range of staffs thus saving up from the payroll. The maintenance requirement costs significantly less as well. These factors make the concept tempting and convince people to put their investment into. (The Forum 2011; E-Junkie 2016; Hood Mart 2017; Food on a Truck 2015; Food Truckr 2016.)

## Manoeuvrability

This is the main characteristic of the concept and also its strongest point. Anenberg and Kung $(2014,2$.) argues that the important advantages of food trucks is using their mobility to capitalize the consumers' taste of variety. This factor allows the coverage of wider market and more customers. The operator can test through various locations and choose the superior one and in case of facing an unfitting spot, they can simply move to a better one. While the restaurant gambles in choosing the location, and makes lots of effort to convince the customers to come, the trucks have the flexibility to bring their businesses to where the customers are. (Weber 2012, 39; E-Junkie 2016; Food on a Truck 2015; NCASS 2017.)

Besides the main advantages, there are also some strengths which are in the trucks favour. Food on a Truck (2015.) and Hoodmart (2017.) address that with the nature of being small scale, the process of modifying the menu or changing the strategy is quicker and less in cost. An article from E-Junkie suggests that compact menu feature eases the inventory and managing supply chain (E-Junkie 2016.). Pat Flynn from the Food Truckr with the stand point of a business man explains a few more bright sides of the truck business. He says the truck concept gives people concern about capital limitation or experience in the field a chance to break into the industry and learn. Secondly, with being multitasking as a chef, a manager, a business owner and a server for the truck, you become the ears, the eyes, the brain of the operation and that gives a perfect image of running a restaurant. Lastly, if the truck does well, the truck has the opportunity to build up the brand in small scale before it expands into something larger. (Food Truckr 2016.)

### 2.4.2 Disadvantages

It seems like food truck is a perfect concept with all the advantages and tempting characteristics and gives a promising scenario for the entrepreneur. Yet, there are obstacles that the owners must be alerted to avoid pitfall or the worst scenario, failure.

## Limit in space

The compactness once being supportive for the flexibility of the trucks now becomes a double edges sword and causes problems. A food truck has limit space. When there is big event to serve, which requires more storages and room for more than just one people to work then the truck is a bit too tight. Nevertheless, they have to accept it because there is no other way to exceed its capacity. This leads to missing possible sales of that day. Moreover, depending on the variety of the menu and the process of food, there may be the need of a commercial kitchen and this will set the budget a bit backward. (The Forum 2011.)

## Legal system

The industry is rather new and has not been perfected yet. The authorities are trying to keep up with the trend leading to unstable from legal aspect. Some cities have their regulations specifically designed for the food trucks while others do not. The rules and laws also varies depending on the location where the trucks operate. This is cautious for the operator. The rules that applied at the based city may not be true anymore in other cities and may lead to an ugly ending with getting a fine or lawsuit. On the other hand, a food truck is regulated as any other foodservice business plus handle more license require-
ments as a traffic vehicle e.g. parking time and place. Bringing a truck to business involves many authorities from the same municipality and leads to heavy bureaucratic works. (E-Junkie 2016; Food on a Truck 2015.)

## Opposing from restaurant owner

The oppression of restaurant owners toward food trucks is not something new. Back to 1700s, the restaurants and retail stores succeeded in influencing the local officers in New York to imply a ban on all street food vendors - the precursor of food trucks nowadays. (Food on a Truck 2016.). The food trucks enter the market and take a share of it, make the stiff competition even more tense. In addition, there is still a myth that food trucks compete unfairly with restaurants due to low cost and unclear regulations. Operating in the environment full of disgruntle opponents who are willing to lobby against is a real challenge for any trucks. (Food on a Truck 2015; Myrick 2017.)

## Uncertainties element

The food trucks most of the time operating in open air. Any extreme condition weather may lead to a lot of trouble. It is certainly that countries from the frigid zones where long winter and low temperature are a norm facing more difficulties. Even in the warm climates, a sudden rain will mark a bad day of income.

## Maintenance

It is mentioned that the fee for maintenance a truck is cheaper than a restaurant. However, within one truck's budget the maintenance can cost a huge proportion. Ms. Natasha Case and Mr. David Weber mutually agree that the trucks are very prone to break down. The operator needs to put money in maintaining the truck, the equipment on the truck and the generator to make sure they run smoothly. When one of them is accidently broken, it costs an amount for repairing. The period when a truck is fixing puts a lot of strains on the owner. The whole business paralyzes and leads to the loss of sales and the inventories with short self-life get ruined. (Weber 2012, 14-15, 159.)

## Choosing the right truck.

The problem of choosing the right location is translated into choosing the right type in case of food truck. What is the size? Brand new or second hand? Owning or renting? Those are several questions that an entrepreneur must struggle through. A too big truck is a waste of capital and increases hardness in finding the parking place and also higher in cost. A small truck cannot accommodate the business and could require a separate commercial kitchen for preparation process which at the end may cost more. Buying a truck can cost more than a hundred thousand dollars while renting helps with the starting up but
then becomes a part of overhead cost. After the truck, what kind of the equipment to put on board is also questioned. All those matters need to be carefully taken care of. It is critical to have a good balance between the entrepreneur's desire and his / her financial ability. One mistake made and the business will face the failure. (Food on a truck 2015; Weber 2012, 55.)

It is mentioned that an entrepreneur who wants to start their business with a loan may face obstacle from the bank. Banks are sceptical with this type of business and more likely to give a loan to a restaurant than to a truck. (Food on a truck 2015.). E-Junkie (2016.) mentioned a minor factor which many people may not pay attention to. The whole operation heavily depends on fossil fuels and the price is fluctuating.

In conclusion, food truck concept is a perfect answer for new entrepreneurs who want to join the foodservice business but still concern about their limitation in capital and have the need of breaking into the industry and learn. Moreover, it can also be a solution for restaurants' owners who want to expand their business and reach out for more customers without spending a huge sum of investment for the new location.

### 2.5 Direction to develop

After being successful with the first truck, the operators may look for ways to expand their business. Weber (2012, 164-170.) recommends a few options as follow:

## One truck to many trucks

The business can be transformed from a single truck to a fleet of several trucks. The whole process is now easier and has less risk with all the experiences gained from the first one. This method creates an opportunity to cover a larger market, hence more customers. It also helps with seizing the possibility of selling in the case there are events in more than one spot on the same day. The safety of the business is increased. If one truck is broken or in maintenance, there is still the others to back up the business. The drawback, however, is more investment. It requires skills from the manager to handle multiple units at the same time. Not to mention that it affects the personal touch of the food truck when the consumers are now in contact with an employee while the owner is at one of the other truck. The recommended ideal number of food trucks is two per fleet.

## Franchising and licensing the concept

Rather than taking the burden of putting capital into a new truck, the owner can choose to franchising or licensing their concept. In this way, the concept is taken care of as well as the original owner does and the owner can have extra incomes from the initial fee and on-
going fee. The disadvantages of this direction is that the concept owner has to build up the whole set of documents as a franchising business and it may involve legal service or lawyer which may be costly at the end. In addition, with the low cost of investment, a new entrepreneur may prefer their own truck rather than dealing with fees from franchising method.

## New market

The mobility of the trucks give them chances to change the location when it feels like the current market is already saturated. In the case of a big country with many major cities like the US, moving to another state or municipality is an option. This comes hand in hand with the new set of regulation, different demands from customers and competitors who knows the market better.

## Restaurant

When the crave for stability gets big enough, a food truck operator can translate their concept into a sit-in restaurant with the advantages of having established brand, knowledge about the customer base and a well-formed business model. This is when the operator gives up the advantages of food truck and officially start the master race of restauranteur. Nevertheless, the food truck does not have to be dismissed. It can be kept and used as a complimentary to the restaurant.

## Wholesale

A food truck with a strong enough brand could reach out to cooperate with shops or markets to offer pre-packaged food, hence become a wholesaler. If they do not wish to be involved with another party, independently selling prepacked products as signature sauces or branded merchandises like t-shirt, kitchen wares are also viable.

### 2.6 Food trucks in Helsinki

### 2.6.1 History of street food in Helsinki

Food truck is a new trend in Helsinki. It started only a couple of years ago. That does not mean the people here were eating nowhere else than from their own kitchens or inside sitdown restaurants. Street food in Helsinki has a long history. This chapter will look at the story how the street food started up in Helsinki and how its movements reflect the dining habit of the residents which lead to the booming of food trucks nowadays.

Back to 1900s when the urbanization in Helsinki started, the city became attractive for the country side folks to come and work. While in the countryside the meals were provided by
the masters, in the city the responsibility to feed the workers was put back to their own hand. They were allowed to have a break but had to take care of getting their own food. Some of them went home, but with others it was not possible because of the distance between their houses and workplaces. The demand of access to food nearby the worksites rose. Secondly, in the 19th and 20th centuries, the kitchen was considered luxurious. Many people lived in tiny houses or rooms without the opportunity to cook their own meals. The mentioned people had to let their need of eating depend heavily on street foods. The scenario back then is that the city has hawkers, mostly foreign origin like Jews, Tartar and Russian. They sold simple foods such as pancakes, pies, bread, cake, fruit, ice cream and even alcohol. The popular spots were Hakaniemi, Railway station square and docks in Sörnäinen. The first regulation was introduced in1899 and considered rigorous. All street traders were ruled by Helsinki magistrate. At this stage, street food played the solely role of a sustenance for customers. For the hawkers, street food was the only option for them to get by.

The era of Finnish sausage kiosk (nakkikioski) - or snägäri in Helsinki slang - started after the Olympic in 1952. The food shortage came to an end, meats and dairy products were available again in abundance and with affordable price. All the positivities led to the opening of the first snägaäri in 1950s at the railway station square. The trend reached its peak in 1970s with the extraordinary number of those sausage kiosks all over the city. This era marked a transition of street food images. Foreign hawkers were replaced by Finnish owners. The simple foods were changed into products with a bit more complicated products like burgers, hot dogs, meat pies, frankfurter and fries. Local specialties like porilainen sandwiches were presented and became famous as well. The range of customers also expanded. The main groups were still people who needed to reach out for a quick lunch or dinner, which explained why taxi drivers and the police are regular customers of the kiosk. A new range of customers includes revellers from nightclubs when they were hungry and no restaurants opened at that time of the night. Even the elite class like the parliamentary went to grab their lunch at the Jaska kiosk in Töölö. It was once being the one and only option for people as sustenance now becomes a joy for the family who would spare a long drive to get the food and the kids can enjoy hot dogs as favourite treats.

1980s marked another milestone for the city when Kebab was introduced to the residents and became popular. The snägäri faced the competition with the surge of kebab places and burger chains. The recession in 1990s checked the end of golden era for sausage kiosks. Meanwhile, kebab and other ethic street food took off because of its affordability.

Helsinki once again changed it food landscape. The movement gets back to its root where street food businesses are dominated by foreigners.

In 2008 when the world faced the Great Recession, the gastronomy scene in Finland was affected. The restauranteurs found their way of adaption to cope with the situation. Most of the restaurants were scaled down and reintroduced their concepts in the direction of stepping down from high class culinary towards casual enjoyment. Timo Santala set a brand-new beginning for street food in Helsinki with his invention of Restaurant Day (Ravintolapäivä) in 2011. For four times a year, everyone can have their own pop-up restaurant for a day. The concept quickly got attention and became a worldwide known phenomenon. The success of Restaurant day reveals many aspects of the street food in Helsinki. There are demands from customers and there are people who wants to be street vendors. That was the antecedent for the food trucks boom nowadays. (Rantanen \& al 2014, 25-35, 43-55.)

### 2.6.2 Current situation

According to the public data collected on the 4th of April 2017, there are 18 registered trucks operating in Helsinki (Public Works Department 2017.). This statistic is fluctuating because the license's length can be a full year or by month. There will be more explanation later. The list of operating food truck in Helsinki is updated every seven days. However, this does not mean that there are only 18 food trucks in Helsinki. The list shows only the ones which have registered to operate during the given point of time. There are other food trucks which only operate during summer, for private events as a catering service or during big festivals. For the validity of the data, the author decides to study only the trucks which belong to the list published by PWD.

### 2.6.3 Regulation

## Trading spots

The available trading spots in the city are indicated by the PWD as follow.
There are four main areas to trade in city centers which includes the city centers, Hakaniementori square, Säätöspankinranta and Vaasanpuistikko.

Table 2. Trading spots in city center. Table is modified by the author.

|  | Name of location | Amount of slot (1 slot per vehicle/wagon) | Trading time |
| :---: | :---: | :---: | :---: |
| 1 | Asema-aukio North | 2 | 07-19 \& 19-06 |
| 2 | Elielinaukio | 1 | 07-19 \& 19-06 |
| 3a | Rautatientori Summer (after 4th May 2017) | 13 | 07-19 \& 19-06 |
|  | Rautatientori Summer | Mon-Fri 07-14 \& 21- |  |
| 3b | (1 Nov 2016-3rd May | 5 | 06 |
|  | 2017) |  | Sat - Sun 21-06 |
| 4 | Kansalaistori | 4 | 07-19 \& 19-06 |
| 5 | Simonpuistikko | 1 | 07-19 \& 19-06 |
| 6 | Narinkka | 9 | 19-06 |
| 7 | Kampintori | 4 | 07-19 \& 19-06 |
| 8 | Erottaja | 2 | 07-19 \& 19-06 |
| 9 | Kauppatori | 16 | 20-03 |
| 10 | Kukkatori (Havis | 4 | 20-03 |
| 11 | Fredrikintori | 2 | 07-19 \& 19-06 |
| 12 | Hietalahdentori | no specific slots | 20-05 |
| 13 | Töölöntori | 7 | Oct-Apr 16-05 |
| 13 | Toôlontori | 7 | May-Sep 19-05 |
|  |  |  | Mon-Fri 17-03 |
| 14 | Hakaniementori | 16 | Sat 17-23 |
|  |  |  | Su-1 |
| 15 | Säästöpankinranta | 1 | 07-19 \& 19-06 |
| 16 | Vaasanpuistikko | no specific slots | 07-19 \& 19-06 |

There is a minimum of 82 available slots - given that Hietalahdentori and Vaasanpuitikko do not have specific number of slots, which means there can be as many as possible. 10 out of 16 place allow operation 23 hours per day, 7 days per week. The rest has indicated time.

Outside of the city center the food trucks can operate anywhere if follow conditions are fulfilled. Other activities in the area (traffic, events, residents and so on) are not disturbed. The safety in general is not endangered. The operation shall not cause any damages to the area. A minimum of 2 meters of space for pedestrian must be ensured.

The food trucks are not allowed to operate in any parks in the city. Among the beaches there are seven indicated beaches where the food trucks can trade: Furuvik beach, He vossalmi beach, Iso Kallahti beach, Pakila beach, Porvariskuninkaanpuisto beach, Tapaninvainio beach and Veijarivuori beach.

The fruitiest spots are Rautatientori, Asema-aukio, Simonpuistikko consisting of 8 selling spots. In order to use these spots, the food trucks must contact the PWD and the department will rotate turn to give fair chances to each and every truck to use those spots (Vares 4 April 2017.). New sale spots can be recommended via the department feedback forms. However, there is no data about how long it will take before the new spot is approved.

## Procedure and fee.

A food truck in Finland must follow rules and laws as a traditional brick-and-mortar restaurant. However, due to the special characteristic: mobility, it has to be involved with two more departments of the City of Helsinki. As a vehicle, it needs to be registered with Trafi - Finnish Transport Safety Agency and the right to use the land is granted from Rakenusvirasto - Public Works Department.

Every truck will pay a fix amount of fee for the right to use the land as mentioned before. There are two options of installment. The yearly rate is 1860 euros, which consists of 1500 euros fee plus $24 \%$ VAT. The monthly rate is 248 euros, which consists of 200 euros plus $24 \%$ VAT. The entrepreneurs are free to choose the payment method which is the most suitable for their businesses.

In the contract template and starting guide from the PWD (PWD 2017.), there are some rules that the food trucks need to pay attention to:

1. Maximum dimension of a truck is 3 meters wide and 8.5 meters long. Bigger size trucks need separated agreement in advance.
2. Sales must be done directly from the food truck. Sales desks or tents outside the food truck are not allowed
3. In case of need of seats, a food truck can have maximum of 6 seats around it.
4. Beside the PWD, there are other departments of the city which can appoint the location for a given food truck. The Helsinki Wholesale Market holds right for market area. The Sports Department holds right for swimming beaches and sport facilities. The Real Estate Department holds right for public sites area. In addition, some certain spots are owned by private parties.

## 3 Customer expectation

Every person in the service industry aims for an ultimate goal of exceeding customer expectations. That is the key element for a successful business. The famous author Roy Hollister William once said:
"The first step in exceeding your customer's expectation is to know those expectations" (Engage Customer 2017.)
This chapter will focus on gaining deeper understanding of the customer expectation and the factors that affect it. It will start with defining what customer expectation is, its importance and what the purpose is to study about it. The second sub-chapter will focus on the kind of issues when it comes to customer expectations. The next one will give the information about how the expectation are categorized following with the theory about two levels of expectations. All the factors which influence the customer expectation will be discussed in the fifth sub-chapter. Lastly, the dynamic model of expectation is presented.

### 3.1 What are customer expectation?

The customer expectation is defined as follow:
"Customer expectations are belief about service delivery that serves as standards or reference points against which performance is judged" (Zeithaml \& Bitner 2009, 75).

Nowadays, customers have a wide range of selection whether it is service or tangible products to fulfil their need. The expectations will influence the purchasing decision and then used as a scale to evaluate how satisfied they are. Thus, they play a vital role from the beginning of the process till the last end where customers will make their decision to return to the offers or not.

Having the knowledge about customer expectation in depth are critical for the service provider. Kotler, Armstrong, Harris and Piercy (2017, 7.) warn the marketer about setting the right level of expectation for the customers. If the expectation is low, the business can satisfy the current customers, yet fail to attract more customers who have higher expectations. In contrary, too high expectation will lead to disappointed customers. Customer expectation is one of the keys which affect the satisfaction as well as developing and managing customer relationship. Zeithaml \& Bitner (2009, 75.) said that being wrong about customer expectation can lead to three consequences. The first one is losing customers to the competitors if they know better and hit the right target. The second one is wasting company resources on the aspects which do not matter to the customers. At the bottomline, mistakes about customer expectation will lead to closing down the business in a fiercely competitive market.

The nature of customer expectation and how they are formed are ambiguous. In practice, customer expectation along with the perceived service is used as two main pillars to assess the quality of service and study about customer satisfaction. The figure 2 demonstrates the customer assessment of service quality.


Figure 2. Customer Assessment of Service Quality (Zeithaml, Parasuraman \& Berry 1990, 23.)

The most popular used of studying about customer expectation is employed in the SERVQUAL, as known as the GAP model. It was developed by a group of academic researcher including Ms. Zeithaml, Prof. Parasuraman and Prof. Berry in 1988.


Figure 3. Conceptual Model of Service Quality (Zeithaml \& al 1990, 46.)

The expectations are involved in two gaps. Gap 1 and Gap 5. Gap 1 is between the Management perception of the consumer expectation and the actual ones from customer.

Gap 5 is about the shortfall between the service that customer expected and what they perceived

### 3.2 Expectation failures

Even though customer expectations are critically important. They are usually poorly handled. Watkinson (2013, 100-102, 111.) describes there are three common types of issues when it comes to the expectation:

## Dissonance

There is the gap between set expectation and the met one. The set expectation does not match the reality. In this case, the company has set a certain level of expectation to customers, yet do something else rather than what they have promised. This is the most common form. The way to minimise it is to define the gap between the set and met expectation, then either have a new set of expectation or adjust the performance to meet the current one. In short, you must do something exactly like how you have promised to do it.

## Absence

The expectations are not set at all

## Inference

The customer expectations are set elsewhere. This sound similar to the first case yet being a totally different one. In the dissonance form, the expectations are set but not met. Inferencing means that the expectation is left to the imagination of the customers. More often than not, those assumptions from customers are incorrect. The solution of this problem is to communicate clearly to the customers.

### 3.3 Customer expectation category

Watkinson $(2013,101$.$) divides the expectation into two groups:$

1. Existing expectations: What customers already have before getting in contact with a product or service. An example is when they surf the website of an airline they expect to be able to search and book for flights.
2. Set expectations: These are formed as a result of an interaction. For instance, if they already checked in online then they expect that they do not need to queue to check in at the airport.

Harris $(2007,17)$ shares quite a similar view when he also puts the expectation into two groups:

1. Primary expectation: They are the most basic requirements of the customer upon an interaction. For example, the expectations for eating out are having food without effort to cook at a reasonable price
2. Secondary expectation: These are formed based on the previous experience. They enhance the primary expectation. With the same example, the secondary expectation will be receiving good service, be treated well and the foods are tasty.

### 3.4 The two zones of expectation.

The expectation is used as the reference point to compare to the delivered service. The degrees of expectation are wide and vary from customer to customer. The follow figure presents the possible level of expectation from customers in a restaurant context.
(Zeithaml, Bitner \& Gremler 2009, 76.)


Figure 4. Possible levels of Customer Expectations (Zeithaml \& al 2009, 76.)

The complexity of the expectation in the figure above makes it challenging to comprehend, measure and manage the expectation. Zeithaml \& al (2009, 76.) condenses the topic into two main levels which indicate what customers desire for and what they consider acceptable. It is visualized with the following figure.

## Desired Service

## Zone of Tolerance

## Adequate Service

Figure 5. The dual customer expectation levels and zone of tolerance (Zeithaml \& al 2009,81.)

The "Desired Service" is a mixture of customer belief about what "can be" and "should be". These expectations may vary in different contexts. For instance, a customer will expect only fast service, convenience and good food from a fast food chain. In contrary, in an upscale restaurant they can fancy about well-designed surrounding, gourmet foods and extraordinary service. Naturally, the desired service expectations are quite similar for the business from the same category or sub category. (Zeithaml \& al 2009,77.)

The "Adequate service", on another hand, represents the "minimum tolerable expectation. This is the lowest level of performance that a customer will accept. Differentiating from the desired service, these ones fluctuate even among the different companies from the same category. Prior experience with the service also plays a role in the fluctuation. A customer who is a regular person who experienced the consistent service at a given firm will hold higher expectation for that firm than to other firms even though the level of consistency is rather lower elsewhere. (Zeithaml \& al 2009,77.)

The zone between the spectrum is called "The zone of tolerance". When the service performance is landing in this zone the customers do not pay much attention. When the performance falls out of the zone, there are two cases which can happen. If the service goes beyond the desired service, customers will be happy and satisfied. In case it goes under the adequate service, customers will be frustrated and hold negativity toward the service provider. In either way of getting outside of the tolerance zone, the levels of customer satisfaction increase or decrease proportionally with the level of exceeding the limit at each spectrum. This zone is not a fix measurement. It is only bounded by the two level of expectation. A zone can be expanded or compressed based on the characteristic of each individual customer and on which kind of situation they are in when they have contact with the service. For example, a waiting time of 15 minutes in a restaurant is unacceptable for the ones who are in a hurry or really hungry. A customer who does not have any of those issues still considers it unacceptable simply because he/she does not like the feeling of waiting and wants the service to be in a fast pace. (Zeithaml \& al 2009, 80-81.)

### 3.5 What influences customer expectation

With the model of customer assessment of service quality, Zeithaml \& al (1990, 19-20.) points out factors that influence and shape the customer expectation:

## Word of Mouth

People can form the initial expectation with the suggestion and recommendation they receive from people in their social circle.

## Personal needs

The levels of expectation strongly depend on the needs of each individual

## Past experience

the previous interaction with a service will influence the degree of expectation. It can be lower or higher in different aspect comparing to the ones with no prior experience.

## External communication

This refers to the messages delivered from the service provider to the customers. What a company promises or implies will affect the customer expectation. This factor includes a sub one which is the price. Frankly saying, the customers who pay more will certainly expect more from a service.


Figure 6. Factors influence expected service (Zeithaml 1990, 23.)

Ten years later, in a different book, Zeithaml \& al (2009, 82-90.) specify all the factors that influences the customer expectation of service based on the theory of dual expectation and the zone of tolerance.


Figure 7. Factors that influence the expectation (Zeithaml \& al 2009, 87.)

The three groups of influencing factors are explained in details as follow

### 3.5.1 Factors influencing desired service

Desired service is affected by two causes. The first one is personal needs which can be physical, social, psychological or functional. These needs are essential for the customer well-being and plays the vital roles in shaping expectation. (Zeithaml \& al 2009, 82.)

The second one is "lasting service intensifiers" which is then divided into two sub categories: derived service and personal service philosophy.

1. The derived service occurs when one individual represents a group of people. Usually in the case of one person making decision for a group or in B2B case, the needs of that person are rooted from the others who he/she represented.
2. Personal service philosophy refers to people who work in the same field themselves. With the knowledge about the operation and the past experience at work, their personal philosophy is strong, the tolerance is lower and the level of desired service is elevated. (Zeithaml \& al 2009, 83.)

### 3.5.2 Factors influencing adequate service.

The list of what influences the adequate service seems longer and more complicated than the desired service. Conversely, they are rather short-term and fluctuate more. The five factors are: temporary service intensifier, perceived service alternatives, customer selfperceived service role, situational factors and predicted service. (Zeithaml \& al 2009, 83.)

## Temporary service intensifiers.

This is when the customer awareness toward a specific need rises, usually in the emergency cases. It usually happens in a very short period of time. During that time frame, the level of adequate service increases as the result of the compressing of the tolerating zone. (Zeithaml \& al 2009, 84.)

## Perceived service alternatives.

When the customers believe that they have a wide range of choices, the level of adequate service is boosted. On the contrary, if they are convinced that they would not find better service elsewhere, it is more likely that the level is shifted downward. (Zeithaml \& al 2009, 85.)

## Customer self-perceived service role.

This refers to the customers' belief about their contribution in the service delivery. For example, a customer thoroughly explains to the waiter how he would like his steak to be cooked and he will be frustrated if the meat comes to the table over or undercooked. Meanwhile, a customer without any specific requirement for the same steak would not suffer the same feeling. In short, if they feel like they have done their part well, the adequate service is higher and vice versa. (Zeithaml \& al 2009, 85.)

## Situational factors.

This indicates the cases when the service is affected by unexpected elements and it goes beyond the control capability of the provider. Most of the cases are related to nature disasters such as floods, earthquakes or hurricanes. The customers empathize and have the understanding for the cause of the situation. These factors usually influence the customers, lower their expectation and widen the tolerate zone. This usually happens in a really short time frame. (Zeithaml \& al 2009, 85.)

## Predicted service.

This is the level of service that customers foresee that they will most likely get. If they predict a good service, their adequate service level will increase and a prediction about bad
service will consequently lead to lowering the level. For example, a person from a town whose residents are mostly compound of university students will predict a faster service in a restaurant during summer when the students are off from school. (Zeithaml \& al 2009, 87.)

### 3.5.3 Factors influencing both desired and predicted service

## Explicit Service Promises.

They are the statement regards the service that the service providers convey to their customers. These promises can be personal or non-personal. They are personal if delivered via a representative person from that organization and non-personal if the customers acquire the information via other communicational channels such as webpage, advertisement or written publication. This is one of the rare factors that can be fully controlled by the businesses. This contains the risk of over promising which leads to unrealistic desire from customers and false prediction of anticipated service performance in the future. (Zeithaml \& al 2009, 89.)

## Implicit Service Promises.

These promises are rather tacit and they also cause challenges for customers to have precise image about how the service should be and will be. Generally, the quality cues come through the price and the tangible factors of a service. Higher prices and notable tangible factors will imply better in quality. (Zeithaml \& al 2009, 89.)

## Word of Mouth Communication.

The suggestion, recommendation or evaluation from other people via different kinds of platforms such as expert review, consumer report and internet forum. Word of mouth is engaged in the cases that the service is hard to evaluate prior purchasing or require direct experiences. Since this source of information is considered to be objective, it holds a big share in influencing both desired service and predicted service. (Zeithaml \& al 2009, 89.)

## Past experiences.

The more customers are exposed to the service in prior to the current encounter, the more it affects the shaping process of prediction and desires. A customer naturally compares his night in a given hotel to his previous staying at the same place. The comparison may regard other hotels or hotel chains as well. To a wider extension, the customers also weigh the different industries which have some similarity in offer like cable service and phone service or hospital stays versus hotel stays. (Zeithaml \& al 2009, 90.)

### 3.6 The dynamic model of expectation

The dynamic model of expectation was introduced by Mr. Jukka Ojasalo from Hanken University. He integrates the time aspect into service quality. The model demonstrates the development of expectations over time. It is important for various reasons. Firstly, it is vital to understand the mechanism and the nature of expectation in order to be able to manage them. Secondly with this model he explained how and why a customer expectation may be changed in different stages of the customer service. Even though he developed this model based on examination of professional service area, this model is still valid and relevant for any type of service regarding customer relationship. (Ojasalo 1999, 81; Gröönroos, 2007, 99.). The model is presented in figure 8

$\longrightarrow$ : intentional dynamics $=$ expectations management
$\cdots$ : unintentional dynamics

Figure 8. A dynamic model of expectations (Ojasalo 1999, 97.)

His study identifies three distinct types of expectations:

## The fuzzy expectations

The customers sense an issue or a need and require the solution from the service provider. However, they do not have a clear understanding and cannot precisely formulate a picture of what or how the situation can be improved. They can also have hazy ideas about the change that they may need but still not certain about them. It is critical to the service provider to be aware of the presence of this kind of expectations. They must be able to materialize them and have the solutions to turn them into the explicit. If the fuzzy expectation remains fuzzy, customers will be frustrated, yet still wondered why they are not satisfied. Nevertheless, the customer expectation is rarely totally fuzzy. It contains many elements in which some are more or less fuzzy. (Ojasalo 1999, 82; Gröönroos, 2007, 100.)

## The implicit expectation

This refers to the case in which the characteristics of the service are so apparent that customers do not consciously think about them. It is too obvious and self-evident that most of the time is taken for granted by customers and neglected by the service provider. In the mentioned context, the existence of those expectations remains invisible until they are not fulfilled. It is important for the businesses to also detect the implicit ones and have a service which responses to all kinds of expectations, not only the explicit ones. (Ojasalo 1999, 82-83; Gröönroos, 2007, 101.)

## The explicit expectation

These expectations are precise and conscious. The customers know exactly what they wish to receive from a service. They highly pay attention to these and examine whether they are met. If they are not met, they can point out properly what were wrong. The nature of explicit expectation is more precise than the fuzzy and more conscious than the implicit. Even though the explicit expectation is clear and mostly assumed to be met, there are still cases that they are not. It is explained with the two terms: realistic and unrealistic expectations. Unrealistic expectations are the impossible or most likely cannot be met by either the service or the customers themselves. The issue is generated from two sources. The first source is the wrong assumption from the customers themselves. Secondly, the vague and unclear messages from the service that form the "implied-in-fact" promises. This type of promises leads the customers to believe that some features are offered while they are, in fact, not. The companies shall be attentive with what kind of messages are delivered to customers, not only at the beginning but also adjust along the process. It reduces the risk of forming unrealistic expectation and increases the chance of customer expectation being met. (Ojasalo 1999, 83; Gröönroos, 2007, 100-101.)

There are two dynamics that happens in the model.

## The intentional dynamics

They are visualised with the bold arrows. This can be and should be done by the service provider as expectation management. Fuzzy expectation is materialized and rendered into explicit. It is called focusing expectation. During the process the implicit ones are detected - in case they are not met - and becomes explicit. This is referred to as revealing expectation. Customers are also aware and be alerted of what are unrealistic and what are possible to look forward to. The effort from the company to shift downward the expectation from unrealistic toward realistic is named calibrating expectation. (Ojasalo 1999, 96-97; Gröönroos, 2007, 101.)

## The unintentional dynamics

Happen via the learning process in two ways. The dotted lines demonstrate the natural movement of expectations without any external effect from the companies. The second dynamic is indicated with the dotted arrow from explicit expectation to implicit expectations. When a customer gets used to the service, some characteristics of it turn to be implicit. The customer will not pay as much attention at the beginning and consider it as the nature of the service. However, if the expectation is not met because of some changes in the service itself or the way it is carried out then the problems arise. Consequently, the implicit expectation returns to be explicit. (Ojasalo 1999, 96-97; Gröönroos, 2007, 101.)

## 4 Methodology and implementation

In order to find the answers for the research question: "Is there a gap between customer expectation about products' diversity, price, time and location of operation and what they are offered from the food trucks in Helsinki?", there are two types of data that need to be collected. One flow is the data from the trucks and the other one is the expectation from customers. Thus, the following research is conducted.

### 4.1 Quantitative research

The target is to reach as many trucks and people as possible. Thus, it is wise to employ the quantitative research method. "The quantitative approach to research involves numerical data. It relies on numerical evidence to draw conclusion or to test hypotheses". (Veal 2011, 34)

Since the two researched objects - the food trucks and customers - are totally different in any given mean, two kinds of techniques have been employed to gather the data quantitatively. The author decides to use the observation method for the trucks. The information of customers is collected with a questionnaire-based survey.

### 4.1.1 Observation

Observation research is the one that focuses on the act of "looking" and exposed under four main forms. The first form is structured or systematic observation in which the process has formal rules about what to observe and how regularly it should be. The data is then sorted into forms and analysed as in a questionnaire survey. The second type is unstructured/naturalistic/ qualitative observation. This type target is to describe or explain a circumstance in comprehensively. It is considered an equivalent of the informal, in-depth interviews. The third type is called quasi-experimental observation. The observer will intentionally change the climate of researched object and detect what are the reactions. This type could be both structured or unstructured. The last kind is participant observation where the researcher actively is a part of whatever is studied. This type is quite complicated since it can be overlapped with all other three types. (Veal 2011, 208). In this thesis, the first type of observational research is employed.

Observation method has the nature of being unobtrusive. This is also the advantage of the method. The observation method enhances the validity of a research. When the researched objects or people are not aware of being observed, the researcher can avoid the situation of getting modified or distorted answers. (Veal 2011, 125.)

There are many situations in which observation method can be employed. For this particular study, the chosen form is mystery shopper. "Mystery shopping involves a researcher playing the role of user / visitor / customer as a method of obtaining information on quality of the experienced enjoy by users of a leisure or tourism facility or product." With this approach, the true identity of the researcher must be concealed. That is to avoid the deceptional act from the management of the researched object. The researcher has a checklist of features which he/she wants to observe. The list may vary from research to research. The mystery shopping approach gives the researcher the opportunity to directly interact with the researched object. (Veal 2011, 214.)

### 4.1.2 Questionnaire-base survey

"Questionnaire surveys involve the gathering of information from individuals using a formally designed questionnaire or interview schedule.". A questionnaire and survey instrument is used to elicit the information from the respondents as well as being a channel for documenting answers. (Veal 2011, 255-256.)

This type of approach has two main limitations. Firstly, it is the size of sample. Most of the time, it is often that a proportion will represent the whole population. That will make the reliability of the research questionable. Moreover, the survey relies on the answers from the respondents which could be exaggerated or under-reported. In addition, the surveys with sensitive topics may face inaccurate data as well. (Veal 2012, 259.)

A questionnaire survey could be completed in two ways. The first way is interviewer-completed. In this method, the questionnaire becomes the script of the interview, the data is recorded via various ways and depends on whether the interview was in person of via telephones. The second form is respondent-completed or also called "self-completion". The researched people can individually, independently answer to the survey. It could be done with a hard copy or online. (Veal 2011, 260). With the limited resources that the author can cope with, this study chooses the self-completion method to conduct. Furthermore, this will be an e-survey to take advantage of being fast and cost-effective characteristic.

The questions in this type of survey could be both closed or open-end kinds which depend on what kind of the information the researcher needs. More details of designing the questionnaire and collecting process will be presented in the next sub-chapter.

### 4.2 Questionnaire design and data collection

Closed questions, or also referred to as pre-coded questions, have a list of answers ready-made and they only need to choose the answers that suit their opinion. It is convenience for both parties. Especially the data analysis will take less time with this type of question. Open-ended questions, on the other hand, give the chance to the respondents to freely express their answers toward the asked topic. It generates a rich source of information which may be missed out in a pre-coded list. On the contrary, the analysis will be burdensome and time-consuming. The laziness of the respondents may lead to lack of answer for this kind of questions. (Veal 2011, 284-285.).

In order to enhance the diversity of data, both open-ended and closed questions are engaged in this questionnaire. There is a mix of various types of questions. The total number of questions is 20 , which are divided into five segments. The first one focuses on back ground information of the respondents, which includes gender, age, nationality, occupation and their experience in the general level with food trucks. The second and third parts ask about their time and location that they usually experience the service from food trucks respectively. The fourth one lays the attention on the variety of products that they would like to have. The last segment is to portrait the average amount of money that they are willing to pay per product or product group. The questions are formulated based on the literature review and the data from the trucks.

Besides the two types of questions which are mentioned above, the author also uses the scaling technique via Likert - scale question. The tool is used when it comes to analyse the aspects with high complexity like attitudes and opinions of customers. The respondents can express whether they agree or disagree with a given statement or how important they are affixed to an element. Using this method helps the researcher measure the quantity of responses later on in the process. (Veal 2011, 298.)

All the questions are purposely designed to serve the goal of the research. The draft survey was discussed with five people who are working in different industries as well as the supervisor of this thesis. The feedback is then used for the revision. Some introductions were added and the author reconstructed the order of questions to make it more logical and coherent. The survey is only available in English. The full version of it can be found in Appendix 1.

The research for the trucks was conducted on two days. The first time was during a weekend night in the city center including Narinkkatori, front side of the Central Railway Station
and the back side where the Ice Rink is located. The second time is during a food carnival event in Kansalaitori. For both conductions, the author took pictures of the menu which is visible on the trucks, then processed to strike a short and simple conversation with the operators about what the time and location that they operate are. On the second time of conducting, some trucks were hustling with long queue of customers, hence there was no possibility even for a short talk. The author then contacted them via emails or Facebook with the inquiry of regarded information.

The online survey for customers was spread via three main channels: the internal email system of Haaga-Helia University of Applied Sciences, Facebook and the author's personal network. Via the platform of Facebook, there are two groups that the link to survey was published. The first one is The International English Speakers' Association of Finland (IESAF). The second group is Welcome to Finland - a community of Vietnamese students in Finland.

### 4.3 Justification, Reliability, Validity and Limitations

The research is done in order to figure out what are the current offers from food trucks and what are the expectation from customers regarding four discussion points including the variety of products, the selling prices, the time and location of operation. A mixed technique of quantitative methods is employed to suit the characteristics of each researched object.

One out of two times of conducting the data gathering from food trucks was a street food carnival where many trucks which usually do not opt to operate on a regular basis also show up. This increases the amount of data and gives better understanding of the scenario of food trucks in Helsinki. Furthermore, the data is personally observed and collected by the author which makes it more reliable. For the online survey, the channels in which the survey was spread have the diversity in terms of nationality and age group. This helps to avoid the biased opinion.

There are several limitations that the research must cope with. The first one is about the time of conducting. The process starts from March to May which are cold months in Helsinki, hence not the peak season for food trucks to operate. In addition to the period of time, the observations were conducted on two different days. If the author had had more time to do it, the results would have been even better. Secondly, the locations of conducting were the city center and during an event for food trucks. There are more spots for the trucks around the city as well as a bit further from the center. This research only focuses on two locations, which leads to the absence of trucks from other places.

The next limitation belongs to the nature of a questionnaire based survey, which is the sample size and the accuracy of the data. The number of responses is 429 which is a relatively big sample in the context of a bachelor thesis. However, its merit to represent the whole population is still questionable. Veal $(2011,259$.) says that the accuracy of the data depends on the respondents' power of recall, their honesty and how the questionnaire was formatted. The author can only influence the last factor by trying to structure the questionnaire as well as possible. The first and second factors are totally beyond the keen of the author's control. There is also the chance of misinterpreting the questionnaire due to the lack of knowledge toward this specific topic among the respondents.

The last limitation is about the topic itself. There are many features of a food truck that could be studied. On the same token, customer expectation is also an extensive topic. With the limit of resources, the author has to narrow the topic down to the variety of products, selling prices, operational time and location. There are many factors which have to be neglected such as portion size, quality of products and so on.

## 5 Data analysis and Finding

In this chapter the collected data is presented. The first sub-chapter will introduce the information from the truck. The second one will show demographic and basic statistic summary from the respondents of the online survey. In the last sub-chapter, data from both process will be compared as well as combined with the theory to find out the answer for the research question

### 5.1 Background of trucks

The target for data collection is all the food trucks that operate in Helsinki. In total, there are data of 22 trucks. Two of them were rejected for the following reasons. The first one only serves as a learning environment for a culinary school in Helsinki. The second one sells blazing-salmon (loimulohi) as an ingredient rather than under the form of a meal. Thus, the final pond of data includes only 20 trucks.


Figure 9. Base location of food trucks ( $\mathrm{N}=20$ )

The proportion base on which city the food trucks are from is illustrated in figure 9. 18 trucks, which make up $90 \%$ of the total, are from Finland. One out of those 18 are from Jäppilä. The other 17 trucks are Helsinki based. There are two trucks that come from Stockholm, Sweden. The explanation for their presence in Helsinki is for Street Food Carnival at the end of April 2017


- With a restaurant

Figure 10. Proportion of trucks operate with restaurant under same brands ( $\mathrm{N}=20$ )

Figure 10 illustrates the proportion of how many food trucks are operating with a restaurant under the same brand. The number of trucks which are the solely form of business of the operator and operate independently are 11, which makes $55 \%$ of the sample. There are 9 trucks ( $45 \%$ ) operating as a side business of a restaurant with the same brand.

### 5.2 Data from customers.

### 5.2.1 Sample demographic.

The data was collected in a period of five days. The target group is people who must live or work within the Great Helsinki area. There is a total of 429 respondents.


Figure 11. Proportion of Gender ( $\mathrm{N}=429$ )
Figure 11 illustrates the proportion of gender among the respondents. There is a significant difference in the distribution of researched gender. The number of female respondents doubles the male ones. There are 293 females, which accounts for $68 \%$. Only 136 males took part in this survey, which is equivalent to $32 \%$.


Figure 12. Proportion of Age ( $\mathrm{N}=429$ )

The proportion of age group is shown in figure 12. 89\% of the respondent are from 18 to 39 years old. In which, $47 \%$ is from 18 to 24 and $42 \%$ are from 25 to 39 years old. There are 45 respondents belonging to the 40-60 age group (11\%). One respondent is under 18 and there is nobody who is over 60 years old answering this survey. The majority of respondents are relatively young. It partially portraits the target customers for food truck in Helsinki.


Figure 13. Proportion of Nationality ( $\mathrm{N}=429$ )
The dispersion of nationalities is explained in figure 13. The majority of respondents are from Finland. There are 304 Finnish which accounts for $71 \%$. Vietnamese makes $13 \%$ with 55 respondents. Russian follow up with 20 people take part in this survey. The rest of the answers (11\%) come from 28 others nationalities which are: The Netherlands, Estonia, Germany, The United States, Brazil, United Kingdom, Canada, The Philippines, India,

Portugal, Spain, Ukraine, Cameroon, Chile, France, Hungary, Indonesia, Israel, Japan, Kazakhstan, Kenya, Latvia, Lithuania, Mauritius, Nepal, Nigeria, Slovenia and Thailand. All the nationalities in this group has less than 7 people per country. It is too sloppy to bring all of them to the chart. Thus, they are merged into one group.


Figure 14. Respondents Occupations ( $\mathrm{n}=758$ )

Occupations of the respondents are illustrated in figure 14. The question gives the people right to choose more than one option. The reason behind is that it is common in Helsinki for people to have a part time job on the side of their study or take courses while working full time. 368 respondents are studying with 256 of them being full time students while the other 112 are part time ones. 157 respondents work full time whereas 153 have a part time job. 9 respondents say that they are self-employed. A total of 71 respondents are unemployed.


Figure 15. Allergies and Special Diets from Respondents ( $\mathrm{n}=456$ )

Figure 15 depicts the need of customers regarding their allergies or type of diets they are following. There are chances that an individual respondent has more than one type of allergies or special diets thus it is possible to choose more than one answers for this question. A total of 456 answers are given. The largest portion of the respondents which is made up from 286 answers is totally allergy-free as well as do not follow any special diets. 42 respondents have lactose intolerance condition. 19 people require a gluten free diet. The vegan and vegetarian segment make up a total of 48 answers with 12 vegans and 36 vegetarians. The respondents are also given the possibility to describe their answer in free-text form in case their allergies or special diet do not belong to the pre-coded answers. 61 answers were mentioned in this group which can be divided into following group.

The first group is allergy which may put the customers in risk if consuming the allergic ingredients which are: milk, soy, fruits \& pollen, vegetables such as carrots and celery, nuts, fish and seafood in general, egg, rice and spices. The second group is for customers who have diseases and their diet belong to the treatment. In this group, there are people with type 1 diabetes; IBS (irritable bowel syndrome) patients with FODMAP diet and Gl (gastrointestinal) patients with SCD (Specific Carbohydrate Diet). The last group leans more toward personal choices diet such as no red meat, low-carb, low-sugar, no wheat or have affiliation with religions such as no pork for Muslim and Kosher for the Jews.

Even though the majority of the customers do not have to worry about allergies or special diets, there is still a high number of guests who have one or more special requirements about their meal. This should be noted and paid attention to from the food trucks.

### 5.2.2 Experience with food trucks in Helsinki



Figure 16. Proportion of prior experience with food truck abroad ( $\mathrm{N}=429$ )


Figure 17. Proportion of prior experience with food truck in Helsinki $(\mathrm{N}=429)$

More than three quarter ( $76 \%$ ) of the sample have eaten from a truck outside of Finland. 101 people, which accounts for $24 \%$, answer "No" for the same question. The scenario is quite similar when the question focuses only on the food trucks in Helsinki. 322 people say they have taken their food from a truck in Helsinki. 96 people have never done it but willing to. $3 \%$ of the answers, equal to 11 people, confirm that they have never and they will not buy food from a food truck.


Figure 18. Customers' reasons to eat from the trucks ( $\mathrm{n}=675$ )

The respondents are asked about why do they choose to eat from the truck and they can choose more than one reason. Among the 675 given answers, the most commonly cited reason is because the food is good. Cheap price is the second popular reason with 157 times mentioned. Closely follow the price is the availability which mean at the given time there were no other options to dine at. This reason was mentioned 157 times. 109 others answers were given as well. Some of those are actually overlapped with the ready-coded options so they are eliminated. The rest can be grouped into following reasons. Firstly, the customers are curious about food truck and want to give it a try. Secondly, people said that the food, especially ethnic or exotic foods are more authentic from the trucks. Some of the options the trucks' offers are not available in restaurants yet therefore they choose to dine from the trucks. Thirdly, many times it was mentioned that they were at a private event where the food truck plays the role of a catering service. Last but not least they stated that they want to support friends who are trucks' operators.


Figure 19. Channel which customers get information about food trucks ( $\mathrm{n}=692$ )

Figure 19 illustrate all the channel via which the customers obtain the information about food trucks. It is likely that a customer get the information through more than one channel that is why this question also allows the respondents to choose more than one option. In total, there are 692 answers given. A significant number of 360 answers is that they just see it on the street. The next two commonly-cited channel are via friends or family members' recommendation and online platform such as official websites and social media with 148 and 140 times mentioned respectively. Newspaper was mentioned 19 times. TV advertisement is the least popular with only 5 time cited. 20 respondents claim that they do not know any food trucks in Helsinki.


Figure 20. Customers' companion when eating from food trucks ( $\mathrm{N}=429$ )

The respondents were asked to choose who they are usually with when they dine at a truck. The result shows that $44 \%$ of the respondents were with a friend. $27 \%$ of them have the companionship with a group of friends. Being alone or with a family member have quite close rate to each other with $11 \%$ and $10 \%$ correspondingly. Only $2 \%$ of the sample answered that they ate from the trucks with their colleague or group of colleagues. The last 5\% states other answers which include their boyfriend/girlfriend/partner and their pet.

### 5.3 Comparison

In order to find out whether there is a gap between the expectation from customers and the current offers from food trucks in Helsinki, both flows of the data will be combined with the theory framework and analysis. The four points of the discussion will be the variety of the products, price, time and place of distribution.

### 5.3.1 Location of operation



Figure 21. Location where customers get food from trucks ( $\mathrm{n}=727$ )


Figure 22. Customers willingness to choose food trucks outside city center area ( $\mathrm{N}=429$ )

When asked about where they usually buy from food trucks, several places are cited. Based on all the mentioned locations, festival venue was mentioned 315 times, followed by Central Railway Station area with 260 times. The third popular spots of food trucks are

Narinkkatori and the area around Kamppi shopping center with 105 times cited. 41 answers give different locations where they get food from the trucks. There are spots in the city center like Senaantintori, Kasarmitori. A little bit further spots include Hakaniemi, Kallio, Teurastamo, Ruoholahti and Bruno. Beaches and parks in Helsinki are also mentioned. Within the range of Helsinki city, the furthest location where customers encounter with food trucks includes the east side of Helsinki such as Herttoniemi, Itäkeskus and Vuosari. Some answers are that they buy the food when the food trucks were on tour to suburb of Helsinki. Three places outside Helsinki, which are Espoontori, Otaniemi in Espoo and Tikkurila in Vantaa, are mentioned.

A hypothesis about the scenario that food trucks park elsewhere than city center was presented in the survey to see how likely the customers still choose the trucks. 42 of them (10\%) answer with a firm "No". Approximately $58 \%$ shows that they will if the distance is not too far and under certain condition of what will be offered there. 136 people, which accounts for $32 \%$, are unsure and answer "Maybe".


Figure 23. Operational Location of Food Trucks $(\mathrm{N}=20)$

The dispersion of operational site is explained in figure $23.60 \%$ of the sample, which includes of 12 trucks, operate in festival venues wherever it may be. The rest 8 trucks, which accounts for $41 \%$ of the data, claim that their operational area is around the city center, yet not able to confirm the exact location due to the regular rotation from PWD.

Regarding the location, the customer expectation and current operational spots of food trucks are quite aligned. City centers and festival venues are the most popular places where the customers dine from trucks. Further location from the city centers are also possible for the trucks to operate since the customers show interest to come.

### 5.3.2 Time of operation



Figure 24. Time when customers get food from food trucks ( $\mathrm{n}=855$ )

Figure 24 illustrates the time when customers get served by food trucks. Based on all the points of time mentioned, during festival was cited most with $35 \%$, followed by $28 \%$ of weekend night. The third popular time is weekend during day time with $18 \%$. During the weekdays, day time and night time are almost equally mentioned with $9 \%$ and $10 \%$ respectively.


Figure 25. Customers recommended on operational time ( $\mathrm{n}=527$ )

When asked about whether food trucks should extend their operation time, $40 \%$ thinks the current time is enough and no need of an extension. $26 \%$ would like to have the service during the afternoon from 15.00 to 18.00 . $25 \%$ suggests the opening time should be extended to lunch time around 11.00 and 14.00. Lastly, $10 \%$ wants the operation to be in the morning, before 11am to be exact.


Figure 26. Operational time of food trucks $(\mathrm{N}=20)$

The proportion of operational time is shown in figure 26. Operating during festival takes the largest share. That portion is $60 \%$ and made up from 12 trucks. $40 \%$ of the sample, which includes 8 trucks, operate all year-round. Within those 8 trucks, 5 of them (25\%) only operate during night time of the weekend. The other three ( $15 \%$ ) also take weekend night for the winter but mentioned that whenever the weather gets warmer, they will add day time and daily operation to their schedule.

From the customers' point of view, $38 \%$ of the mentioned answers are during the night time, which very closely matches the number of trucks operating during night time (37\%). Comparing the two statistics, it seems like the choice of operational time from food trucks operator is perfectly aligned with customers' demand. However, the number of cited answers, which recommend an extension of operational time is $60 \%$, advances the $40 \%$, who think the current time is enough. That signals the demand of customers about other time of operation. Food truck operator should pay their attention to other time beside the festival and the night time.

### 5.3.3 Variety of products



Figure 27. Type of products customer usually buy from food trucks ( $\mathrm{n}=669$ )

In total 669 answers collected for the question "what kind of products do you usually get from a truck?", a majority of customers go for savoury products such as hot dogs, burgers, sandwiches and other types of hot foods. Sweet products and non-alcoholic drinks share quite close rate at $19 \%$ and $17 \%$ respectively. $3 \%$ of the cited answers mentioned toward specific types of products such as tacos, Vietnamese "bánh mi", ethnic foods, vegan and healthy foods.

The breakdown of current offered products in Helsinki is shown in the table below

Table 3. List of current offers

| By region | By type of products | Others |
| :--- | :--- | :--- |
| Finnish | Burgers | Fusion |
| Greek | Burritos | Vegetarian |
| Korean | Falafel | Barbecue |
| Latin America | Fish \& Chips |  |
| Mexican | Hot dogs |  |
| Middle Eastern | Sandwiches |  |
| Southern Grill | Soup |  |
| Thai | Tacos |  |

The current offers are divided into three groups. The first group is the regional cuisine determined by geographic location. The second group is by a specific type of products and
the last one is cooking style. The data is sorted based on the frame from David Weber. The total number of type of offers is 23 . The figure is higher than the number of food trucks because of overlapping in data. For instance, one food truck in the sample sells a variety of dishes with falafel as the core product. It is then categorized into three groups: Middle Eastern, Falafel and Vegetarian. By the same token, some trucks with larger menu, mixed type of products could be either categorized into all of the groups or no group at all.

There is also a difference when combining the time of operation with the offers. The trucks in festival time are more themed-truck or product-focused truck such as Soup truck, Fish \& Chip or Korean Street food truck. Within the 8 trucks that operate all year-round, 6 of them offer a mixed menu, 1 focuses on Greek food and the last one sells BBQ themed products. The size of the menu also massively fluctuates in this group. The smallest menu has 4 products while the biggest one offers over 33 options.
$100 \%$ of the trucks in this study sells savory products. There is no truck that serve sweet products or have sweet and savory combination. The beverage truck does not exist as well. Despite the fact that there is no such thing as a beverage truck in Helsinki, there is still $17 \%$ of customers get their drinks from trucks. It is understandable since most of the trucks included bottled water, milk and canned or bottled soft drinks in their menu. There is still a need of a truck that focus on beverage only.

All of the trucks decide to focus on savory foods. That reflects perfectly the demand of the market. 19\% of the answers mentions about buy sweet products from a truck such as ice cream and cupcake. Onto the market, the author personally knows that there are at least 2 trucks which sells ice cream in the city yet that could not be counted in this pond of data. Nevertheless, it is justifiable for the trucks operator to go with savory foods since it has the largest share of demand and provide a higher chance to be profitable. However, the need of customers about sweet products and non-alcoholic drinks exist yet be left out.

In the survey, the respondents were asked to give their opinions about what kind of foods they think are missing from the food trucks in Helsinki. It is a free text question. The number of answered is massive. After filtering to reject irrelevant answers, the results are presented into three group, using the same framework from David Weber.

## By region/location based cuisine

There is a total of 32 cuisines mentioned by the respondents. The answers are listed from the highest frequency to lowest ones: Asian, Mexican, Vietnamese, Thai, Indian, Japanese, Korean, Chinese, Latin America, Ethnical, Finnish, Middle Eastern, Nepalese, West Africa, Greek, Indonesian, Italian, Spanish, Arabic, Eastern Europe, French, Iraqi, Lebanese, Malaysian, Mediterranean, Russian, Singaporean, Somali, Sri Lanka, Tex-Mex, Turkish, Venezuelan.
Asian was mentioned most with the frequency of 31 times, followed by Mexican 19 times, Vietnamese 13 times and Thai with 10 times. The rest of the group's frequency are as high as 8 times and as low as 1 time.

## By type of products

Sweet products. There are 8 types of products belong to this category. Waffle is the most popular with 9 time cited and closely followed by pancake with 8 times. Fruit/fruit cocktail and churros are equally mentioned 4 times. The other four products are frozen yoghurt, dessert in general, cupcake and tiramisu are mentioned 1 time each.

Savory products. 55 specific products are specifically described by the respondents. The answers are listed from the highest frequency to lowest: sushi, taco, salad, wok, burrito, pizza, dumpling, kebab, spring roll, ramen, soup, tortilla, Vietnamese bánh mì, donut, poke bowl, sandwiches, seafood, sausage, fries, arepas, gourmet / New York style hot dog, fried chicken, wraps \& roll, steam bun, tapas, gyros, curry, saslikkia, lunch boxes, shawarma, BBQ skewer, chips \& curry sauce, haloumi / goat cheese burger, pelmeni, borsch, lobster roll, corn on the cob, poutine, curry wurst, fish \& chip, baguette, smoked meat, fried rice, noodle soup, fajitas, bratwurst, pad Thai.

Sweet and savory combined. There are 7 products in this group, listed by frequency from high to low: crepe, bagel, pretzel, popcorn, pastries, pies and roasted nut.

Beverages. There are 9 products in this group, listed by frequency from high to low: smoothies, alcoholic drinks, fresh-pressed juice, coffee, homemade lemonade, wine, bubble tea, tea and mulled-wine.

It is quite easy to see that the expectations from customers are extensive comparing to the limit offers that available in Helsinki. The food trucks that offers sweet products and beverage are totally missing in the market. Within the products that described by the respondents, few of them are already in the market like kebab, sandwiches, hot dog, smoked meat, sausage, fries and so on. There are two reasons why they get mentioned.

Firstly, the quality of product is relatively low. The answers always include term like "high quality, real, gourmet" before the name of the product. Secondly a lot of them only available during festival time or special occasion for food trucks like street food carnival and absent the other times which lead the customers to think that they are not available in the market.

Besides the four main groups mentioned above. There are several types of product which were cited as well. They are: healthy food, vegetarian, vegan, raw food, breakfast, dairy free and gluten free


Figure 28. Visibility of special diet products ( $\mathrm{N}=20$ )

Among all the trucks there are only 4 which have offers for special diet such as Lactosefree, Gluten-free, Milk-free, Vegetarian and Vegan. They also make it visible on their menu with the abbreviation like L (lactose-free), G (gluten-free), M (Maidoton / milk-free) and Veg (vegetarian/vegan) behind the name of the product.

Figure 29. Availability of vegan/ vegetarian products ( $\mathrm{N}=20$ )

In total, there are $75 \%$ percent of the trucks have special offers for vegan and vegetarian customers. In which, 1 truck ( $5 \%$ ) sells solidly vegetarian / vegan products. $70 \%$ of the total sample offer one or more options toward customers with this need. Those 15 trucks generate a total amount of 19 options for this type of customers. One quarter of the sample which consists of 5 trucks have all their offers not suitable for customer with this needs.

### 5.3.4 Price



Figure 30. Customers comment on prices $(\mathrm{N}=429)$

The figure 30 shows customers opinions about the prices of food trucks in Helsinki. 69\% of the respondents think that the current prices are reasonable. One third of the sample says they think it is expensive. Only $1 \%$ of the total answers confirm that they think it is actually cheap.

The respondents are then asked to choose the average price that they are willing to pay for each group of products. The result is presented in the following table.

Table 4. The average price that customer willing to pay per group of product $(\mathrm{N}=429)$.

|  | $<\mathbf{3}$ | $\mathbf{3 - 5}$ | $\mathbf{5 - 7}$ | $\mathbf{8 - 1 0}$ | $\mathbf{> 1 0}$ | Average |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Asian foods <br> (rice or noodle base with filling) | $3 \%$ | $15 \%$ | $43 \%$ | $36 \%$ | $2 \%$ | 3.2 |
| Burgers | $4 \%$ | $23 \%$ | $39 \%$ | $27 \%$ | $7 \%$ | 3.09 |
| Burrito | $5 \%$ | $25 \%$ | $45 \%$ | $24 \%$ | $1 \%$ | 2.93 |
| Chicken nuggets | $27 \%$ | $46 \%$ | $24 \%$ | $4 \%$ | $0 \%$ | 2.05 |
| Chips \& dip | $35 \%$ | $49 \%$ | $13 \%$ | $3 \%$ | $0 \%$ | 1.84 |
| Falafel | $12 \%$ | $31 \%$ | $41 \%$ | $16 \%$ | $0 \%$ | 2.62 |
| Finnish loaded fries <br> (Makkaraperuna) | $19 \%$ | $35 \%$ | $37 \%$ | $8 \%$ | $1 \%$ | 2.38 |
| Finnish meat pie <br> (Lihapiirakka) | $31 \%$ | $45 \%$ | $20 \%$ | $4 \%$ | $0 \%$ | 1.97 |
| Fish \& Chips | $10 \%$ | $26 \%$ | $45 \%$ | $18 \%$ | $1 \%$ | 2.75 |
| Grill sausages | $45 \%$ | $38 \%$ | $14 \%$ | $2 \%$ | $0 \%$ | 1.75 |
| Homemade lemonade | $65 \%$ | $27 \%$ | $6 \%$ | $2 \%$ | $0 \%$ | 1.45 |
| Hot dogs | $42 \%$ | $40 \%$ | $14 \%$ | $4 \%$ | $0 \%$ | 1.79 |
| Kebab ( with fries / rice / pita) | $6 \%$ | $23 \%$ | $48 \%$ | $22 \%$ | $1 \%$ | 2.9 |
| Meatballs with fries | $9 \%$ | $28 \%$ | $48 \%$ | $14 \%$ | $0 \%$ | 2.68 |
| Onion rings | $52 \%$ | $37 \%$ | $9 \%$ | $2 \%$ | $0 \%$ | 1.62 |
| Sandwiches | $14 \%$ | $47 \%$ | $31 \%$ | $8 \%$ | $0 \%$ | 2.33 |
| Soup | $21 \%$ | $46 \%$ | $28 \%$ | $4 \%$ | $0 \%$ | 2.17 |
| Tacos | $12 \%$ | $32 \%$ | $42 \%$ | $14 \%$ | $0 \%$ | 2.57 |
| Wraps <br> (with chicken / falafel / kebab fill- <br> ing) | $3 \%$ | $27 \%$ | $50 \%$ | $18 \%$ | $2 \%$ | 2.88 |

The highest percentage of respondent for each type of products is yellow-highlighted. Among the 19 product groups, there are 9 groups which customer most commonly cited that they will pay from 5 to 7 euros per dish which are Asian foods, burger, burrito, falafel, fish \& chip, kebab, meatball with fries, taco and wrap. It is understandable why the customers agree to pay more to these group since they can play the role of a complete meal and the portion size is usually enough to fill up a hungry stomach. The next category has 6 groups of products that customer will pay from 3 to 5 euros which includes chicken nugget, chips \& dip, Finnish loaded fries, Finnish meat pies, sandwiches and soups. It is quite strange since a couple of product like meat pie or soup could totally belong to the first group yet are graded in the lower segment of price. The last group has four type of products that the maximum price customers want is only 3 euros. They are grill sausages,
homemade lemonade, hotdog and onion rings. These seems to be small snacks rather than a meal therefore the prices also lower.

The collected menus from food trucks are broken down into type of food groups and find the average price or price range for each group. The information is shown in the follow table.

Table 5. Average price per group of product

| Group of product | Averages prices |
| :--- | ---: |
| Asian Foods | $8-12$ |
| Burgers | $4.5-12$ |
| Burritos | 10 |
| Dessert / Ice cream | $4-5$ |
| Finnish meat pies | $3.5-8.5$ |
| Fish \& Chips | 10 |
| Fries with sausages / meatballs / kebabs | $6-7.5$ |
| Homemade lemonade | 4 |
| Hot dog | $3-6.5$ |
| Others (fries / chicken nugget / mozzarella | $1-10$ |
| sticks/ onion rings / nachos / sausages / |  |
| frankfurter / | $6.5-20$ |
| Plater (mixed / chicken / kebab / falafel) | $5-15$ |
| Sandwiches (Pita / Gyro / Reuben) | $6-10$ |
| Soups | $8-10$ |
| Tacos | $7.5-10$ |
| Wraps / Rolls (chicken / kebab / falafel) |  |

The product groups are alphabet listed. There are totally 15 groups. 12 of them have the average price under the form of a bipolar range for two reasons. Firstly, one given type of product is sold from different trucks and have different prices e.g. burgers and hot dogs. Secondly, from one truck, a given product has more than one price which may come from the extra they come with. For example, a Finnish meat pie starting price is 3.5 e but when it comes with frankfurter or sausages then the price can be up to 6 e . With all factors that affects the price, it is impossible to get a fix average price for a product. Thus, they are presented under the form of a price range. There are three products that have fixed average price which is burritos, fish \& chip and homemade lemonade. The reason behind it is there is only one truck serve burrito and same for fish\&chip. Both of them also have fixed
price for their product hence the price is presented as a fixed figure instead of a range. The cheapest product is a Corn Chip which is sold at 1 euro per piece. The most expensive one is a meat plater with mixture of products that costs up to 20 euros per plate.

There was a mistake in constructing the questionnaire which makes the two list of products unmatched. After carefully considering, the author filtered out the incomparable group and the final list have 11 groups to compare between the trucks offer and the customer expectation.

Table 6. Price comparison

|  | Average price <br> range from <br> customer | Current market <br> Prices |
| :--- | :---: | :---: |
| Asian foods <br> (rice or noodle base with filling) | $5-10$ | $8-12$ |
| Burgers | $5-10$ | $4.5-12$ |
| Burrito | $3-7$ | 10 |
| Finnish meat pie <br> (Lihapiirakka) | $<3-5$ | $3.5-8.5$ |
| Fish \& Chips | $3-7$ | 10 |
| Homemade lemonade | $<3-5$ | 4 |
| Hot dogs | $3-5$ | $3-6,5$ |
| Sandwiches | $3-7$ | $5-15$ |
| Soup | $3-7$ | $6-10$ |
| Tacos | $3-7$ | $8-10$ |
| Wraps <br> (with chicken / falafel / kebab filling) | $7,5-10$ |  |

In the table, there are two kind of figures. The first one is the average price range which customers willing to pay for the products. This are made by choosing the two price ranges of each product which have the biggest dispersion from the respondents. The second figure is the current average market price.

As we can see from the table, there are three type of price ranges from customer opinions: under 3 to 5 euros, 3 to 7 euros and 5 to 10 euros. The selling price range of the trucks, on the other hands, are broader. The difference between cheapest option and most expensive option for the same kind of product could be as low as 2 euros for tacos and as high as 10 euros in sandwiches group. There is only one product - homemade lemonade - which has its selling price is lower than the highest prices that customers willing to pay. The rest of the list has the price ceiling lower than the market's ceiling. The differences between those two figures are as low as 1.5 euros (hot dog) and as high as 8 euros (sandwiches)

In conclusion, even though the majority of customers answered that they feel the current prices are reasonable, the amount they willing to pay is actually lower than the market selling prices.


Figure 31. Difference in price of vegetarian products ( $\mathrm{N}=15$ )

In total, there are 15 trucks offer vegetarian options. 3 trucks (20\%) pricing their vegetarian products 1 to 2 euros cheaper. 7 trucks ( $47 \%$ ) stay at the same prices compare to product in the same category. $1(7 \%)$ truck decides that it should be 1-2 euro more expensive. 2 trucks fall into the mixed category that their vegetarian - segment could be both. Some are more expensive. Some are cheaper. The last two trucks are listed as other because there is no reference point to judge the price. The first truck offer all meals included meat. There is only Corn Chowder vegetarian, no other soup offer therefore no comparison. The second case is the truck sells only vegetarian food thus no reference point either.

All the lactose free products stay the same price. However, in the gluten free product there is 1 truck decides to increase the price. Customers have to pay 1 euro extra if they wish to have their meal gluten free.


Figure 32. Customer opinion about differences in prices for vegetarian/vegan products ( $\mathrm{N}=429$ )

The figure 32 shows what is the differences in prices for the vegetarian and vegan product from customer point of view. Approximately $73 \%$ think that the price should be the same. Roughly $6 \%$ suggests it should be cheaper and about $22 \%$ express that it could be more expensive.

Table 7. Extra charge for vegetarian / vegan products

| More expensive |  |
| :---: | :---: |
| Value | Frequency |
| $0.5-1$ | 3 |
| $0.5-2$ | 1 |
| 1 | 14 |
| $1-2$ | 18 |
| $1-3$ | 1 |
| $1-5$ | 1 |
| 2 | 9 |
| $2-3$ | 9 |
| $2-4$ | 1 |
| 3 | 2 |
| $4-7$ | 1 |
| $5-7$ | 2 |
| $5-10$ | 1 |
| 9 | 1 |
| $12-15$ | 1 |
| $10 \%$ | 1 |
| $10 \%-20 \%$ | 3 |
| $15 \%$ | 2 |
| $20 \%$ | 1 |
| $25 \%$ | 1 |
| $30 \%$ | 2 |
| $250 \%-300 \%$ | 1 |
|  |  |

Among the 94 people who suggest that the price should be more expensive, there are 76 answers given to the attached free text field about how much more should the price be.

The value and the frequency of value is shown in table 7. There are 18 times the range of 1-2 extra euros was cited following closely by a sharp 1 euro with 14 times cited. An extra price of 2 euros or the range of 2-3 euros extra are equally mentioned 9 times. There is error in the data which is most likely caused by the lack of instruction for the question. There answers like 9 euros, $12-15$ euros or $250 \%-300 \%$ are absolutely unrealistic.

Table 8. Discounted charge for vegetarian / vegan product

| Cheaper |  |
| :---: | :---: |
| Value | Frequency |
| 1 | 9 |
| $1-1.5$ | 1 |
| $1-2$ | 2 |
| 2 | 1 |
| 6 | 1 |
| $15 \%$ | 1 |

The table 8 shows how much cheaper the customers think vegetarian and vegan products should be. The is a total of 15 answers. 9 of them think a discount of 1 e is enough. The range of 1-2 is mentioned twice. Four other suggestion including 1-1.5, 2, 6 euros and $15 \%$ cheaper are cited once each.

The majority of trucks maintain the same price for their vegetarian and vegan offers which is aligned with the public opinion. When there is a fluctuation in price, either increase or decrease, the range is also matched. For the group of products which targets the customers with special need, it could be concluded that the current selling prices are coordinated with the customer expectation.

## 6 Conclusion

### 6.1 Research question

## "Is there a gap between customer expectation about products' diversity, price, time and location of service and what they are offered from the food trucks in Helsinki?"

The answer to this question is yes. The result which is found out in this study points out that there is a gap between what customers would love to have and what they currently can get from the food trucks in Helsinki. However, each point of discussion needs to be carefully understood in a certain context. The explanation is given below.

The product diversity is rather narrow compare to the expectations of customers. In a festival context, the diversity of products seems broader. Customers have a wide array of choices to choose from. The food trucks which have restaurants with the same brand also have focused or themed - product. The other trucks which operate daily and year-round, on the other hand, tend to present themselves as the mobile version of the Finnish sausage kiosk. They have big menus which some can go over 30 items and mostly offer Finnish type of junk foods. The result, however, is only valid within this study with the 20 trucks which are put under the spot lights. Taking this result out of this thesis context will pose a possibility of distortion for following reasons. Firstly, within the studied trucks, two are from Sweden and only be in Helsinki for an event. The mentioned trucks contribute burrito and fusion gourmet burger to the variety of products for customers. However, if the research was carried out in a different time-point when they are not in Helsinki and there is no truck from Finland which offer the equivalent selections, it will put a dent of the diversity of the products. Secondly, the author personally knows there are trucks in the current market which sell the products which are considered to be in the gap yet they are either operating under different forms of mobile-eateries such as pushcart or food bikes or they did not response to the information inquiry. Therefore, they cannot be included in this thesis. Finally, the customer expectations have the nature of being realistic and unrealistic at the same time. It is wise to keep in mind that respondents who are not working or having academic knowledge of Food \& Beverages field may give opinion which are not possible for the truck operators to execute. One example is many customers express that they would like to have sushi truck which is an absolute infeasible idea. The condition of the kitchen of a truck could not handle such a delicate ingredient like raw fish. Moreover, Helsinki already have quite many sushi restaurants and the competition deems very stiff. There would be no point for a truck to offer sushi regardless the customer wishes.

The majority of the crowd agree that the current prices are reasonable for them. In contrary the amount of money they are willing to pay for each product is lower than the selling prices. The thesis focuses on finding out what are the prices rather than analyze how or why the operators choose given pricing strategies. The factors like operational context or portion size which have strong influences on the prices were neglected. There are trucks that operate only in festivals whereas others operate daily, those could pose two different price manners. The truck owners could use this result to re-evaluate and adjust their prices to make it linear with customer expectations. It could either be decreasing the price or increasing the value added so customers feel their food-dollars are worthy.

At the moment, food trucks are mostly found within festival venues or around city centers. It is understandable since the operators aim for area with high foot traffic to guarantee their revenue. The result show that people also wish to see food trucks elsewhere outside the fruitful spots around the Central Railway Station or Kamppi shopping center. There are areas like Itäkeskus, center of Vantaa and Espoo were cited many times by the respondents. These spots have decent traffic flow and able to secure the sale for the trucks. People also shows interest to transport themselves to other locations in the condition of good offers available. There were events held at Kasarmitori, Teurastamo, Kallio or Bruno which are not that central but still able to attract many customers. The authorities of Helsinki also did their part with creating many trading spots yet not utilized by the trucks. The Public Work Department also did a good job rotating the turn in the best locations to give equal chance for all the trucks.

Regarding the opening time, food trucks in Helsinki operate toward two directions. One group will go with the festival whenever the time maybe. The other group which operate on the daily basis put their attention to weekend nights. The reason for this is similar with choosing locations. The operators want to secure their profit. It is shown in the result that there are segments that have been left out during regular day time like breakfast or lunch time. These are potential market which the trucks can have a look to see whether it is viable for them to expand their operation.

In the final word, the point of this thesis is not to judge whether the food trucks in Helsinki are good or bad. All the results are recommended to be used as suggestion for the food trucks which are currently operating as well as people who are tempting to step into the business. The opinions from customers can be exploited to give the operators a better understanding about the market demand and with that information they can adjust or improve their businesses.

### 6.2 Suggestion

The weather condition plays a vital role in the operation of food trucks. The peak season of the trucks is when the weather is warm which lasts only a couple of months. Except a couple of trucks choose to open their business regardless of the cold weather, the rest has to hibernate in the winter missing out the potential markets. Helsinki undoubtedly has the extremely long and hash winter yet the Finns have such an international reputation about how to handle the winter. The people here have innovative ways to adapt with the cold and make sure all the activities are carry on normally even during the frigid weather. With that snow-how and winter-expertise, it is for sure that there will be solution to help the trucks to cope with this uncontrollable element. It is highly recommended for the city to embracing food truck as an urban activity and create a hub for them. There are many warehouse-type buildings around the city where the trucks can park inside. It does not require any other infrastructure than a roof over the head to cope with the weather. If it is not possible to do such a thing, there is another way which is organizing more spots in Narinkkatori and around Kamppi shopping center. This location has more space than the area around the Central Railway Station and does not interfere the traffic. It is also in a walking distance which would not put second thought on customers about going to the trucks. Besides the location-wise supporting, the city can aid the trucks with offering small equipment like heating lamps, creating more events, promotions, putting information onto official channel to encourage the customers to come to the trucks.

There is a need of a uniform platform for food truck like What The Truck website in Australia. The mentioned webpage includes all the information about the trucks and it is updated in real time line. Customer can track the truck and have a look at the menu. The easier for them to know where is the truck and what kind of food they can get from it the more likely that they will choose to eat from trucks.

At the moment, the process of starting up and operating food trucks relates to more than one authorities of the city of Helsinki. By the nature of the concept, it needs to follow regulations for foodservice businesses plus all rules and laws for vehicle and parking. At some point the bureaucratic procedure becomes confusing and has negative effects to the truck operators. A set of tailored made regulation for food truck should be published soon as well as introducing a food truck association. This type of organization will ensure the rights of the food trucks and protect the possibility of promoting hatred from their competitors such as traditional restaurants and retail stores like what happened in the history. This association can also behave as an agency to provide necessary knowledge to help the entrepreneur who wants to start up a truck.

### 6.3 Further research

Since the industry is relatively young and new hence not so many academic researches about food trucks. There are a various of topic which could be studied in the future regards this topic. The discussion is possible to approach under three point of view which are the food trucks' operators themselves, the authorities of the city where they operate and the customers. More detail will be disclosed in the following paragraphs.

Firstly, in order to understand the other side of the story, a qualitative research should be carried out among the food trucks operator. The food trucks' owners should be given the chance to justify themselves about how they engineer their menu, why do they choose certain type of products to sell. Pricing technique and how they perceive the competition in the market is also interesting to look at. Another topic to consider is what kind of obstacles they are facing at the moment and how did they overcome it.

Secondly, the study can put the focal point on the authorities of the city of Helsinki. From what this study has revealed, the government more or less claims that they have put a lot of effort to encourage this type of business. An interview with authorized personnel about their point of view and vision about the future of food trucks in Helsinki would be really useful.

Finally, there are still more aspects from the customers to be studied for instance, the consumer behavior, the satisfaction toward food trucks. To have better understanding of the advantages and disadvantages of Helsinki as a market for the food trucks, further research can also focus on market analysis and feasibility of the concept.

### 6.4 Discussion

The aim of this thesis was to explore whether there is a gap between what customers expect to have and what they are offered regarding the diversity of products, the selling prices, time and place of location of food truck in Helsinki. With the target to get reach as many food trucks and customers as possible, the quantitative method was chosen under two form: mystery shopper for food trucks and questionnaire-based for customers. In addition to that, a slightly portion of qualitative information was gathered under the form of free-text questions in the survey.

The procedure includes several steps. Firstly, the relevant theories were chosen and form the theoretical framework for the thesis. Secondly the data from the trucks are collected. Base on the formularized theory and data from the trucks, a questionnaire was drafted
and distributed via Haaga-Helia internal e-mail system and social platforms. Collected data is then analyses by Microsoft Excel and Webropol Analytic to create a comprehensive picture of the result. From the main finding of the study, the author proposes ideas which could be useful for the food trucks operators as well as for the authorities to look at. Possible topics for further researches in the near future are also recommended.

Even though the original target of the thesis is achieved, the author must admit that there are limitations which negatively affect the study hence the result is not as good as it otherwise could be. The first constraint is the restricted number of referencing sources. There are not many prior studies regarding this topic that the author could obtain information from. Books and articles which were used in this study are mainly from The United State which create biased opinions and from certain aspect could not be applied to Helsinki market. This is also the very first thesis about food trucks among the university of applied sciences in Finland. The whole structure was built up from scratch thus there are unavoidable mistakes. There are flaws in constructing the questionnaire which more or less distort the result. The second limitation is the lack of analytical skills. The possibility of using a professional analytic program like SPSS would enhance the result yet could not be performed by the author. More cross-tabulation technique could have contributed to a better finding as well.

This study opens the author's eyes to many aspects of the food trucks in Helsinki. The author also learns a lot about the personal strengths and weaknesses in conducting such a research. Hopefully this result is useful for the relevant parties and become the premise for people who would like to explore this field in-depth. With all the interest and efforts which have been put to support the trucks, the author is confident that food trucks in Helsinki are getting closer to the true success and become a bright mark in the world food map, in a Finnish way.

## References

Anenberg, E; Kung, E. 2014. What's behind the food truck phenomenon? URL: https://www.aeaweb.org/conference/2015/retrieve.php?pdfid=413. Accessed: 10 April 2017.

Bargen, H. 2016. Street Foods. John Wiley \& Sons. New Jersey.

Basinski, S. 2014. Hot dogs, hipsters, and xenophobia: Immigrant street food vendors in new york. Social Research, 81, 2, pp. 397-408,501.

Brooks, Z. 2017. Keep on Truckin'! - Immigrant Keep Food Trucks in High Gear. URL: http://escoffier.com/culinary-content/featured-stories/726-keep-on-truckin-immigrants-keep-food-trucks-in-high-gear?showall=. Accessed 9 May 2017.

Cambridge Dictionary 2017. Gourmet. URL: http://dictionary.cambridge.org/dictionary/english/gourmet. Accessed: 16 April 2017.

Coffer, D. 2012. Pop-up restaurants, food trucks go global. Nation's Restaurant News, 46, 5, pp 14.

Coughlin, J. 2016. Millenials are the Food Truck Generation. URL: http://bigthink.com/dis-ruptive-demographics/millennials-are-the-food-truck-generation. Assessed 7 May 2017.

E-Junkie 2016. The Advantages and Disadvantages of a Mobile Business. URL: http://www.e-junkie.com/blog/the-advantages-and-disadvantages-of-a-mobile-business.htm. Accessed 16 April 2017.

Engage Customer 2017. The Golden Rules to The Six Pillars: Expectations. URL: http://engagecustomer.com/the-golden-rules-to-the-six-pillars-expectations/. Accessed 25 April 2017.

Entrepreneur 2011. Food Trucks 101: How to Start a Mobile Food Business. URL: https://www.entrepreneur.com/article/220060. Accessed: 6 April 2017.

Fellows, P; Hilmi, M. 2011. FAO Diversification booklet 18. Selling street and snack foods. URL: http://www.fao.org/docrep/015/i2474e/i2474e00.pdf. Accessed 9 May 2017.

Food on a Truck 2015. Pros and Cons of Starting a Food Truck. URL: https://www.foodonatruck.com/pros-and-cons-of-starting-a-food-truck/. Accessed 16 April 2017.

Food on A Truck 2016. Food Trucks vs Food Trailers vs Food Carts vs Even More Options. URL: https://www.foodonatruck.com/food-trucks-vs-food-trailers-vs-food-carts-vs-even-more-options/. Accessed: 6 April 2017.

Food on A Truck 2016. History of Food Trucks. URL: https://www.foodonatruck.com/his-tory-of-food-trucks/. Accessed: 6 April 2017.

Food Truck Builds Miami 2015. Food Trucks vs Food Carts vs Food Trailers: What's the Difference? URL: http://www.foodtruckbuildsmiami.com/food-trucks-vs-food-carts/. Accessed: 6 April 2017.

Food Truckr 2016. The benefits of Owning a Food Truck over a Sit-Down Restaurant from a Business Standpoint. URL: http://foodtruckr.com/2016/07/benefits-owning-food-truck-sit-restaurant-business-standpoint/. Accessed 16 April 2017.

Grönroos, C. 2007. Service Management and Marketing. Customer Management in Service Competition. 3rd. John Wiley \& Sons. England.

Harris, E. 2007. Customer Service. A practical approach. 4th. Pearson Education. New Jersey.

Henderson, J. 2009. Food tourism reviewed. British Food Journal, 111, 4, pp. 317-326.

Hood Mart 2017. The 5 Biggest Advantages of Opening a Food Truck vs a Brick and Mortar Restaurant. URL: http://www.hoodmart.com/blog/the-5-biggest-advantages-of-open-ing-a-food-truck-vs-a-brick-and-mortar-restaurant.html\#.WPT1KdKGPIW. Accessed 16 April 2017.

IBISWorld 2016. Food Trucks: Market Research Report. URL: https://www.ibis-world.com/industry/food-trucks.html. Accessed: 4 April 2017.

Kotler, P.; Armstrong, G.; Harris, L. \& Piercy, N. 2017.Principle of Marketing. 7th. Pearson Education. United Kingdom.

Myrick, R. 2015. 2015 Food Truck Industry Statistic Show Worth of 1.2B. URL: http://mo-bile-cuisine.com/trends/2015-food-truck-industry-statistics-show-worth-of-1-2b/. Accessed: 4 April 2017.

Myrick, R. 2017. Food Truck Menus: An In-Depth Look. URL: http://mobile-cui-sine.com/menu-design/food-truck-menus-an-in-depth-look/. Accessed: 12 April 2017.

Myrick, R. 2017. Hints for building your food truck menu. URL: http://www.dum-mies.com/business/start-a-business/hints-for-building-your-food-truck-menu/. /. Accessed: 13 April 2017.

Myrick, R. 2017. Ten Myths About Food Trucks. URL: http://www.dummies.com/busi-ness/start-a-business/ten-myths-about-food-trucks/. Accessed 16 April 2017.

NCASS 2017. Advantages and Disadvantages of using a Motorised Food Van to run your Mobile Catering Business. URL: https://www.ncass.org.uk/mobile-catering-home/con-tent/buying-selling/motorised-food-vans. Accessed 16 April 2017.

O'Neil, S. 2012. A taste of the street. Caterer \& Hotelkeeper, 202, 4729, pp. 30-32.

Ojasalo, J. 1999. Quality dynamics in professional services. Svenska Handelshögskolan. Helsinki.

Public Works Department 2017. Contract. Food trucks. URL: http://www.hel.fi/static/hkr/luvat/ketterat_kioskit/kettera_sopimus_en.pdf. Accessed: 4 April 2017.

Public Works Department 2017. Helsingissä toimivat ketterät kioskit. URL: http://www.hel.fi/static/hkr/luvat/ketterat_kioskit/kettera_kioskilista.pdf. Accessed: 4 April 2017.

Public Works Department 2017. Starting guide. Food trucks. URL: http://www.hel.fi/static/hkr/luvat/ketterat_kioskit/kettera_aloitusohje_en.pdf. Accessed: 4 April 2017.

Public Works Department 2017. Trading spots for food trucks in the city center 2017. URL: http://www.hel.fi/static/hkr/luvat/ketterat_kioskit/kettera_keskusta_en.pdf. Accessed: 4 April 2017.

Rantanen, P; Knorring, M; Relander, V; Nars, K; Koskelo, A; Sillanpää, M. 2014. Helsinki Street of Food. Whyprint 2014. Helsinki.

San Diego Food Trucks 2011. What's the difference between a gourmet food truck and a non-gourmet food truck, anyway? URL: http://sdfoodtrucks.com/whats-the-difference-be-tween-a-gourmet-food-truck-and-a-non-gourmet-food-truck-anyway/. Accessed: 16 April 2017.

Saxena, J. 2015. An Illustrated History of Food Trucks. URL: http://first-wefeast.com/eat/2015/09/an-illustrated-history-of-food-trucks. Accessed: 6 April 2017.

The Food Truck Guru 2016. From Roach Coach to Gourmet Food Truck. URL: http://www.sizemoreultimatefoodtrucks.com/single-post/2016/05/31/From-Roach-Coach-To-Gourmet-Food-Truck. Accessed: 16 April 2017.

The Forum 2011. Food trucks offer advantages, disadvantages to traditional restaurants. URL: http://www.piedmontforum.com/2011/09/15/food-trucks/. Accessed 16 April 2017.

Tinker, I. 1999. Street foods into the 21st century. Agriculture and Human Values,16,3, pp 327.

Vares, M. 4 April 2017. Inspector. Service Division. Public Works Department. E-mail.

Veal, A. 2011. Research methods for leisure \& tourism. A practical guide. 4th. Pearson Education. England.

Vietnam Online 2017. Street Vendors. URL: https://www.vietnamonline.com/culture/streetvendors.html. Accessed: 9 March 2017.

Watkinson, M. 2013. The ten principles behind great customer experiences. Pearson Education. United Kingdom.

Weber, D. 2012. The food truck handbook. John Wiley \& Sons. New Jersey. Zeithaml, V.; Bitner, M. \& Gremler, D. 2009. Services Marketing. Integrating Customer Focus Across the Firm. The McGraw-Hill. Singapore.

Zeithaml, V.; Parasuraman, A. \& Berry, L. 1990. Delivering Quality Service: Balancing Customer Perceptions and Expectations. The Free Press. New York.

## Appendices

## Appendix 1. Questionnaire

## Food trucks in Helsinki

Are you currently living / working / studying in Helsinki / Vantaa / Espoo? If NOT please stop here. I strongly appreciate your cooperation. If YES please click "Next" to begin.

1. Gender *

O Male

- Female

2. Your age *

- <18

18-24
25-39
-40-60

- $>60$

3. Nationality *
4. Are you currently....? *

You can choose 1 option from each section
Studying
$\square$ Full time
$\square$ Part time
Working
$\square$ Full time
$\square$ Part time
$\square$ Self - employed
$\square$ Unemployed
5. Do you have allergies or follow a special diet ? *

You can choose more than 1 option
$\square$ Lactose free diet
$\square$ Gluten free diet
$\square$ Vegetarian
$\square$ Vegan
$\square$ I don't have any
$\square$ Others. Please specify
6. Have you ever eaten from a food truck elsewhere outside of Finland ? *

Yes
O No
7. Have you ever eaten from a food truck in Helsinki? *

O Yes
Not yet, but willing to
O No and will not to

## 8. Why do you choose to eat from a truck? *

You can choose more than 1 option
$\square$ The foods are good
$\square$ The price are cheap
$\square$ That was the only option, other places are closed at that time
Others. Please specify
9. How do you get to know about a food truck in Helsinki? * You can choose more than 1 option
$\square$ Online platform ( official website, social media)
$\square$ Newspaper
$\square$ TV advertisement
$\square$ From friends / family members
$\square$ I just see it on the street
$\square$ I don't know any
10. When you choose to eat from a food truck in Helsinki, you are usually with...? *

A friend
A group of friends
A family member

- A colleague / colleagues
- Alone

Other. Please specify
11. When do you usually get food from a food truck? *

You can choose more than 1 option. If you have never eaten from a truck in Helsinki please imagine the scenario and choose the closest possible answer
$\square$ Weekday, day time
$\square$ Weekday, night time
Weekend, day time
$\square$ Weekend, night time
$\square$ In festivals
12. Do you want the food truck to extend their opening hours to..? * You can choose more than 1 option
$\square$ Morning (before 11'am)
$\square$ Lunch time (11am-2pm)
$\square$ Afternoon (3pm-6pm)
$\square$ No. The current opening time is enough
13. Where do you usually get food from a food truck? *

You can choose more than 1 option
$\square$ Around the Central Railway Station
$\square$ Narinkkatori / Around Kamppi shopping center
$\square$ In Festivals' venues
$\square$ Others. Please specify.

## 14. Would you choose food trucks if they park somewhere else than city center ? *

Yes, if not too far and depends on what are offered
No

- Maybe


## 15. Which type of foods do you usually get from a food truck? *

If you have never eaten from a truck in Helsinki please imagine the scenario and choose the closest possible answer
$\square$ Savoury foods ( hot dogs, burgers, sandwiches and other type of hot foods)
$\square$ Sweets ( cupcakes, cakes, ice creams)
$\square$ Non-alcoholic beverages (soft drinks, water, tea, coffee, homemade lemonade)
$\square$ Others. Please specify
16. What kind of foods do you want to have but currently not available from the food trucks in Helsinki? *
17. In general, how do you think the prices from the food trucks in Helsinki are ? *

O Cheap

- Reasonable

Oxpensive
18. Please choose the max amount you willing to pay for each of the product group * Price is in $€$

|  | $<3$ | $3-5$ | $5-7$ | $8-10$ | $>10$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Asian foods ( rice or noodle base with filling) | 0 | 0 | 0 | 0 | 0 |
| Burgers | 0 | 0 | 0 | 0 | 0 |
| Burrito | 0 | 0 | 0 | 0 | 0 |
| Chicken nuggets | 0 | 0 | 0 | 0 | 0 |
| Chips \& dip | 0 | 0 | 0 | 0 | 0 |
| Falafel | 0 | 0 | 0 | 0 | 0 |
| Finnish loaded fries / Makkaraperuna | 0 | 0 | 0 | 0 | 0 |
| Finnish meat pie / Lihapiirakka | 0 | 0 | 0 | 0 | 0 |
| Fish \& Chips | 0 | 0 | 0 | 0 | 0 |
| Grill sausages | 0 | 0 | 0 | 0 | 0 |
| Homemade lemonade | 0 | 0 | 0 | 0 | 0 |
| Hot dogs | 0 | 0 | 0 | 0 | 0 |
| Kebab ( with fries / rice / pita) | 0 | 0 | 0 | 0 | 0 |
| Meatballs with fries | 0 | 0 | 0 | 0 | 0 |
| Onion rings | 0 | 0 | 0 | 0 | 0 |
| Sandwiches | 0 | 0 | 0 | 0 | 0 |
| Soup | 0 | 0 | 0 | 0 | 0 |
| Tacos | 0 | 0 | 0 | 0 | 0 |
| Wraps ( with chicken / falafel / kebab filling) | 0 | 0 | 0 |  |  |

19. If the mentioned products have gluten free / vegetarian / vegan option, how would the prices change ? *

More expensive. How much?
Cheaper. How much?
O Same price
20. If you have some other comments regards the food trucks in Helsinki, please feel free to share here.

