# Market Research: Demand & Business Models for an Online Grocery Shopping service in Porvoo

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**Abstract**

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| Market Research: Demand & Business Models for an Online Grocery Shopping service in Porvoo | **36+7** |

The thesis is named Market Research: Demand & Business Models for an Online Grocery Shopping service in Porvoo the commisioning party for the thesis is a young restaurant food delivery company.

The primary objectives of the thesis written is to gather data on attitudes & opinion of people on online grocery shopping, particularly in the city of Porvoo, Finland; research is conducted to investigate if an online grocery delivery service is a favorable business in Porvoo or not.

Goal of this research in thesis is to gather primary data through quantitative reseach approach & analysis of different business models that could be adopted by the commisioning party. The research questionnaire includes 14 questions divided in to two sections. The questions asked are described and data gathered is analysed.

The empirical part of this thesis includes data analysis, disscussion and conclusion. Data retrieved suggest to a posibility of a pilot program to test the service. It does not recommend a full scale initiation of a grocery delivery business as more data is needed.

Lastly all sources are cited and appendices are attached.

**Keywords**
Online grocery shopping, delivery, pilot program, e-grocer

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# 1 Introduction

The thesis is written in an association with ASINE Tmi the parent company of FOOD-CHIMPS food delivery service in Porvoo, Finland. The company is the commissioning party and it is interested in gathering data about the possibility of grocery delivery service in Porvoo. This is a research-based thesis that focuses on the market study of Porvoo city. The study focuses market research for demand of an online grocery shopping in Porvoo Finland along with analysis of various business models that could be adopted. The study employs quantitative approach to conduct the research. The thesis is divided into two major sections namely theoretical framework and empirical part.
As the names suggest the theoretical framework hosts introduction to the commissioning party, problem or thesis statement, previous researches as well as explanation of some basic concepts. Literature is reviewed from various sources including, books, articles, reports, official web sources, news and interviews. It also has an explanation of research method, type of research method used and why. Throughout the research primary data is collected. The second section consists of the empirical part, in here the data collected is presented in an understandable and managed way. The data is then used to create a discussion between the questions of the research questionnaire. Conclusions are drawn, and a list of possible ideas, suggestions, and future research are stated.
The researcher concludes the thesis by recommending a pilot program after discussing the results in relation to the data gathered.

## 1.1 Commissioning party & Thesis Problem

The company that has proposed this market research problem is known as ASINE TMI. Bearer of business ID 2869729-2. This company is better known by its brand called Food-Chimps(dot)com. Food-Chimps is a multi-vendor platform meaning that it allows different vendors in this case partnered restaurants in Porvoo and Vaasa to sell their food and menu items online from Food-Chimps website. Food-Chimps is responsible for providing food delivery services in Porvoo & Vaasa Finland for these partner restaurants. The company started operations on 19th Jan 2018. The CEO of the company is Aun Hyder. Therefore mentioned company in the introduction of commissioning party section now seeks to expand its delivery services into the online grocery shopping arena and has suggested to conduct a market research in the city of Porvoo, Finland.

*"We would like to test our services in grocery shopping, but we need to do a market research before we get into the business"* (Hyder, 2017)

The purpose of this research should be to collect data on the public in order to determine whether such a service will be used or favoured by the grocery consumers in Porvoo, Finland. The problem statement can thus be summarized as: Market research for demand & business models for an online grocery store in Porvoo Finland.

To address the thesis problem & statement, one must understand the basics of this thesis problem. For having a basic understanding of this thesis, the following sub-sections focus on some initial basic topics such as the traditional grocery shopping, Innovative & new ways of grocery shopping, Market share of the companies involved providing grocery shopping facility inside of Finland. This section focuses on creating a pattern and a steady flow of understanding the thesis problem from beginning to end.

## 1.2 Research Aims, Study group & Objectives

The primary aim of this research is to gather a background information for starting an online grocery service in the city of Porvoo. In Porvoo, grocery shopping at large is carried out in the old and traditional manner where a physical store is a source for grocery goods for consumers. The secondary aim is to a find out the demand for this service in Porvoo.

In this research, different business models adopted and practiced by various E-grocers from all over during present and past will be studied along with successful and failure factors for each model that is studies.

There are two objectives of this research

1- To predict a need or demand for an online grocery service in Porvoo.
2- Finding out business model suitable for addressing such a demand if there exists any.

The study group that is chosen for conducting research on grocery shoppers at various grocery stores in Porvoo, Finland. Majority of the grocery stores are in a 3-kilometre radius of the Porvoo city centre. The population of Porvoo is approx. 50,000. That is the 21th largest population in Finland. Population density is 76.71/km2. (kunnttain, 2018). The objective of the research is to collect data on views about an online grocery shopping service from respondents with the help of a structured questionnaire. Based on the data collected the researcher shall produce results; ideas and suggestions; draw data driven conclusions; recommendation for future research studies.

### 1.3 Scope of Research and Research Limitation

The scope of this research is to predict the market demand for an online grocery service only in the city of Porvoo. The research does not mention any discussion on how to build, develop and operate the online grocery delivery service. The major concern & focus of the research is to find the demand of such a service in Porvoo.

The limitation of this study are the business models used by the retailers in UK, USA & Finland. Articles online and in books discuss business models, however, these models do not necessarily work out in real life practice. The research was only limited to respondents of Porvoo. Thus, results are also limited to the population of Porvoo.

## 2 Theoretical framework

In Europe, online grocery shopping has yet to make its roots and Europeans are steadily moving towards shopping for groceries online. However, it does not imply that people do not have a desire of doing grocery shopping online. Online grocery shopping with its quality for not having save time to browse shelf after shelf selecting your products and waiting in que to checkout is not yet attractive. The convenience in this regard is not tempting & it is not considered as the only selling point. In an ordinary trip to a grocery store for grocery shopping, customers are not willing to sacrifice price, quality and variety of products that they are familiar with in a traditional grocery shopping experience. Not many retailers in Europe have provided customers with an option to move from traditional grocery shopping to online grocery shopping. “The online grocery market is poised for growth. But only early movers will win and only if they are adept, disciplined, & agile.” (Galante, 2013)

According to (Galante, 2013) 4500 consumers from across European countries namely France, Spain & United Kingdom took part in a research for global practices and the research indicated that a demand among the consumers for and electronic grocery shop exists. For each country however the practices for online grocery shops will vary as it will vary for each retailer or provider for such service depending on margins, current market share and other several internal and external factors. “Only early movers will win and only if they have an outstanding value proposition, a relentless focus on profit optimization, and willingness to place big strategic bets.”

Over the previous 20 years, the grocers’ in Finland and their retail trade has been associated with the development of shopping facilities. The placement of grocery stores is based on the population density and business profitability. Central wholesale companies control the grocery sales in Finland; however, they lack a suitable home delivery system. Nonetheless it would be incorrect to assume that online shopping in other words known as E-commerce shopping has not made acquaintance with the Finnish customers, as a matter of fact Finnish populations is comfortable with electronic shopping. In comparison with other nations, it must be noted that online grocery shopping has yet to catch up with Finns.

According to an International Journal on retail and distribution management, Punakivi & Saranen mention, (Punakivi, 2001) “The Decision-makers pf the largest grocery retailing companies in Finland share the opinion that e-grocery may take over around 15-20% of the Finnish grocery market by 2010.” It turned out to be an incorrect estimate in the year 2012 and only 4% of the Finnish population is shopping online. This error in calculation of

percentage beg for the question whether a demand for electronic grocery shopping exists in Finland or not.

## 2.1 Business Models

**Business Models for E-grocers:**

According to (Murphy, 2007), the computerized retail systems have been in practice since 1990's. Out of the retail systems designed, only three of them belong to EGS. These 3 models include, Bricks and Clicks, Pure Play and Infomediary business models. Amongst these systems, the Bricks and Clicks method happens to be the most economical method of them all. Whereas, the most expensive one is Pure Play method which is based on e-commerce. The Informe-Diary approach is mostly used my medium based retailers.

**Bricks and Clicks:**

Conventional grocery stores stayed off the concept of e-grocery and did not realize the importance of offering online services. As a result, the Bigger brick and mortar companies entered the e-market with a delay and did well than pure plays. This lead Pure-plays to reconsider their strategic plans. The benefit which a conventional store achieved using this strategy was to attract more customers from the market along with their original customers. The plan put forward by bricks and clicks strategy allowed the customers to avail the options of shopping from the store and from the online services. There were options for the consumers for home delivery and pick up from stores. The companies willing to utilize this strategy can be benefited only if they already have existing stores. (Hays, 2004)

According to (Chadwick, 2007), Tesco, a British retail giant is an example of Brick and clicks methods. When Tesco adopted bricks and Clicks method in 1996, it was highly disparaged for its regressive approach.

In the initial phase of the implementation in Tesco, the requests from the customers were received and was routed to the nearest available store based on customers location. After the packing of ordered items from the customers by the staff of the retail store, the delivery process was initiated. This method was not free from flaws, even though cheap but it was inefficient because the storage rooms of the stores were not well capable of handling online orders, moreover, delivery optimization was also a hurdle. The online stores were offering more products online than the store had shelved, this led to the problem of filtering the choices being given to customer.

According to (Murphy, 2007), Upon the implementation of Bricks and clicks model, Tesco employed multiple order picking scanners rather than single order picking, to save time and increase the efficiency. All the orders were packed in separate boxes for the customers, but there was a room for human error since the picker can pack the order in wrong box. With the implementation of this model, Tesco became cost efficient with replicating this model in scores across the UK.

By the year 2000, Tesco in mere 3 years' time had offered 90 percent of the Great Britain's population with its diverse range of products. Moreover, it started to expand its online services outside the Great Britain. In 2001, first online grocery store in Ireland started functioning. Tesco kept on expanding its technology to other countries and it played an essential role in setting the trend of online grocery shopping in the UK. The sales revenue kept on ballooning up and by the year 2006, they increased by 36.5 % from the previous year and hence the annual profit also accelerated. (Chadwick, 2007) (Murphy, 2007)

According to (Chadwick, 2007), soon online grocery shopping strategy of Tesco became famous all over the UK. Along with grocery items, non-food items, and other financial services were also being offered via online services. This expansion on a wide scale was attributed to the implementation of e-commerce in its approach. According to Tesco's CEO, with the help of internet, there is no restriction on space, the store can be as expanded as they like. Hence, this strategy also helped Tesco to go at a par with its rival Wal-Mart.

According to (Murphy, 2007), apart from Tesco, many other companies such as ASDA, J Sainsbury from the UK, Albertsons, Safeway, Carrefour, Woolworths from USA, France, The Netherlands, New Zealand and Australia tried bricks and clicks models and it fitted well into their approaches but still could not compete the financial gains of Tesco.

**Pure-Play**

According to (Hays, 2004), In this particular model, the business thrives without retail stores by web order deliveries with the help of one or multiple warehouses. This model has gained advantages over its rival bricks and clicks model. The first advantage being that it does not involve high costs related with property taxes, parking and renting etc. Moreover, inventory is far more manageable if it is operating in few locations. This also helps in the less spoilage of perishable foods, by routing the grocery to consumer in a shorter mean time. It also gives an insight into customers buying preferences and his grocery habits. The same approach is being used by the retail store grocers by tracking their customers purchases using loyalty cards.

During the dom-com era, the US media's favourite online grocery model was a Company named Webvan based on Pure-play strategy to compete with Amazon. Apart from selling online grocery items, Webvan went to an extra mile i.e. delivery of a variety of grocery items to the customers' doorstep. Webvan aimed for the automation of grocery business by extending the delivery services to the edges of cities. The size of the warehouses was three times bigger than that of a supermarket that means more investment as it took 300,000 square feet to build one warehouse. The investment used the concept of automated warehouse featuring rotating racks, conveyer belts to bring the products to the picker. Webvan had plans to extend its services to adjacent 16 cities with a single central hub. However, due to lack of liquidity it failed to achieve its desired goals and had to ultimately close its virtual shop in July 2001. (Murphy, 2007)

**Threats:**

1. The consumers had many other options to avail for their grocery shopping that means that the threat of substitute products was very real. Webvan knew that they could not ask consumers to pay a high price for the delivery. In-fact the situation was other way round, it was the consumers who had the actual power to choose from the other options and Webvan never had that competitive leverage.

2. When Webvan came to the market with their online grocery services, they did not face any substantial rivalry. Due to the lack of competitors in this field, Webvan was the first one to come up with the concept of online grocery shopping in that locality.

3. With the rapid growth of information technology, the threats posed by new entries in online grocery service providers kept on increasing. Moreover, the online shopping market had prospects and a huge potential. There were huge chances of new companies to enter online shopping businesses as the risks were low in comparison with Bricks and Click models.

4. Food manufacturing companies have a low power on the buyers, and they cannot influence the buyers by incrementing the price of their food products. The reason being that there are many other food manufacturers in the market offering the same products.

5. According to Porters five forces model, Webvan chose a favourable route by offering their services online but ultimately ran out of money after spending more on infrastructure. The business model chosen by Webvan failed to sustain in market as their operational cost was sky high.

6. Whereas on one side Webvan had an unsuccessful attempt at the Pure-play model implementation, there are few successful implementations of the same model in the UK's market for example, Ocado. Initially Ocado was started in a joint venture with John Lewis. The warehouse of Ocado is about 12 times bigger than an average super-market. The company workers delivered the items to the buyers in Midland and South-East regions after picking the products up from the depots. The drastic difference between Webvan and Ocado was the usage of

multi-pod transporters which helped in docking to local delivery vehicles without having to reload it. (Murphy, 2007)

**Infomediary**

Infomediary is the third model in which the physical requirements are not administered by the company itself, but the company performs as an intermediate link between the consumer and the retailer. Infomediary model requires the website operations in a different manner than the other models. When the customer places the orders, they are linked with the retailer's database and then according to the orders received the goods are packed for the consumer. The usage of this model helps the retailer to save the cost of maintaining its own websites. Peechtree network operating in North America is an example of this model which offered services for small store operators in North America. It offered services to take the orders from the consumers online and then forwarding the orders from the customers to the retail stores via email or fax (Murphy, 2007)

Sometimes stores and warehouses become Bricks and Clicks models after acquiring certain growth scale and in sales by starting EGS operations along with infomediary. An example of this strategy is Stongs which was supported by Peechtree Network. Another Electronic grocery retail, Woolworth's supermarket started operating as a part of New Zealand Shopping mall. Outsourcing of operations to infomediary alike websites can be done by EGS organizations where logistic support is hosted. An example of strategy is Quick.com where its webservers were hosted from Calgary's outsourcers. (ibid.,945).

## 2.2 Success factors for E-Grocers

The advancement in technology is transforming the shape of retail industry. According to (Galante, 2013), In order to be successful in the field of digital consumers along with the rapid advancement in technologies, the most critical 6 questions need to be addressed in this regard.

**First Mover Advantage.**

Bring the first mover in a market can bring along a lot of benefits that include brand recognition. Media can provide invaluable attention to the first mover, like free marketing and publicity. This advantage not only helps to establish the brand but also helps in acquiring advantages over the competitors. Market Penetration can be the foremost focus for an online grocer during the initial phases and being the first mover in the market is of great importance and it helps. (Keh, 2001)

**Access to Capital**

As time has passed, new modes of business and mediums for conducting businesses have emerged. Online start-ups have long faced several hurdles when it came to securing capital. Different challenges have made is difficult to obtain investors. However, kickstarter.com, indigogo.com, gofundme.com & patrion.com are all crowd funding platform that have recently emerged over the recent years. These methods allow companies and new start-ups to get the funding they need relatively easy as compared to traditional methods for financing for Pure-Play online grocery stores. Traditional retailer businesses have also been able to generate strong financial support in the past. for example, Amazon provided HomeGrocer with capital to continue its operations. whereas Louis Borders saved Wenvan the same way. This funding by external means is crucial and necessary, especially when online grocers are still developing and testing out their business models. (Keh, 2001).

In order to continue in the business environment with smooth operations, especially when it comes to surviving in a new industry, it is important to have enough and adequate resources. Cash flow is vital and the spine of operations during the expansion and building economies of scale. Therefore, having a capital for operations is essential. A common way of raising capital is via IPOs and venture capitals. For example, Webvan was listed in NASDAQ stock market in November 1999, while Home-Grocer funded $100 million dollars from Amazon along with capitalist Kleiner Perkins Caulfield & Byers and Hummer Winblad venture partners. In March of the year 2000, Home-Grocer raised an additional $245 million dollars from its IPOs. Peapod, the first online grocer, had its IPO in June 1997, but its share prices had tumbled and was recues by the Dutch grocery powerhouse Royal Ahold in April 2000. (ibid.)

**Strategic Alliances**

Teamwork makes the dream work. In todays' rapidly changing business environment, it is crucial to understand that a single company cannot achieve all its goals. especially when there are several variable factors governing the operations. Herein, it is evident that alliances are made among businesses, specifically strategic alliances. A strategic alliance is a method by which organic growth along with mergers and acquisition can be achieved. Pure-play retailers advance in benefits of first mover in a new and emerging market by way of adopting strategic alliances. It allows them to gain rapid expansion, for a network of working synergies and hands-on access to partner's resources and capabilities. including the cost and time saving, resulting in gaining the economy of scale in new market. (Keh, 2001)

**Website**

Having the right website in on of the most important success factors. It allows a business to manage and maintain an excellent workflow, while allowing new potential customers to navigate and obtain information on products, the company and its partners. It is not easy to acquire customers, especially when the business is new and conducted by a website. In this scenario, the website must always consider the six I's of marketing mix including Intelligence, interactivity, integration, individualisation, industry restrictions and independence of location. In any case, for a webstore or an e-grocer it is important to have an attractive and a user-friendly website, thus, avoid losing customers to competitors for a price of own goodwill. The competition is always around the corner, first good impression is a must have for every e-grocers and their website otherwise companies lose customers and their good will. Customers' data should be protected and should be according to a national law and international law. Another good practice is to have built-in search engine, that way customers can search products by typing. (Keh, 2001)

**Better and Superior Service**

For building a better and superior service, e-grocers can use the fact that groceries are the kind of commodities that depend on service differentiation element. Thus, high quality service is offered to customers and a repetitive business can be created by e-grocers. This helps in providing better penetration into the market and enables fast growth leading to competitive advantages in the market. As online retailers are focusing on rapid changes in technology, e-grocers should not lose sight of responsiveness. The key to gain long-term benefits for online grocers is to maintain relationships, incorporated with functional and emotional aspects of online customers. (Keh, 2001)

**Value Added Information**

Consumers can be attracted by offering value added information. In the case of online grocers, it translates into food recipes, cooking tips, nutritional data, cooking expert advice, diet experts advise, and much more. it could help loyal customer to visit the website again and again. (Keh, 2001). Consumer should also be given a platform on the website to give their comments, share advice and help other customers with relevant topic, this type of interaction engages customers and allows them to maintain a close relationship with the e-grocers.

**Warehouse & Logistics Structure**

For any grocer, a storefront is manageable even by virtual mean. However, the backbone of the operations relies on the internal workings of the store. The online grocers must

have effective, efficient warehouse and logistics network at hands to conduct the distribution matters such as delivering goods to customers in an effective and timely manner. The situation is magnified by pre-orders, the perishability of products and continual fluctuation of demand from customers. Therefore, the construction and designing of the warehouse should be considered by logistician. They should keep in mind land availability, population density and geographical location. (Keh, 2001).

## 2.3 Failure Factors for E-grocers

This section discusses the risks and potential causes for failure associated with entering the niche of E-grocers. The most prominent and significant factors resulting in failure for e-grocers provide an insight.

**Sensing the products**

Food Products fall into two categories. Tangible and non-tangible, former of the two requires an individual to sense it by sight, touch and smell. Many a times the consumer or the customer prefers to sense it by means of itself. It is a growing concern and a potential failure factor since most of the consumers are not satisfied by the products unless they are personally able see, touch or smell the fresh product.

Some online grocers are feeling very comfortable having special arrangements for fresh fruits and vegetables. Pickers supply these types of goods in intensive care, but it is very hard to satisfy and change the mindset of consumers as they tend to choose fruits and vegetables with their own hands. (Keh, 2001)

This approach towards traditional grocery shopping consumer mindset can be endorsed by Dornbusch: “Looking at and smelling and touching food is very basic part of their (consumers) liver.” On another occasion a customer being interviewed by Yle News namely Jaana Kojo a customer states their preference by stating: “I buy my food from grocery stores because I want to make sure that the products, I purchase are fresh.”

**Poor Supply and Delivery**

Most consumers expect the process of buying online from online grocers to be quick, convenient and the order to be delivered in minutes. This way e-grocers are determined by their efficient and effective logistical network. According (Keh, 2001), 19% of e-grocery shoppers filled complaints of not receiving their order during the expected delivery time. Since the competition is growing so are expectations for quick order deliveries. It is important to know that most e-grocery shoppers do not plan their meals ahead of time. Many buyers, that wanted to buy online are not buying because of lack of immediate delivery response. A cluster of problems can be noticed by the type of strategies applied by e-grocers regarding geographic coverage.

**Financial Stability and Security**

Even though a rather less amount of finances is required by online grocers to start a business, it does not eliminate the hurdles of raising a capital for start-ups in online grocery businesses. Aside from warehouse construction, it is difficult to gain competitive advantages and market shares. Although many online grocers have been successful in raising finances in the past, however, recently many online grocers have faced difficulties in raising capital from banks and have resulted in discontinuing of operations. (Keh, 2001).

**Technology**

Information technology is a great resource when it comes to gaining competitive advantage, However, it must be understood that for organizations, there is a challenge in maintaining the sustainable competitive advantage directly only through the application of information technology. Information technology is widely available and easy to access and understand moreover it is convenient to copy. To put it into simple words, it can be said that constant competitive advantage is gained by unique Information Systems (IS) and unique resources of information technology (IT). For instance, commercially available information technology systems may not be effective in providing a competitive advantage as compared to in home or a company's own information system. (Chadwick, 2007),
For a retailer to gain competitive advantage using IT resources, a website with different yet better functionality & services must be presented by a retailer. The website and Information system should utilize information technology in order to maintain a constant competitive advantage. If a retailer's website is leveraged through the development of complementary resources, such as service, brand image, customer loyalty or logistics, the organizations may be able to gain a competitive advantage from its online channel, even if its website is better than that of its competitors.

**Privacy and Seasonal Influences**

In the past, organizations and specifically e-grocers have allowed marketers to study their customers to make better marketing campaigns. They have allowed marketers to analyse and asses the consumers buying and behaving patterns. E-commerce has provided manufacturers with a way to promote their products in a unique way, that traditional stores cannot. On the contrary, there is a negative side to this phenomenon, online shoppers are now concerned about their online safety and privacy in all manners. Whether it is about their buying behaviour, lifestyle, or any other kind of information being observed. (Keh, 2001). Seasonal influences and fluctuations are another reason for failure for e-grocers. A customers' preference may change from season to season and time to time. For example, in winter season a customer may prefer to shop online than in summer. Also, seasonal

demand for product may vary and sales decline in many products may be due to lack of need for the products. For this reason, e-grocers need to carefully monitor seasonal fluctuations for inventory management and formulate a plan for production.

### 2.4 Finnish Grocery Market

The traditional way of grocery shopping is conducted between a consumer and a grocery store. However, there is more than what meets the eye. In the process of grocery shopping several key components and players are involved, starting with the producers and individual business to registered brands and vendors willing to provide their goods for the shelves of the grocery stores; Logistical operations and logistical partners; Suppliers and distributors etc.

The work of selecting and purchasing food for households, is the main avenue for food to enter households. Although other organizations purchase and provide food, including schools, prisons, and restaurants the household is one of the most significant institutions for feeding individuals and families. (Koch, 2013)

In this seemingly convenient exchange of goods and currency between a consumer and a grocery store, several wheels must spin in-order to fulfil the demand and supply of the consumers.

### 2.5 Grocery Shopping & E-commerce

In this new age of technology and e-commerce, different small and big companies have started to reap the fruits of grocery shopping by combining it with e-commerce. E-commerce is conducting an act of sale and purchase online with the help of internet. The scope of electronic commerce is narrower than digital business. It’s often thought simply to refer to buying and selling using the Internet; people immediately think of consumer retail purchases from companies such as Amazon. But e-commerce should be considered as all electronically mediated transactions between an organisation and any third party it deals with. (Chaffey, 2015). Every now and then companies will try to reach out their customers by help of internet and mobile devices. Providing the facility of online grocery shopping and delivery services.

## 2.6 Market Share of Grocery Trade Syndicates in Finland

The Figure 1 represents the grocery trade syndicates and their market shares in Finland for the term 2015-2017. According to this report, S Group is held ahead of other syndicates in the market share during 2015-2017 ranged at 47.2%, followed by K Group at 36.2%. In this contrast the S group and K group held the largest share Finnish grocery market. The German giant LIDL however is held 3rd averaging at 9.3% during this term. The remaining syndicates are Tokmanni Group, Soumen Lihäkauppa Oy, Stockmann, Minnimani, M-Ketju & other Private all hovered over 1.4% to 2.3% in the year 2017. Thus, making S-Group, K-Group and LIDL as the biggest market share holders at 45.9%, 32.7% & 9% in the year 2017 respectively. (Statista, 2017)

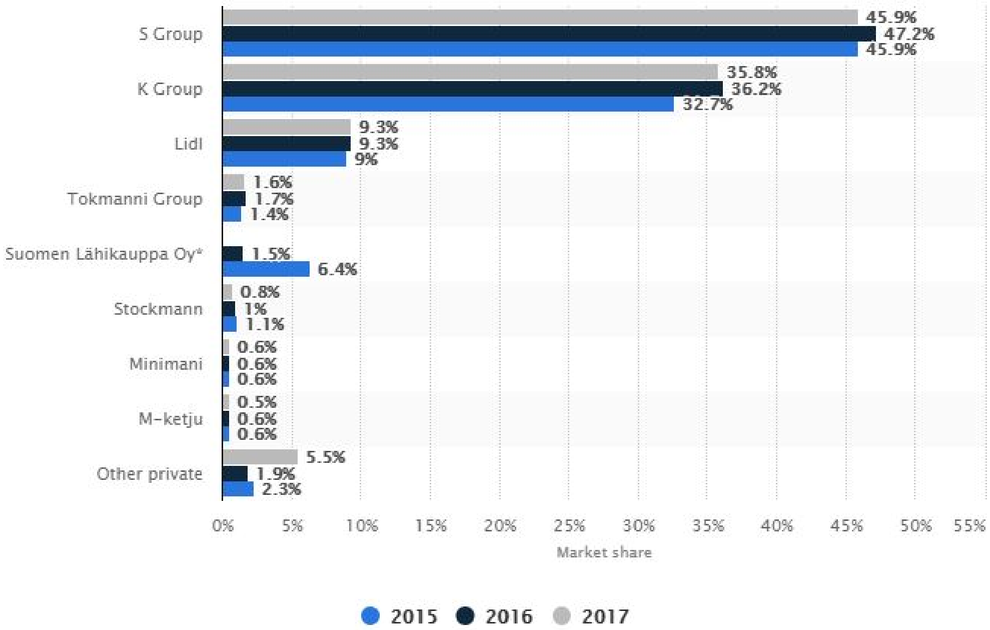


Figure 1 Market Share of Grocery Trade Syndicates

The Figure 2 confirms the share of market among the grocery store syndicates in Finland. (PTY, 2017)

| GROUP | MARKET SHARE % | GROCERY SALES (MEUR) |
|---|---|---|
| S Group | 47.2% | 7,896 |
| K Group | 36.2% | 6,055 |
| Lidl* | 9.3% | 1,551 |
| Tokmanni Group* | 1.7% | 276*** |
| Suomen Lähikauppa Oy (until 11 April 2016) | 1.5% | 249 |
| Stockmann* | 1.0% | 165 |
| Minimani* | 0.6% | 93 |
| M-ketju* | 0.6% | 93** |
| Other private* | 1.9% | 360 |

Figure 2 Share of Syndicates PTY 2017

Previously in Finland, there have been platforms that have successfully launched similar businesses and business models; however, they serve in the spectrum of instantly delivering food/cooked meals from restaurant of choice to the customer's doorsteps. Wolt and Foodora are leading examples of these businesses here in Finland, however, while making a business model for instant grocery deliveries there haven't been any such successful attempts in Finland yet, examples of which are SuomiKauppa.fi and ruoka.net. However, K-Ruoka.fi an online service provided by K-Group & Foodie by S-Group are rather customer friendly and can be considered as competitors in the Finnish market.

*Only a handful of online grocery stores exist in Finland. The concept has failed to take off as it has in other countries, like Britain for example. Jyri Stenberg, the managing director of Finland's first online food store Ruoka.net, says that long transport distances have discouraged shoppers from going online for food.* (Stenberg, 2012)

There is scepticism about the online grocery shopping, because Finns prefer handpicked fresh produce from the grocery stores, also because there are smaller grocery stores like Alepa, Valinta Talo and Siwa that is now owned by K-Group and renamed under it as K-market that can be found just around the corner, which are practical if you need groceries in small amounts, however, if you need them in larger amounts as most families need then you will be forced to visit Prizma, LIDL, K-City or K-Super market or S-Market. Finns have yet to acquire a proper taste of online grocery shopping mainly because the previous attempts have not been able to provide value. "*Kesko's online food services are still at a trial stage. The S-Group, on the other hand, has been running the Foodie.fm service for a*

*couple of years now, and while sales are still small, interest in the service is showing signs of growth."* (Timonen, 2012)

### 2.7 Online Initiatives & E-Grocers in Finland

The following cases address the initiatives and business models that are already operating in one way or another inside Finland.

**SuomiKauppa.fi**

SuomiKauppa(dot)fi is a Brand of Lako Oy situated in Kerava, Finland. It appeals to consumers who have a taste for Finnish goods and products. Aside from groceries it is a marketplace for most Finnish brands. It ships Finnish brands outside of Finland (Kauppa, 2005). Following are features offered by SoumiKauppa(dot)fi.

1. Online Ordering system
2. Multilingual website
3. Customer service
4. International postage and delivery
5. Finnish Products (mainly preserved)

Suomi Kauppa lacks both an instant or a quick delivery system, alongside of most fresh grocery products such as vegetables, meats and dairy products. It offers delivery of preserved products offered only by most Finnish brands.

**Foodie by S-Group**

Foodie is an online grocery shopping platform made by S-Group that allows users to browse the grocery items of the store that offers both item and delivery to a user's address. (Foodie, Foodie.fi, 2017). Foodie allows the user to make search based on their location and offers the nearest store for shopping.

Following are the features offered by Foodie:

1. Online ordering
2. Delivery system
3. Attractive Website
4. Mobile Application
5. Customer Service
6. Products offered by S-Group
7. Products offered by stores owned by S-Group

**K-Ruoka.fi by K-Group**

K-Ruoka(dot)fi is a service started by Kesko Group otherwise known as K-Group for customers to personally pick-up their products that are all assembled and collected in one place at any of the K-Group grocery stores. The products can be picked up at a specific

time that is selected while checking out products or they can be delivered to home addresses. A specific set of instructions or message to the store you are purchasing from. Following are the features offered by K-Ruoka:

1. Online booking system
2. Fresh Produce
3. Pick Up facility
4. Physical presence
5. Multilingual Website
6. Mobile Application
7. Customer Service
8. Large variety of grocery products

None the less K-Ruoka provides a home delivery service, the cost however is not small. (K-Ruoka, 2016)

**Ruoka.net**

Ruoka(dot)net is an online grocery service introduced by Ruokanet Oy. Founded in 1997 Ruoka(dot)net is an independent online grocery store that operates in Helsinki, Finland for private and corporate customers with delivery services for companies in Tampere, Finland. The features offered are as follow:

1. Online ordering system
2. Fresh produce
3. Delivery services
4. Physical presence
5. Customer service
6. Large variety of grocery services

(Ruoka.Net, 2018)

### 2.8 Regulations in Finland

There are certain regulations that have been set to be followed by all operating in food business. The Ministry of Agriculture and Forestry, Finland (23/2006, amendments up to 352/2011 included) section 11 refers to the requirements of concerning the handling storing and transportation of food as follows. (L 8.4.2011/352.)

1. Food must be handled, stored and transported in a way that does not endanger the high hygiene standard of food.
2. Further provisions are issued by Decree of Agriculture and Forestry on:
   - Handling and transportation of food.
   - Temperature for handling, storage, transportation, selling and serving food and temperatures of food.

- National implementation of the Agreement on the international carriage of perishable foodstuffs and on the special equipment to be used for such carriage (Finnish Treaty Series 48/1981; the ATP agreement).

**Transport**

While conducting transport of food items, control systems should include measures to prevent weakening of the hygienic quality of food. Self-supervision must accordingly show the actions covered by the plan, the individual conducting the transport requirements for transportation equipment and rolling stock. Transport container should operate on mentioned transport temperatures. Temperature monitoring system must be onboard asses and monitor food hygiene. The supplier and recipient should conduct food inspection and check-ups to maintain food hygiene. The most efficient way to conduct these operations is to integrate check plans for these tasks upon loading and unloading. A fully maintained and up to date in house control should be created. (Evira, 2019)

**Storage**

As soon as the food items have arrived, they should be transferred to an appropriate food storage. The required food items and their temperature, humidity levels, and smell should be understood. Since products vary, their storage also varies and should be stored accordingly. for example, dry storage, cold storage, cool storage, frozen storage, fresh meat of poultry, meat and fish should have their separate storages. storage of raw materials and finished products should be stored in different storages. It is important to note that the storage should must align with how a certain product has to be stored in a storage. (Evira, 2019)

# 3 Research Methodology

The thesis is research-based thesis. A research-based thesis is used to gather data of a specific phenomenon. This thesis will use the following research methodology to conduct its research.

### 3.1 Method

Research is an integral part of our society, much of man's actions are based on assumptions and untested hypotheses. such untested hypotheses are usually accepted on faith or some common and no attempt is made to verify them. In contrast, research involves the objective verification of hypotheses. These verifications require the scientific analyses of problems and devising appropriate methodologies for testing hypotheses. (Taylor, 2005) Quantitative research requires theories or models of phenomenon subject to research or an understanding of phenomenon exist. internal or external factors exist (variables) influencing the phenomenon are known because calculations for quantitative research cannot be conducted without knowing what is to be counted (what). (Kananen, 2013).

As part of research, the literature review also focuses on business models that provide a comparison of success and failure factors for e-grocers. In the city of Porvoo, the empirical part mainly analyses the market for an online grocery service in Porvoo. The research conducted was both in Qualitative and Quantitative in Nature.
"Qualitative research is synthetic or holistic (views the separate parts as a coherent whole), heuristic (discovers or describes the patterns or relationships), with little or no control and manipulation of the research context, and uses data collection procedures with low explicitness. There is less of an emphasis on statistics and more of an interest in the individual and immediate context. " (Tavakoli, 2012)

The analysis of business models for e-grocers and operators was qualitative in nature. Secondary on this subject was collected using different published articles, and electronic articles in the form of visual and textual manner. Majority of the analysis was done on to the existing business models. "Qualitative research is fundamentally interpretative, indicating the research outcome is ultimately the product of the researcher's subjective interpretation of the textual data. The researcher is essentially the main measurement device in the study and provides a detailed description as opposed other quantification of data through measurements, frequencies, scores or rating. Providing a natural and holistic representation."

Keeping in mind the versions of the definitions for both qualitative and quantitative research methods, (Tavakoli, 2012) discusses that "quantitative research is classified as systematic, rigorous, focused, and tightly controlled, involving precise measurement and producing reliable and replicable data that is generalizable to other contexts." It aligns directly with our first objective and aim of the research where a portion of target audience in Porvoo is analysed for their willingness to practice online grocery shopping, by conducting

a survey research. “Quantitative research is the primary example of hypothesis testing research investigated through data quantification and statistical analysis.” (Ibid)

Quantitative research is designed to provide objective descriptions of phenomenon and to demonstrate how phenomenon can be controlled through specific treatments. For the benefits portrayed in Figure 3 the quantitative approach to research is considered.

| | *Pros* | *Cons* |
|---|---|---|
| Mail surveys | Lowest cost per interview | Return rate is often low (less than 25% in consumer surveys and 1% in business surveys) |
| | No interviewer bias (anonymous questionnaires) | Lack of flexibility in the questionnaire (which must be short and easy to answer) |
| Phone surveys | Less expensive than face-to-face interviews | No observation |
| | Flexible because interviewers can probe or stimulate correspondents to answer | Sample limited to people listed with phone number |
| | Relative anonymity | Interviewer bias |
| | | Engaged line and no answer can be significant |
| Face-to-face interviews | Very flexible: respondents can be shown visual materials and helped to answer questionnaires | Interviewer bias |
| | Refusals may be lowered by a positive attitude from interviewers | Expensive |
| | Observation provides more quality data | |

Figure 3 (Viardot, 2004)

Thus, the research method that has been chosen is quantitative. The research is conducted through a questionnaire that is divided into two parts section 1 and section 2. It is a structured questionnaire.

### 3.2 Data Collection:

Data collection for this research was based on a survey conducted in the form of questionnaire. People in the city of Porvoo were asked to fill the questionnaire. The following questions were tailored for the participants of the survey:

1. Question 1-4: Email address, Name, Age, Location/city
2. Grocery store(s) of preference?
3. Grocery store visits per week?
4. Mode of Transportation for visits?
5. Amount of time spent per week on grocery shopping.

6. Satisfaction with current way of grocery shopping.

7. Questions 10-14, Possibility of usage of online grocery delivery service? amount willing to pay per delivery (based on distance)? Grocery store preference while ordering online? ideas and suggestions on how the service should be like.

In order to help with data analysis, the survey was a combination of open-ended and close-ended questions.

The city was divided into clusters to gather the data. On some locations due to limitation of conducting a survey on specific premises, the location was changed to city center of Porvoo and Simple random sample approach was applied.

The questionnaire was organized according to the guidelines with Haaga-Helia UAS's survey format & guidelines. After preparing it, the survey was subjected to tests using random computer-generated answers online. However, the responses for the survey were conducted in person rather than using the online platforms. English and Finnish were used as the language of the questionnaire to diversify the responses. The target group was set to be of independent adults who are managing their own finances and are unable to grocery shop due to time limitation.

While conducting this survey, and in order to collect data, the participants were informed about the purpose of conducting this research. Moreover, they were assured that their personal information will not be misused. This survey was conducted by keeping the ethical values in view.

### 3.3 Limitations, Reliability & Ethical Concerns

For most of the written literature review, material such as books were borrowed from Haaga-Helia UAS Porvoo & Pasila libraries, online publications including articles, journals, e-books. Care was observed while sourcing the study material and most of the source material was written by experts in fields of E-commerce and transportation. All the sources are cited, and they can be observed in the references section. Majority of the sources have blended into the thesis well, however, some publications did not mention the technologies of 2019.

All the respondents of the research questionnaire were made aware of the research being conducted, informed that their data and personal information will be guarded, and they were told that their response will be analysed as part of this thesis. Survey was conducted indifferent places in Porvoo, along with the city centre. People from different walk of life

took part in it. The questionnaire was designed and written in both English and Finnish languages, for ease of understanding and remove the non-response error. After collection of data, the author came to know that this research is subject to data snooping. The author did not have any prior knowledge of or familiarization with research methodology nor any knowledge of editing, coding and transcribing until after data was collected from the field. The author hadn't considered the size of the sample that needed to be studied for a better analysis. Thus, the sample is subject to coverage error.

Sample data was passed though cleaning process. However, this raises an ethical question on the reliability of data. Should certain data be removed by the author from a study? In some case, finding "False Trues" and missing data had to be removed or blank responses had to be disregarded so that the missing data didn't disrupt the present data while analysing. In addition, the author of this thesis also has certain human limitations:

1. Lack of previous studies in this field of area.
2. Literature review is an essential part of any thesis and research paper, however, in this thesis the researcher has done to the best of his abilities to find previous data, any researches conducted, or paper or journals written.
3. The scarcity of the research done in this field limits the researcher's ability to formulate an extra ordinary literature review.

4. Scope of discussion, the writer of this thesis is not a frequent researcher, in that the researcher lacks extensive experience in conducting regular researches for research papers.

# 4 Data Analysis & Results

**Result 1**

The highest number of respondents are from the age group 18-24 making up to 44.8% of the sample followed by the age group 24-34 at 34% of the sample that was studied. The remaining study sample can be divided into age groups of 55 or more at 10.3%, 34-44 at 6.9% and lastly 44-54 at 3.4% respectively.

**Result 2**

In terms of individual stores that were chosen alone then LIDL has a clear lead of 20.7%, followed by 2 equal shares of 13.8% by people that chose LIDL, S-Market, K – Market and people that choose LIDL and S-Market. Individual selection of S-Market and K-Market is held equally at 6.9%. Some respondents have choses a combination of S-Market and K-market that is also held at 6.9% whereas the remaining of the 9 preference combinations are held at 3.4%

**Result 3**

The respondents responded with 5 different answers, however, two of the highest portions tie at 30.4% where they visit the grocery store either 2 or 3 times a week. 21.7% of the sample responded that they visit only 1 time per week. Whereas 13.0% of people suggested they visit the grocery store 4 times a week. Lastly a small number of people equal to only 4.3% of the sample responded with 5 times a week making it the highest visiting group among other groups visiting the grocery stores.

**Result 4**

The highest percentage of visitors go to their desired grocery stores using their personal vehicles and make up 51.7% of the entire sample. Followed by 24.1% of people that would either use their personal vehicle or walk. 20.7% of the respondents chose to mainly walk to the grocery store. Lastly, 3.4% people from the respondents responded with either walking or using public transport.

**Result 5**

The data gathered from the respondents when they were asked about the time, they spend grocery shopping per week. Majority of the 29 people 8 in number of people replied with 1 hour, closely followed by 7 people that spend 3 hours whereas 6 people said they spend 2 hours. In this way 21 of the 29 people spent an hour or more per week of their time while shopping for groceries. 5 respondents were spending the least amount of time 30 minutes and only 2 spending 45 minutes per week for grocery shopping. Only 1 respondent spent more than 4 hours and whereas 5 people spent only 30 minutes doing so. The time spent per week for grocery shopping. 27.6% of people spent 1 hour, 24.1% spent 3 hours and 20.7% of people spent 2 hours in a grocery store. This makes 72.4% of the respondents spending time between 1 and 3 hours per week for grocery shopping, dwarfing the remaining groups such as 17.2% that spend 30 minutes, 6.9% that spend 45 minutes and 3.4% that spend 4 or more hours grocery shopping.

**Result 6**

The responses to question 9 are significant as they reveal data on satisfaction of their current grocery shopping experience. On a scale from 1 to 5 the responses are with 1 being not satisfied up to 5 meaning very well satisfied. In the following doughnut chart in Figure 11 it can be. According to the doughnut chart in figure 11, 58.6% of the respondents responded with 4 on the scale of 5, meaning they are very satisfied with their current grocery shopping experience. 20.7% of the respondents chose 3 on the scale meaning that they are fairly satisfied.13.8% chose 5 on the scale showing they were very well satisfied

of their experience. Lastly a significantly small percentage 3.4% chose 2 and 1 on the scale showing their satisfaction as least and not satisfied. The doughnut chart in the figure 11 shows us that the majority 58.6% and 13.8% chose 4 and 5 on the scale respectively and makes up to 72.4% of the most satisfied individuals of the sample. Comparatively only 20.7% were satisfied, 3.4% scaled at 2 as least and remaining 3.4% scaled at 1 as not satisfied individuals.

**Result 7**

A great number of individuals 41.4% have responded with “No” as an answer when it came to assess how likely will they use the service. 31% aren’t sure if they will or will not choose such a service if an opportunity presents itself. Only 27.6% are willing to use such a grocery delivery service, this is the smallest percentage among the remaining response.

**Result 8**

In relation to responses in question 10 above, a total of 8 respondents that choose only Yes in the previous question chose the price they are willing to pay for grocery delivery service based on their distance. 4 of the respondents are willing to pay 3-5€ whereas 3 respondents can pay 3€ & the smallest number of respondents only 1 chose that they are willing to pay 5-7€ for grocery delivery service based on their distance.50% of the respondents will pay 3-5€ per delivery, followed closely by 37.5% paying 3€ and only 12.5% will offer to pay 5-7€ based on their distance from the grocery store.

**Result 9**

The responses to question 12 are collected from people that chose yes and maybe in question 10. A total of 17 respondents responded with their choice of store if it was delivering groceries to their homes. In the figure 15 the bar chart shows that LIDL by far exceeds all other stores in terms of being ordered groceries from as 7 respondents selected is as a sole store for delivery. however, it can also be seen that it is selected with other stores in a combination for example 3 respondents chose LIDL and S-Market. 2 respondents chose K-group stores, LIDL and S-Market, and 1 respondent chose LIDL, S-Market and Prizma. 3 respondents chose only K-group stores and 1 respondent chose S-Market. By analysing the data here it can be said that LIDL is the most likely grocery store to be ordered from, followed by K-Market and S-Market. 41.2% chose LIDL, 17.6% chose K-Market, 17.6% chose LIDL and S-market in a combination, 11.8% chose K-group stores and LIDL in a combination, 5.9% chose S-Market as a single store and lastly 5.9% chose LIDL, S-market & Prizma. From this point of view, it can be said that 76.5% of this group that chose yes or maybe in question 10 will most likely order from LIDL if it provided online grocery delivery services. Followed by K-group and S-market.

**Result 10**

As asked in question 5 of section 1 to select a grocery store(s) of preference, question 13 is a re-assessment of the given responses where respondents are asked yet another similar question however, by adding an element of equal placement of the grocery stores from the residence of each respondent. As shown in figure 17 the responses of all the 29 respondents were recorded and LIDL has taken a clear lead as the most preferred and likely to be visited by the respondents. whereas S-Market and K-Market have equal likely hood of being visited the count of respondents for both grocery stores is 7 which is half of LIDL. Lastly Prizma is placed at the bottom spot to be visited by the respondents.

**Free Form Responses**

The responses here are suggestions and ideas of some respondents that were willing to share their thoughts on the matter. There were 5 of responses to this question. They are as follows:

1. Don't know how feasible it is, but, if I can do the shopping part myself (online/selecting from the menu card) and then a driver can go and shop according to my grocery list.
2. I suggest that you consider putting an order limit to prevent people from taking advantage and ordering the whole week's groceries for just one delivery. I always do in Egypt. I would pay what is required, however I will make big orders to prevent paying for delivery multiple times.
3. I will use depending on the price and if it's worth to pay delivery fees
4. I don’t think it would work very well; it takes time to make shopping and the distance there is very long. The transport fee would be too high. I personally would think a solution like this only in emergency, if the whole family would be sick and nobody else could help.
5. Simple Lots of Variation among Grocery/items/stores.

The analyses of the responses above are presented below:

1. In layman terms the first respondent has tried to put forward his concern about the practicality of this business idea or service in general. However, a slight gesture of approval and a change of tone can be seen for a possibility if he/she can select the items online (via website, application or something similar) then the driver can personally go and purchase for the customer according to their needs.
2. In the second statement, another respondent has suggested that a maximum ordering limit should be placed. According to them it will help restrict the users from either making a very small order or a very large order. This will ensure a steady amount of usage of service. In the second half the respondent has shared their experience of online grocery shopping in Egypt.
3. In the third statement the respondent would first like to see the actual service performing and then decide if it is worth using or not. they are concerned about the economic benefits that they will gain from this.
4. In the $4^{th}$ statement the respondent’s is clear about their opinion that this service will not work very well, however the respondent’s argument has a hint of personal preference and that they will only use such a service as a last resort.

5. The last respondent suggests that if a service of grocery shopping is initiated in Porvoo then it should have a variety of grocery stores and grocery items to choose from.

# 5 Discussion & Conclusions

The results of the research are analysed, and data retrieved suggests a few possibilities regarding an online grocery shopping service in Porvoo. Considering the problem statement, the CEO of ASINE expresses his intensions of starting an online grocery delivery service in Porvoo. Thus, giving an origin to the thesis statement: “Market research: Demand and business models for online grocery shopping in Porvoo, Finland”.

Based on the data analysis the following can be concluded:

- Majority of the participants were aged between 24-34 and 18-24 years of age, all the respondents were residents of Porvoo city.
- The data suggests that LIDL as a store was the most preferred either individually or in a combination with other stores
- Majority of the sample visits the grocery store for grocery shopping 2 or 3 times in a week and according to figure 7 these individuals make up 60.8% of the sample followed by individuals visiting only once a week at 21.7%, this suggests that people are visiting the grocery stores fairly regularly in their 7 day weekly routine and grocery shopping is an essential part of their weekly schedule.
- The data also shows that people are 58.6% of people are very satisfied with their current grocery shopping experience and 20.7% are satisfied, a good portion of the respondents are satisfied with their current grocery shopping experience that is the traditional way of grocery shopping.
- Not many will consider using this service as 41.4% of these respondents will not be using a delivery service whereas only 27.6% agreed to use it. 31% are in the realm of uncertainty. High disagreement for using such a service can be traced back to the satisfaction of the respondent’s current grocery shopping experience.
- As S-group & K-group already have an online and grocery shopping and delivery system. It is only logical to suggest that LIDL should be approached for a partnership.
- Since, LIDL lacks its own online grocery delivery service it is a good candidate for this purpose.
- LIDL is also the most preferred according the respondents’ point of view.

- Although the data suggests mixed results regarding the likelihood of the service being used, it should none the less stop the commissioning party to develop a pilot program of such a service to be launched in Porvoo. The data then gathered will determine if this service is a favourable business or not.

In the body of the thesis, basic existing business models for e-grocers with their success and failure factors were explained. It was explained that an e-grocer can enter a new market by analysing its entrant strategies and business models it will follow. Bricks and Click, Pure play, and infomediary can be choses as business models for E-grocer operator while developing its operation strategy.

The Author suggests that Bricks and Clicks models is the most reliable business model for an already existing grocery store, however, this model is labour extensive as website and product catalogue always must be maintained.

For new entrant or fresh e-grocers it is best to adopt a Pure-Play or an infomediary model in their strategy. Pure-Play model provides flexibility of designing operation and software model, thus a system can be designed and tailored according needs and completely from scratch. The only major investment is infrastructure and e-commerce.

## 5.1 Recommendation for future studies:

- It can be suggested that delivery system should not be limited to only one niche. As ASINE is still a young company the use of delivery services can be diversified and applied to many products.
- One of the products is medicine delivery. Due to a growing old population of the country, research ventures can be expanded here.
- Aside from Porvoo, neighbouring cities such Helsinki, Lahti & Kotka present a market full of opportunities for diverse delivery services, market analysis can be conducted here.

## 5.2 Own Learning:

This thesis has given a chance to conduct a research regarding the problem statement. It is written based on the writer’s personal interest in the topic. The problem statement or the thesis statement was identified in the beginning and worked on accordingly. The primary objective of the research was to conduct a market research and analyse the results. The

methodology used for conducting the research was determined and justified however the limitations of the research caused difficulties in collection of data, given the fact no prior literature, data or research had been written, gathered or conducted this thesis is the first of its kind to be written in-regard to the city of Porvoo. The analysis of the data was thorough, and all the data was analysed. There were false trues from a statistical point of view when the data was gathered and later removed as the respondents responded to question in which certain conditions applied. Based on the analysis of data, the conclusions presented are refined are the most suitable to researcher’s point of view.

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# Appendices

## Appendix 1. Questionnaire

Market Research for Thesis

This Questionnaire will help analyze the need for a Grocery delivery service in Porvoo.

**Section 1**

Q1: Email: ______________________________ Q:2 Name: __________________________________

Q3:Age _________________________________ Q4:City ____________________________________

(Mark X on the Boxes below)

Q5: Grocery Store of Preference?

| | | | | | |
|---|---|---|---|---|---|
| LIDL | S Market | Prizma | K Market | K City | Alepa/Valinta/other |

Q6: How many times in a week do you visit a grocery store in a week?

| | | | | | | |
|---|---|---|---|---|---|---|
| 1 time | 2 times | 3 times | 4 times | 5 times | 6 times | 7 times |

Q7: How do you visit the grocery store?

| | | | | |
|---|---|---|---|---|
| Personal Vehicle | Public Transport | Walk | Ask someone to take you | Other:______________ |

Q8: How much total TIME Per Week do you think you spend on grocery shopping (travelling included).
Home→Store→Back home

| | | | | | | |
|---|---|---|---|---|---|---|
| 30 Minutes | 45 Minutes | 1 hour | 2 hours | 3 hours | 4 hr or more | Other: |

Q9: How satisfies are you with your current Grocery Shopping Experience?

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |

**Section 2**

Q10: Will you use an online grocery delivery service for fresh grocery delivery and save time and energy for doing other things?

| | | | |
|---|---|---|---|
| Yes | No | Maybe | Other:_________ |

Q11: If YES, how much will you pay per delivery?

| | | | | |
|---|---|---|---|---|
| 3€ | 3-5€ | 5-7€ | 7€ or more | Other:_______ |

Q12: From which store will you order if you had online grocery delivery service?

| | | | | | |
|---|---|---|---|---|---|
| K-City/Market | LIDL | S Market | Prizma | Alepa/Valinta talo | Other: |

Q13: Which of the following would you visit if they were all next to you home?

| | | | | | |
|---|---|---|---|---|---|
| K-City/Market | LIDL | S Market | Prizma | Alepa/Valinta talo | Other: |

Q14: Your Ideas/Suggestions on how the service should be? (Can Be Anything)

| |
|---|
| |

**Appendix 2. Section 1**

**Responses**

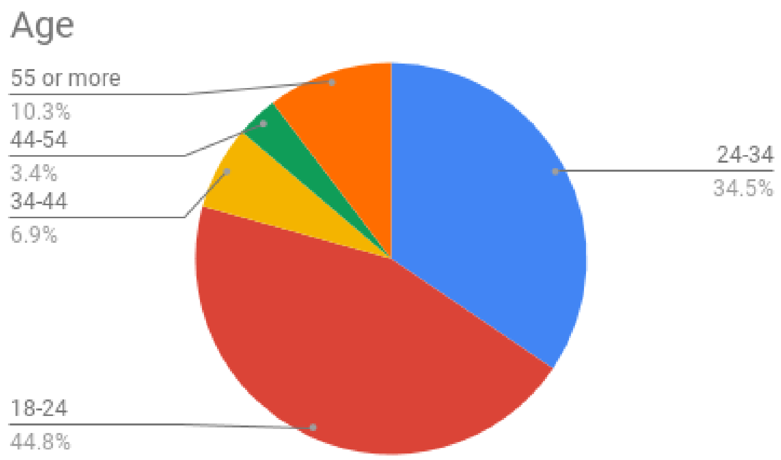


Figure 4 Age

**Question 4 Responses**

The response to this question was limited to only one response. Figure 5 shows that the respondents were all geographically from Porvoo, Finland.

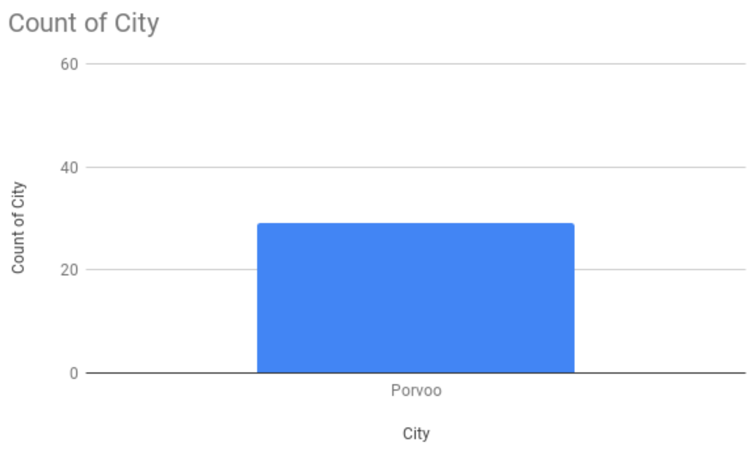


Figure 5 City

## Appendix 3.

### Question 5 Responses

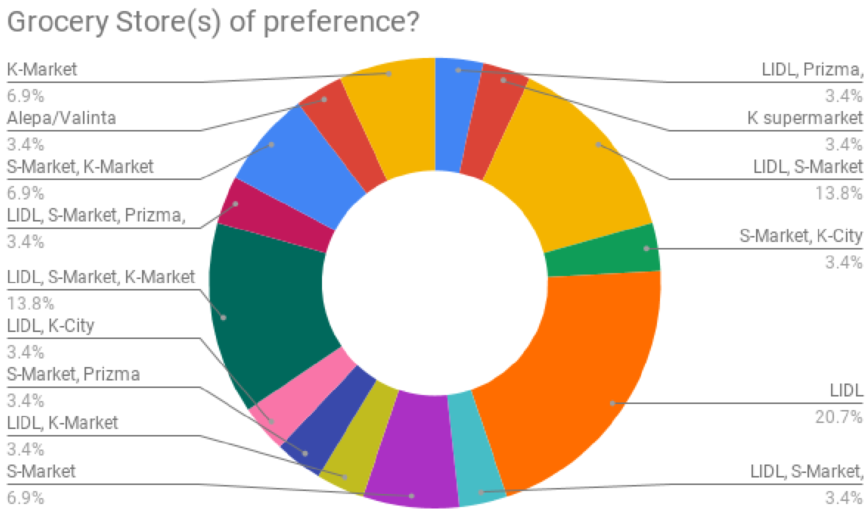


Figure 6 Grocey Store(s) of preference

### Question 6 Responses


Figure 7 How many time do you visit a grocery store in a week

## Appendix 3.

### Question 7 Responses

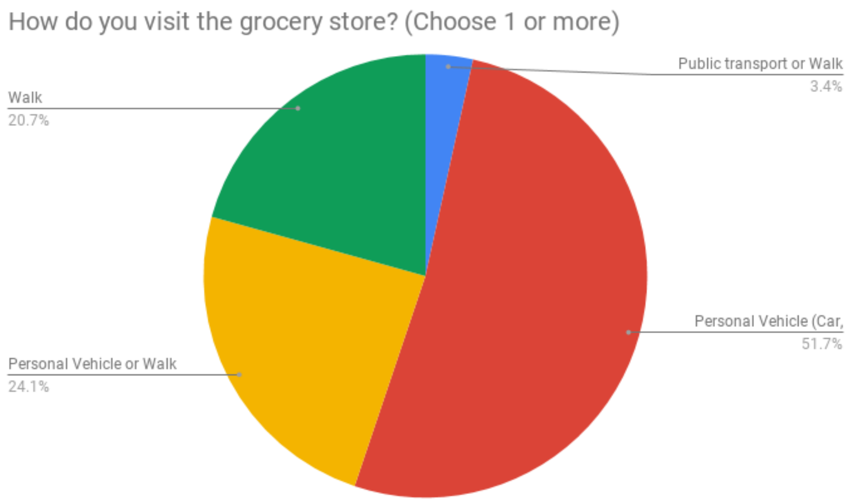


Figure 8 How do you visit the grocery store

### Question 8 Responses

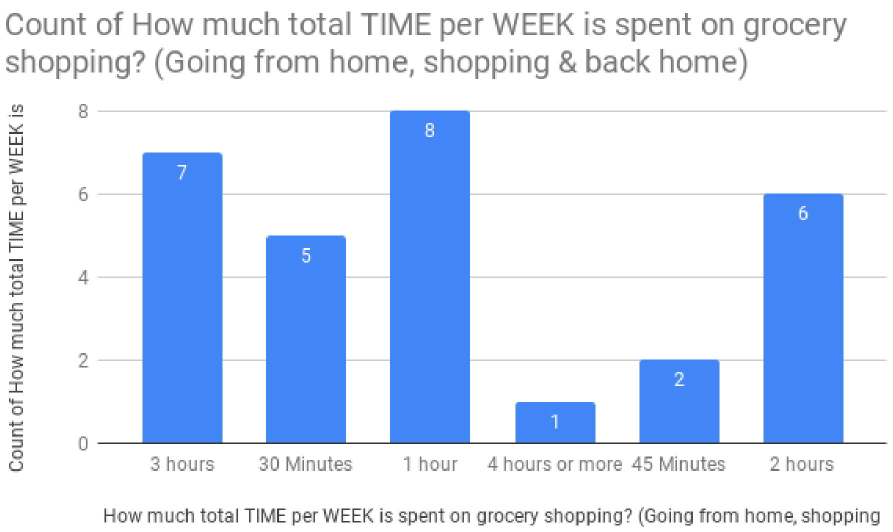


Figure 9 How much time per week is spent on grocery shopping

**Appendix 4.**

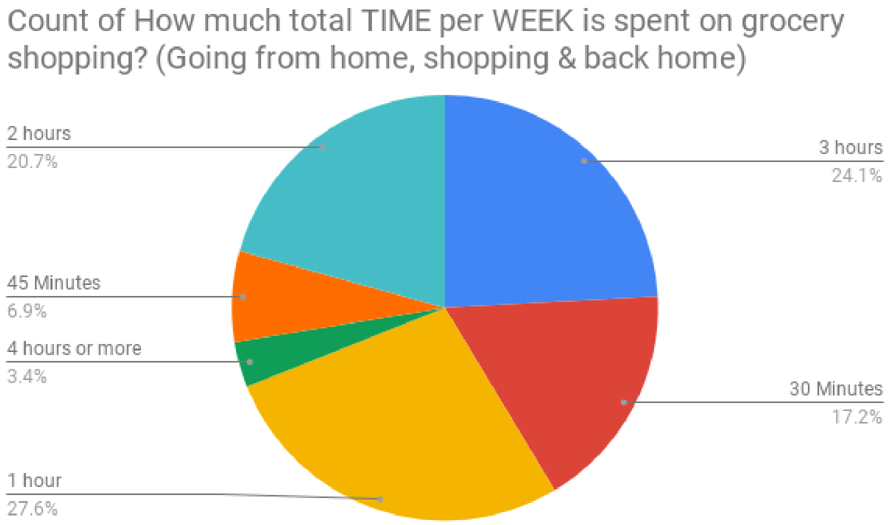


Figure 10 Pie Chart: How much time per week is spent on grocery shopping

**Question 9 Responses**

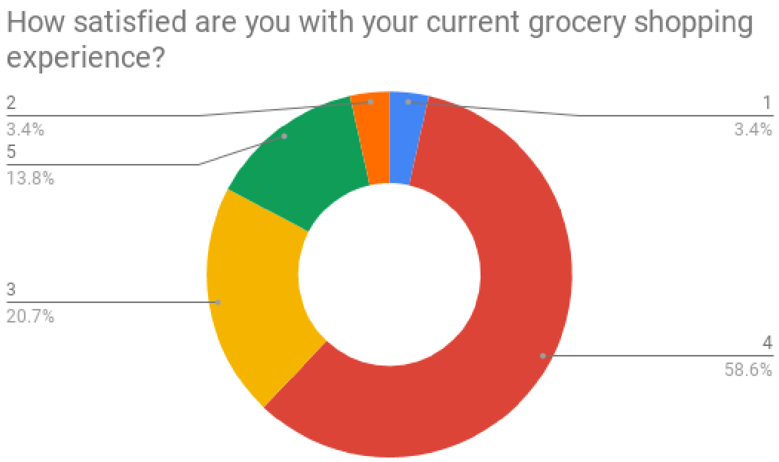


Figure 11 How satisfied are you with your current grocery shopping experience

**Appendix 5.**

**Responses & Analysis of Section 2**

In this section the responses of the section 2 of the questionnaire are analysed. It contains responses of the questions between 10 and 14 of the questionnaires.

**Question 10 Responses**

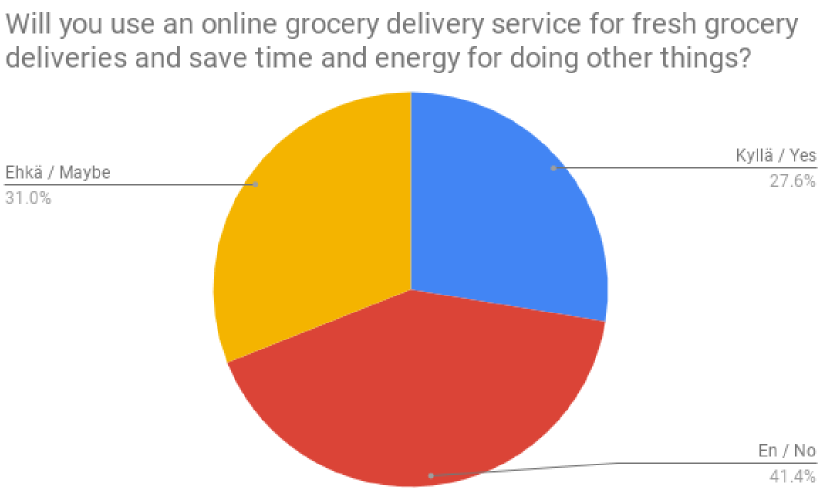


Figure 12 Will you use an online grocery delivery service

**Question 11 Responses**

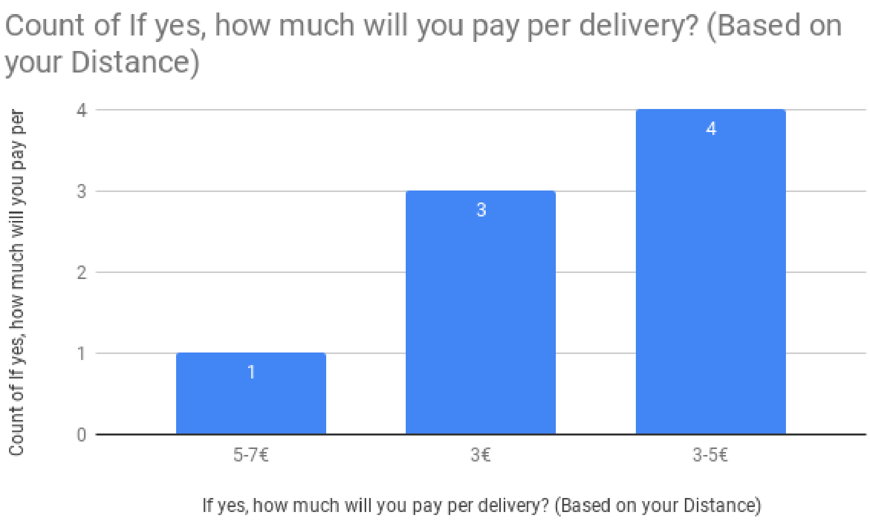


Figure 13 How much will you pay per delivery

**Appendix 6.**

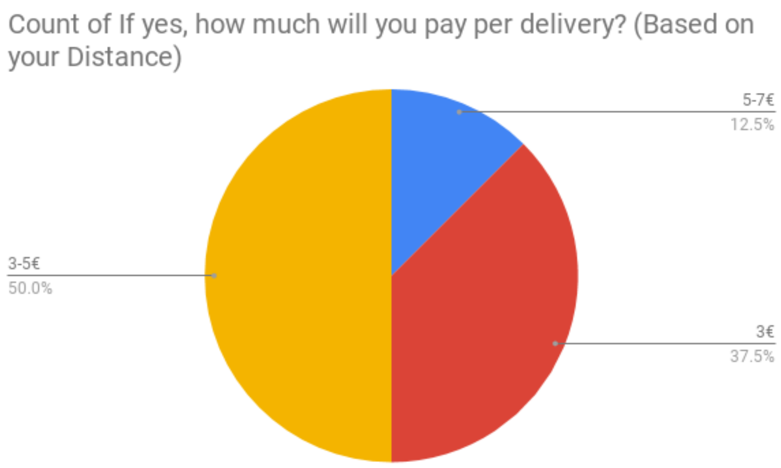


Figure 14 Pie Chart: How much will you pay per delivery

**Question 12 Responses**


Figure 15 Which store will you order from if you had a grocery deliver service

**Appendix 7.**

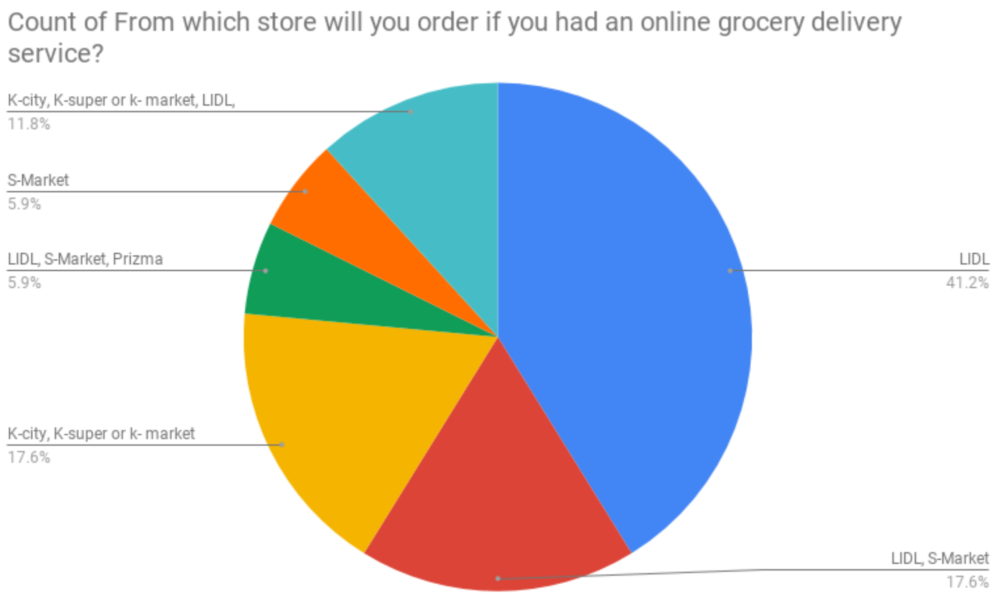


Figure 16 Pie Chart: Which store will you order from if you had a grocery deliver service

**Question 13 Responses**

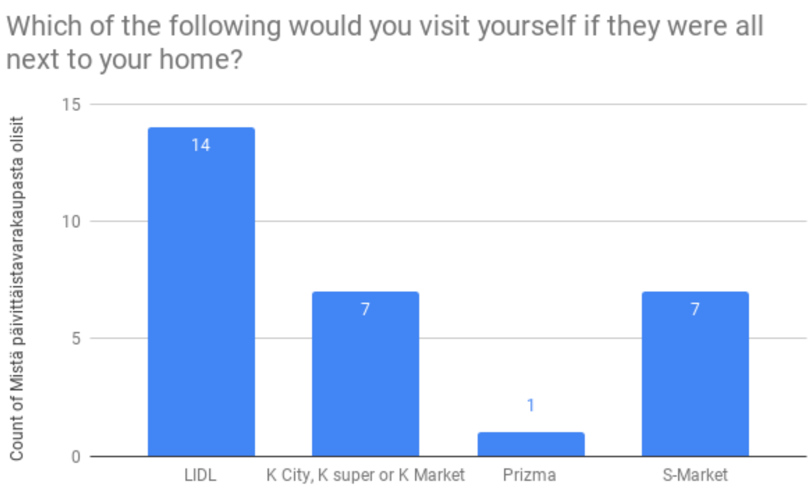


Figure 17 Which of the following would you visit if they were all next to your home