

# Business plan on food vending in Finland.

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### Abstract

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Food vending machine has been developed for a long time, especially in Asia. Some European nations have adopted this concept, however, it is still new to the Finnish market. The authors want to bring this concept to Finland and launch a business for this business model. The aim of the thesis was to explore the feasibility of the food vending machine industry in Finland and to create a business plan which benefits the business of the authors in future.

The theoretical framework of the thesis focuses on reviewing literature about the history of vending machine industry, the business plan including all key aspects of the subject such as target customers, marketing, and operational plan, and the theory of marketing. These theories act as binding for the whole thesis.

In the thesis, qualitative and quantitative research methods are fully utilized. Regarding quantitative methods, survey was chosen to discover the feasibility of the business idea of selling hot food through vending machines in Finland, to identify target customers, and other elements. In respect to qualitative methods, an interview was conducted by the authors with the Managing Director of Selecta Finland in order to gain understandings of Finnish vending industry, to learn from their knowledge and experiences, and to ask for advice. The authors carried out benchmarking method to analyse their potential competitors through comparison. Benchmarking allows the authors to identify the best practices which contribute to their competitors' success. The results of research strengthen the authors' confidence and belief in the business concept which they want to implement in their future business. Additionally, the key components of was analysed and ready to benefit their business plan. However, since the business plan is used for future business, it is important to keep the business plan updated. Moreover, additional research can still be executed to gain more deep insight of Finnish market, customer understandings, and marketing, which means that there is still room to develop the business plan.

Keywords: business plan, business model canvas, vending machine, entrepreneurship

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### 1 Introduction

The topic of the thesis is 'business plan of vending machine business in Finland'. The whole idea behind the thesis is about developing the vending machine business to Finland. The bene-ficiary of the thesis should be the future company of the authors.

The authors have had a dream of opening this form of business in southern Finland. The writing and research of this thesis will benefit the future company of the authors and will act as an actual business plan in the first stage of opening vending machine business. Therefore, the authors put a lot of importance in the development of a thesis and ultimately business plan that is as comprehensive as possible to guarantee profit. The actual establishment and opening of the business is reserved for the next two in order to consider financial issues. The business plan will also act as a motivation and a real asset to the business.

The main purpose is to find out the feasibility of the business idea and produce a practical business plan for the authors' future business. The business plan will act as a firm foundation of knowledge and guidance for their business in future. Another goal of bringing a food vending concept to Finland is to providing people in Finland new experience and access to international trend.

In order to achieve the goals of the thesis, it is important to deeply examine the following questions.

- How do people living in Finland respond to the idea of purchasing foods through vending machines?
- What are the potential competitors in future and what can be learned from them?
- How to produce an actual business plan?

### 1.1 Research methods and theoretical background

In the thesis, a variety of both quantitative and qualitative research methods will be executed to collect valuable data which provides the authors deeper understanding about the target market and helps to generate a good business plan. Regarding qualitative methods, there will be an interview with the Managing Director of Selecta Finland, which is considered as one of the potential competitors in food vending machine industry. Next, net scouting and benchmarking are qualitative research methods utilized to collect and compare information of potential competitors in Finland and other European nations.

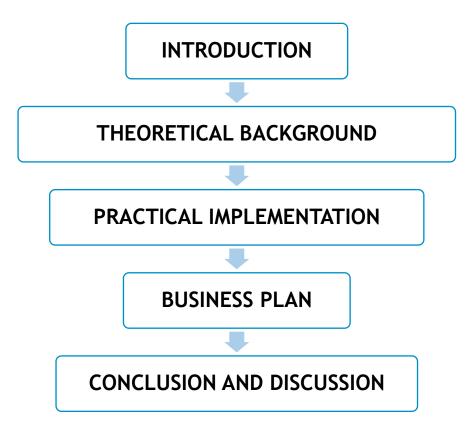
Along with the process of carrying out qualitative methods mentioned above, there will be a quantitative method which is survey including important questions. The questionnaire will be designed in English and Finnish since the target recipients are people living in Finland. The

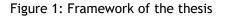
combined outcome of the whole research will help to evaluate the feasibility of the business idea.

The whole thesis is supported by various theories. Firstly, history of vending machine and food vending machine cultures is examined. Secondly, theory on business plan, for example, what a business plan is, the benefit of a business plan, and its components, is reviewed and summarized. Thirdly, theory marketing on marketing mix and marketing plan is also revised. All of these theories act as a binding for the thesis.

# 1.2 Framework of the thesis

This chapter will introduce the framework of the thesis which will be illustrated in Figure 1. The framework of the thesis consists of six parts which are corresponding to the six chapters. They are introduction, theoretical background, research methods, practical implementation, business plan, and conclusion and discussion.





The first chapter is to introduce the background of the thesis, the objectives of the thesis, the research problems and questions, the research methodology, the theoretical approach, and the framework of the thesis. The second chapter focuses on three main theories of the thesis. History of vending machines and food vending culture are revised to emphasize on the fast growth of this industry. This chapter also reviews the business plan theory in order to obtain

knowledge to produce a business plan in the end of the thesis, which mainly helps to solve the third question.

The fourth chapter is the practical implementation. The purpose of this chapter is to focus on the research design and execution as well as to present the information generated from data collection and analysis. SWOT analysis will be applied in this part to evaluate the case study. The chapter mainly answers the first and second question. The results of research documented in this chapter are also valuable information to create a business plan in the end. The fifth chapter is a complete business plan, which will benefit the authors' future business. The last chapter of the thesis is conclusion and discussion. This chapter firstly is to summarize the thesis process and the outcome of research. It also discusses on the limitation of the thesis and suggestion for further research or improvement.

# 2 Theoretical background

In this chapter, theories supporting the author's' research will be discussed in depth. The chapter will begin with the introduction and knowledge of vending machine culture helps to clarify the business idea of the authors. The next theory should be investigated on what a business plan is, its benefits and its important components. In addition, marketing plan will also be focused on as a part of the business plan.

Furthermore, the chapter will also look at the business model canvas (BMC) for the business. The BMC will illustrate how the company will create, capture, and deliver value to its customers. This is crucial for the strategic management of the business in the future.

# 2.1 Vending machine

Vending machine has been popular all over world. A statistic of the Japan Vending Machine Manufacturers Association (2016), there is one vending machine per every approximated 23 people with annual sales of over 60 billion. The figure of the US is one vending machine per every estimated 35 people. (Luan Van 2013.)

Vending machine is simply known worldwide as an automated retailing where people can come and purchase tangible products such as snacks, beverages and lottery tickets after money or credit cards are inserted into a relevant slot. The special feature of vending machine is that there is no requirement of human interaction.

# 2.1.1 The history of vending machine

The first coin-operated vending machine is believed to be created by the Greek mathematician Hero of Alexandria in 215 BC. The initial purpose of the invention was to dispense holy water equally to people inside Egyptian temples. In the early 1880s, vending machines and its technology were practiced in Europe. However, none of them was qualified until 1883, the first commercial coin-operated vending machine was launched in London, England by Percival Everitt for dispensing postcards. Soon afterward, vending machines sprang up at railway stations and post offices for the purchase of postcards, envelopes and note papers. The successful launch of the first modern vending machine inspired Richard Carlisle, an English publisher and bookstore owner, to build the first book vending machine in 1822. The commercial invention of vending machines required the introduction of vending machine services. Specifically, in 1887, the first company, Sweetmeat Automatic Delivery Company for installation and maintenance of vending machines was established. (Vending machine 2017.)

Following the adoption of vending machines in Europe, Thomas Adams Gum Company invented the first vending machines in the United States in 1888 for selling Tutti-Frutti chewing gums which were one of the most popular items at the time. Those vending machines were installed on New York subway platforms. Witnessing the growth of vending machines, the Pulvar Manufacturing Company created a gum vending machine with animated figures to attract customers (Vencoa Vending Machines). This innovative feature was considered as the 'trade stimulators'. (Vending machine 2017.)

In 1902, after imported the concept of the automated restaurant from Germany, Horn & Hardart's 'automat' in Philadelphia were known as pioneer in implementing vending machines into restaurant field in the United States (Klein 2012). The concept of the restaurant was to be completely operated by vending machines. The products of the restaurant were cafeteria-pre-pared foods which only could be purchased through vending machines. After making a payment, customers could get a seat at the restaurant for enjoying their foods. Delaney (2004) said that the idea of vending machine restaurant was incredibly popular, especially during the Great Depression which is known as the worldwide economic depression originating in the United States.

For decades, vending machine has been conquering many industries by selling a wide range of different products from snacks to train tickets. Today, it is not uncommon to see a vending machine on the streets, railway stations, or in organizations. It is worth noting that the thesis will focus on vending machine in food industry.

# 2.1.2 Vending machine in food industry

From dispensing of holy water to postcards in the 1800s, the vending machine market is now bigger than ever and is a welcome revolution notably in the food and beverages industry. In Japan, a leading counterpart in the vending machine market, vending machines exit that are big enough that one is able to do their grocery shopping. Other countries in Europe and other

western countries have taken the trend on board Including Holland and Finland just to name a few, that have vending machine restaurants. The combination of speed, 24-hour accessibility, non-human automaton factor is some of the few reasons vending machines in the food industry is becoming more and more popular in a fast-growing digital age and where people busy lives. (Flynn 2009.)

Vending machines were introduced in the food industry in the mid-1900s and has become very popular and frequently used (NAMA 2016). However, this concept des not develop well in Finland as Finnish people prefer to purchase goods from stores due to the competitive prices. In other countries, for example in Italy, Claudio Torghere, an Italian entrepreneur, in 2009 developed a vending machine that prepares fresh pizza. The machine combines all fresh ingredients to produce the Pizza. The invention was ground-breaking and has since spread to other parts of Europe including the UK. (Flynn 2009.)

Food vending machines are becoming an alternative to a conventional restaurant because they have proven to be more efficient in their use of manpower and space. According to Spring Singapore (2014), the demand of workforce of vending machines is around 70 to 90 percent lower than a typical food store. Moreover, vending machines have a relatively smaller footprint, which reduces rental cost and is able to meet consumers' growing demand for more 24 hours per day of supplying of food. The advantages of vending machines show how the invention and innovations of vending machines have influenced consumers around the world. Vending machines have almost become an integral part of daily life of people in many nations and food vending machines help to ensure the variety and convenience for consumers.

### 2.2 Business plan

There is many existing definition of business plan, however, basically business plan can be understood as an official document clarifying the future goals of a business and framing strategies to achieve them. According to Barrow, Barrow and Brown (2012), the important contents of a business plan must be the long and short-term goals of a business, the description of the products or services provided to a market, the analysis of the market opportunities that the business has been entered and finally, all necessary tools and resources employed to reach the initial targets in the competition with other businesses in the same sector. (Barrow et al. 2012, xii.)

The process of writing a business plan is also considered as telling a story. The story should introduce the background of the business, the business ideas, its goals, presenting the business's components such as marketing, customer segments, target market. It is suggested to tell the story in the way that can grab the reader's' attention on how special and promising the business idea is. The necessities for the plan to be carried out, the risks that possibly happen

and how to be coped with as well as the rewards will be presented in the end of the business plan. It is worth noting that all chapters of the story should be consistent with the plot. In other words, all parts of a business plan must act to support the initial targets set out by the business, which is important to remember in order to keep all things on track and the business goals are secured. (Finch 2013, 6.)

Creating a business plan is probably the most important step in launching a new business or expanding an existing one. Research also shown that without a written business plan, new and small businesses have a higher chance of failure and hardly develop. Making a business plan is also considered as producing a blueprint helping entrepreneurs navigate the right direction to reach his destination. (Barrow et al. 2012, xii.)

Zacharakis, Spinelli and Timmons (2011, 42) said that a business plan is "a living document" which should be revised and nourished during the lifespan of the business. This claim is thought to be reasonable because no one can tell that all events on business plan will happen as expected (Barrow et al. 2012, xii). Therefore, it is necessary to keep the business plan up-to-date. Similarly, according to Scarborough (2012), the process of creating a business plan and constantly improving it is regarded as a learning process requiring entrepreneurs to address important issues such as the form of business ownership, capital requirement and target customer segments. In short, "the real value in creating a plan lies in the process" (Scarborough 2012, 30.)

## 2.2.1 The benefit of a business plan

Zacharakis, Spinelli and Timmons (2011) stated that many people have misperceived that the chief function of a business plan is raising capital only. This belief is not totally wrong but hardly can be adequate since the primary purpose of the planning process is to assist entrepreneurs to have better understanding of the feasibility of their business idea as well as the opportunity they are pursuing. To be more specific, the approach to planning a business prevent entrepreneurs from chasing a bad opportunity by enabling them to make mistakes on papers rather than in practice. (Barrow et al. 2012, xii.)

The process of planning a business simultaneously poses the number of critical questions and requires the relevant answers. To finding out the answers for those questions, talking to target customers and seeking trusted advice are essential because they enable entrepreneurs to gain a better customer understanding. As a result, the puzzles of the product features and requirements which customers most desire can be solved. This is one of the advantages that a business plan provides entrepreneurs as the significant amount of time and efforts in redesigning a product after the launch can be saved in case the product fails to meet customers' demand. (Timmons et al. 2011, 40.)

The greatest benefit of a business plan is thought to be that it enables entrepreneurs to express their business opportunity to many stakeholders effectively. The process of planning helps entrepreneurs to establish a stable background to confidently present the potential and positive result of a business as well as raise the necessary capital from equity investors or debt providers. "A well-founded business plan gives the entrepreneurs credibility in the eyes of various stakeholders" (Timmons et al. 2011, 40). Moreover, business plan also acts as an affirmation to attract the talents or to persuade them to quit their current stable job for the uncertainty of a new business as well as to secure strategic alliances, key accounts or key supplier. In addition, the planning process helps to identify and define the possible risk, reward and the probability for the business to succeed. (Timmons et al. 2011, 40.)

### 2.2.2 The components of a business plan

A business plan outline recommended by Timmons (2011) is indicated in Table 1. Timmons said that there are various formats of business plan today but this one is familiar with many stakeholders and enables them to spot the important details which they are seeking since none of them is expected to read the whole plan carefully. In practice, the business plans with unfamiliar formats are more likely to be rejected by stakeholders. (Timmons et al. 2011, 45.)

١.	Cover
١١.	Executive summary
III <b>.</b>	Tables of contents
IV.	Industry, customer, and competitor analysis
۷.	Company and product description
VI.	Marketing plan
VII.	Operations plan
VIII.	Development plan
IX.	Team
Х.	Critical risks
XI.	Offering
XII.	Financial plan
XIII.	Appendices

Table 1: The business plan outline (Timmons 2011, 46.)

The components included in the business plan outline of Timmons are used in the most business plan (Timmons et al. 2011, 45). In the thesis, the main components such as executive summary, target customers, competitor analysis, product and service description, marketing plan, operations plan, critical risks will be examined. Specifically, executive summary is to sum up the entire business plan, therefore, it plays the most important role. Executive summary should present a compelling story cover all potential aspects of the business, otherwise, there is a low chance that investors will finish the whole business plan. (Timmons 2011, 49.) Next, the entrepreneurs must be able to identify their customers. It is important to get to know their customers and understand them through conversations and observation. Besides direct research with customers, entrepreneurs can also learn their customers from other people who have knowledge of their customers and from their competitors. A clear description of target customers of the business is also a key component of the business plan. (Timmons 2011, 68, 69.) Besides target customers, competitor analysis should be important part of the business plan. By identifying direct and indirect competitors and comparing their performances, entrepreneurs can gain deep understandings of their potential competitors as well as learn from the competitors' key success factors. (Timmons 2011, 71, 72.)

Product and service description are included in the business plan to describe the product or service the company is offering as well as the add value delivered to customers. (Timmons 2011, 79.) In addition, the following component of the business plan is marketing plan and operations plan. While marketing plan focuses on marketing strategy to reach their customers and boosting sales, operations plan concentrates on visualize the production process which allows the entrepreneur to make decisions on finance, resources, and especially labours. (Timmons 2011, 89 -96, 103 -106.) Critical risks are an essential component of the business plan since it helps the entrepreneur to carefully identify potential risks impacting their business's survival. These risks might come from both internal and external factors such as operating expenses, 'availability and timing of financing', competitions, and the interest of market. (Timmons 2011, 127 - 130.)

### 2.3 Business Model canvas (BMC)

Osterwalder and Pigneur (2010, 14) describes the business model as "the rationales of how an organisation creates, delivers, and captures value". In other words, the business model emulates a blueprint for a strategy to be used through organizational structures, processes, and systems.

The purpose of a business model canvas is to describe, challenge, design, and invent business models using the canvas. Canvas means the business models can be painted out and made tangible in one image, which allows a business to map out their entire business model. This works and is easily applicable for both start-up entrepreneurs and senior executives. The business model canvas consists of nine building blocks that illustrate the methods in which a business intends to make profit. These building blocks jointly cover four areas of a business which are customers, offers, infrastructure, and financial visibility. (Osterwalder & Pigneur 2010, 15.)

### **Customer segments and Customer relationships**

The customer segment reflects the customers that a business intends to reach and serve. The customer segment is important because it is the heart of any business. There are many customer segments which an organisation can choose as the best suitable for their business by grouping them according to common characteristics. After determining customer segments, building the business model to fit those characteristics should be carried out. (Osterwalder & Pigneur 2010, 20.)

Customer relationships outline the type of relationships that a business established with its customer segments. There are six types of customer relationships today including personal assistant, dedicated personal assistant, self-service, automated service, online communities, and co-creation. Depends on the characteristics of each customer segment, a company should establish a suitable type of relationship to secure their customers' loyalty. (Osterwalder & Pigneur 2010, 28.)

### Value propositions and Channels

Value proposition describes a set of products and service offerings to the customers that creates value by being the solution for a problem of customers. Value proposition plays an important role in the experience of a customer, hence is the reason why a customer may opt to choose one company over another. Elements which contribute to value creation includes newness, performance, customisation, price, accessibility, convenience, and usability. (Osterwalder & Pigneur 2010, 23, 24.)

Channel building block illustrates channels through which customers are approached and receive products and services. These channels can be either digital or physical channels. There are different functions of channels of an organization such as raising the awareness of the product or service of an organization, allowing customers to evaluate a company's value proposition, customer convenience in purchasing specific products and services, delivering value proposition, and continuing supporting customers after purchases. (Osterwalder & Pigneur 2010, 26.)

### Key resources, Key activities, and Key partnerships

Key resources are considered as the infrastructure to create, deliver, and capture value. This building block depicts key assets which are indispensable in a business model. Specifically, the key resources make it possible for organisations to reach their markets, maintain relationships with its customers, and make profits. Key resources can be categorized as physical, intellectual, financial, or human. (Osterwalder & Pigneur 2010, 34, 35.)

The block of key activities describes key tasks which a business has to do to perform well. Key activities serve in the business model for the same purpose as key resources. However, if key resources are considered as assets, key activities are the most important actions which should be taken by a company. (Osterwalder & Pigneur 2010, 37.)

Key partnerships building block maps out the whole network of suppliers and partners of a business, which helps to leverage the business model. In order to optimize a business model, reduce risks, and acquire resources, an organization need to create alliances. There are four types of partnerships including non-competitor alliances, partnerships between competitors, joint business collaboration, and buyer-supplier alliances. (Osterwalder & Pigneur 2010, 39.)

### Cost structure and Revenue Stream

Cost structure focuses on the most necessary costs for a business model to be operated. After examining key resources, key activities, and key partnerships, the cost structure can be determined easily. Additionally, in order for an organisation to control cost effectively, there are two types of cost structures which are cost-driven and value-driven. Specifically, cost-driven type focuses on producing and maintaining the leanest cost structure by reducing costs whereever possible. By contrast, value-driven structure concentrates on creating premium value propositions with high degree of sophisticated services without concerns about costs. It is worth noting that many organisations fall in the middle of the value- and cost-driven structures. (Osterwalder & Pigneur 2010, 40, 41.)

This building block presents the profit a company gain from their customer segments by subtracting the costs from the revenue. A company should identify which value proposition their customers are willing to pay for. One and several revenue streams can be generated from a specific customer segments according to the number of their favourite value propositions. Each revenue stream may practice different pricing mechanism such as fixed and dynamic pricing, which greatly impacts the revenue generated. Additionally, there are many ways an organisation can achieve revenue streams such as sales of assets, subscription fee, usage fee, licensing fee, and advertising fee. (Osterwalder & Pigneur 2010, 31.)

### 2.4 Marketing

Philip Kotler (2000, 4) defines marketing as "the science and art of exploring, creating and delivering value to satisfy the needs of a target market at a profit". Marketing identifies unfulfilled needs and desires. It defines, measures and quantifies the size of the identified market and the potential for profit. Kotler has also defined Marketing in terms of CCDVTP, which means creating, communicating and delivering value to the target market at a profit. The term CCDVTP is identified as the value chain in marketing among the other important marketing theories. Marketing is a process that starts from the customer's needs and wants and when these needs and wants are understood and identified the suppliers can then fulfil them. This simply means the customer and the supplier have different goals to achieve. The goals that the customers have are to please their own need, and on the other hand the goals that the supplier or organisations might have is that the service or the product is supplied. These products and services provide many advantages, and these might be beneficial to customers, provide employment for the unemployed, provide the shareholders with the deserved profits and lastly, they provide value. (Kotler 2000, 4.)

Another goal for an organisation is to be recognised for what they do as well as gain recognition for its product or services. The organisation will create its marketing communication in a way that is supposed to influence the mind of the customer and their opinions in order to improve the image of an organisation as illustrated in section 2.3.3. By forging relationships with both new and old clients and making an effort to manage and maintain those relationships, ultimately leads to a growth in sales as well as enable the organisation to obtain a better position in the markets. (Bennet 2010, 3.)

### 2.4.1 Marketing mix

According to Neil. H. Borden (1989), the theory of marketing mix is the foundation of marketing, which is the set of marketing tools used by the firm to pursue their marketing objectives in the target market. The marketing mix consists of the four Ps' of marketing which are product, price, place and promotion. These four Ps can be changed in the long run by the company to constantly fix their updated marketing strategies. (Kotler et al. 2000, 10-12.)



Figure 2: Components of marketing mix (Kotler 2000, 10.)

The Figure 2 starts with the product. The product can be anything that can be offered to customers to satisfy their needs or wants. Typically, in marketing, the term 'marketing' is used for any entities or products and services that can be marketed. Kotler (2000) talks about 10 entities that can be marketed, and these are goods, services, experiences, events, person, place, property, organisations information and ideas. There is a wide framework of product such as the variety, quality, packaging, warranty, and return. The next P is price. Price has a great relevance in business. It is the only element in marketing which produces revenue for the business or organisation. It is also the easiest element in the marketing mix which can be adjusted in a short period of time. Decisions on price list, discounts, allowances, instalments, and credit terms are the framework of price. (Kotler et al. 2000, 10-12.)

Place means a marketing channel, trade channel or a distribution channel used to reach out to customers such as retailers, outlets, and catalogues. Place allows customers to easily access to the products or services which they are looking for. In other words, convenience of customers is the value place deliver. Promotions includes advertising, sales promotion, sales forces, public relations, and direct marketing. Promotion is also known as integrated marketing communications, which is illustrated in section 2.3.3. Promotion helps the company to approach the target

customers and attract their attention and interest in a particular product or service. (Kotler et al. 2000, 10-12.)

### 2.4.2 Marketing communications

Marketing communications is focus on the audience experience. Marketing communications are a set of means which are used by a company to reach its audiences or in this case its customers to inform them about its products and services. The main objectives of marketing communications are to get the customers attention, raise their interest, turn their interests into desires, and finally persuade them to take an action. According to Kotler et al (2010), there should always be a clear understanding of what the targeted audience is looking for. the company's position and value proposition are factors determining the key messages which the company wants to deliver to the target audience at each stage of the marketing communication. (Kotler et al. 2010, 687.)

Marketing communications is important to the growth of a company and it plays a big role in creating brand value. Marketing communications has the ability to inform or show the customers why and how the market utilizes its offerings. Marketing communications makes it possible for the customers to be aware who the suppliers and developers of the marketing offerings are. Additionally, marketing communication can also act as a motivation or reward factor for usage or trial of a product. It helps the company to build their own brand and have it always attached. The recent and ongoing rise of digital advertising has generated a symbolic change from the old traditional "push strategies" of products and services to the modern "pull strategies". "Pull strategies" are used to allure customers to a specific brand done by search engine optimization and unobtrusive other ways. The purpose of this strategy is to establish the consumer understanding of a specific brand or product, to strengthen that awareness of a brand and products, and to develop consumer demand. The rise and development of technology deeply altered the way in which consumers process information in the new communications environment. (Kotler et al. 2010, 690-691.)

The views that the customer has on a specific company have the potential to either strengthen or weaken the customer impression of the brand. Therefore, the most successful companies tend to develop theirs brands in order to echo the values observed of the customer. It is important for a company to fully explore all potential interactions with their target customers. Additionally, the company's marketing communication modes including advertising, sales promotion, events and experiences, public relations and publicity, online and social media marketing, mobile marketing, direct and database marketing, and personal selling should be joined in order to deliver persistent, to resonating message, and to attain the strategic positioning that is appropriate. (Kotler et al. 2010, 692-693.) Companies need to evaluate and analyse which experiences and impressions of customers have the most influence at any given stage of the buying process. The understanding will help the company to improve the efficiency, design, and implementation of the budget allocated to the communication mix and to ensure that the right communication methods in utilized. With the appropriate evaluation of marketing communication and their capability to influence the customer's experience and impression of the brand, the company is able to boost sale and to raise equity. (Burnet 2008, 9.)

The framework to develop an effective strategy of marketing communications consists of the several steps. First of all, the target audiences who will be the recipients of marketing message should be identified. They can be regular or potential customers, influencers, the public or a specific group of people. The next step is defining the objectives of marketing communications which can impact the category of the products or services, brand awareness, brand perception of customers, and their purchasing behaviours. After generating clear communication objectives, it is time to produce a meaningful, creative, and attractive message. How the message expressed and which means and channels used for delivering this message should be carefully taken into account to maximize the effectiveness of the message. The channels used to convey the message can be the personal channels such as experts, specialists, and social media accounts of influencers or non-personal ones like trade shows, events, and public relations. (Kotler & Keller 2016, 587.)

# 3 Practical implementation

In the thesis, both quantitative and qualitative methods of research including survey, benchmarking, and interview are executed to collect reliable and valuable data to evaluate the feasibility of the business idea of the authors and to create a business plan for their future business.

All research was conducted by both authors in December 2017. The research methods, their purposes, the process of carrying out them, and the results of research will be documented in this chapter.

# 3.1 Selecta Finland

In the thesis, Selecta company in Finland was chosen for an interview. The authors initially started by conducting net scouting and found out that Selecta Finland has a long history in the vending machine industry, rich knowledge and experiences in Finnish market, good reputation, and position in domestic market. The objective of the interview was to obtain a realistic overview of the company, to gain the understandings of vending machine industry in Finland, to learn from their experiences on the industry, and to get advice on the business idea of the authors.

Selecta Group is a European vending services operator, which was founded in Switzerland in 1957 and then expanded other European countries. (Selecta vending company). According to the Managing Director, Selecta has been operating in Finland for the past 60 years with good reputation among their clients. There are two sectors of business that they focus on. The main sector is providing coffee vending machinery and supportive services in offices such as instalment, maintenance, and replenishment. Selecta only signs a full contract with their clients, allowing them to offer a full package of their products and services. Besides their main business, they also offer public vending machines for snacks and drinks, which is an additional segment of the business. However, this segment does not grow well to play a key role in their business.

### 3.1.1 Interview

The interview method of collecting qualitative data through asking questions is used to discover individual perspectives and experiences, and to address specific topics of interest. The interview is to identify key informants who are willing to speak about their knowledge or experience with the phenomenon of the author's interest. The informant may also during the process of the interview express sensitive behaviours or events that may have occurred in the past in relation to the interview topic. (Altinay & Paraskevas 2008, 107, 112.)

To conduct their interview, the authors choose to utilize a semi-structured interview. A semistructured interview is an extended interview with one or more people. Typically, it is open ended and allows the interviewer to be flexible and adapt to the interviewees response. Semistructured interviews are used in most cases when the research questions are exploratory and evaluative in which case they want to understand a topic with not too many available theoretical explanations or for gathering general information. Semi-structured interview can also be used when the research topic is explanatory, in which case the interviewer may have done some research and analysis on the topic and the interviewer may have clues about the topic and the semi-structured interview may provide in depth knowledge about the topic. (Saunders et al. 2015, 393.)

Semi-structured interviews offer direct interaction, flexibility and many opportunities to realize the research topic, better quality and quantity of data, it may also pose many difficulties in securing the interview. Finding a relevant interviewee and securing the interview maybe difficult, finding a date to have the interview may be hard due to busy schedules, confidentiality issues by the interviewee may limit access to information. (Altinay & Paraskevas 2008, 108.)

Before conducting an interview, an interview guide or interview schedule is essential. This interview guide is a list of all questions, topics and issues that the interviewer may want to cover during the interview. It is a framework for the interview and is not structured to be followed in a standard way, but to be used as a framework to facilitate the conversation. Interview guides contain a list of main questions and probes that help the interviewee understand the intent of the questions. These questions are open and indirect. The interviewer may diverge to pursue an emergent idea in detail, the interview is encouraged to diverge and move away from the interview guide in order to follow a lead that the respondent may offer up in his/her comments and this is called a probe. The interviewer maybe also reword/drop or add questions and change the sequence of questions. (Altinay & Paraskevas 2008, 108.)

To prepare for the interview, the authors generated 10 main questions in unbiased and easyto-understand manner, which is shown in Appendix 3. Most questions were designed as openended questions to collect full answers based on the interviewee's knowledge and experience. The questions were categorized into different topic to establish a flow for both the authors and interviewee to easily follow. There are five main categories in the interview guide including background of Selecta Finland, their business, entrepreneurship, the opinions on food vending machines, and advices for the authors' future business. The interview was planned to be recorded, therefore, asking permission from the interviewee was also noted in the interview guide.

### 3.1.2 Interview with the Managing Director of Selecta Finland

The interview was carried out by the authors with the Managing Director of Selecta Finland. The interview occurred at Selecta office in less than one hour. The interview opened with the introduction of Selecta company and business. Then the authors started to ask questions to collect target information.

### The big player of market and its operation

According to the Managing Director, there are three main players including Selecta, Pelican Rouge, and Paulig, who are dominating the coffee vending machine industry in Finland. Among the three players, Selecta's main focus is providing office coffee solution which accounts for 25 percent of the market share. Besides those three companies, there are also some smaller companies such as Hartwall and Sinebrychoff sharing the same market with several soft drink vending machines within Finland.

Selecta has 10 main locations within Finland, which helps them to cover the majority of population. Their revenue is around 14 million. In Helsinki, their business has about 95 employees working with target clients whose size is more than 20 employees. The company has roughly 4000 operational machines across the country. Specifically, 71 percent of the operational machines are selling coffee in offices and the remaining are public vending machines occupying only 20 percent of the overall revenue.

Selecta has two main types of contract, which are long contracts and full contracts. The full contracts are signed with the office clients for coffee vending machines. The long contracts are

signed with the railway stations, metro stations, and airports for operating public vending machines. The Helsinki branch currently has 7 employees that do the product refills of the machines in the public, 40 staffs that do the product refills in the offices and less than 10 technicians that do fixtures on all the machines in the Helsinki region.

With office vending machines, Selecta rents out the machines to office clients and ensures that the machines work properly. The full package of services includes spare parts, technical maintenance, replacement, snacks, drinks, coffee, plates, cups, cutlery, etc. Monthly cleaning up and delivery of goods are also a part of the service. In case that the machine is broken, the client can call and request for maintenance.

In regards to the public vending machines, the income is generated from two different sources. The majority are from selling products and the remaining comes from displaying campaigns or advertisements on the machines for suppliers. In the case of the public vending, Selecta offers all possible payment mechanisms including coins, SMS, credit card, NFC, mobile pay, and apple pay, which helps to make the products more accessible to customers, facilitate the customer's purchase, and maximize their revenue. Selecta has taken innovations for the snack-and-drink machines in the public vending by installing into their machines a technology called telemetry. Telemetry technology is a remote monitoring system for vending machines that collects information about different object in vending machines and transfers that information where to the handler electronically (Telemetron 2017). All Selecta public vending machines are equipped with a telemetry system that enables them to know if the machines work properly, the number of products sold from vending machine and what they are.

### Entrepreneurship

Generally, it is difficult to obtain official records about the size of the market in Finland and who the main players are, therefore, it makes the Finnish market hard to penetrate. In addition, there have been a tough couple of years in Finland. Economy in Finland is not growing well and the unemployment rate as a result has escalated.

According to the Managing Director, Finnish market is quite small due to the small population. Therefore, the ability to adapt new trends of Finland is slow as well. Since there are not many residents, there is limited demand to keep up with new trends and adopt new concepts. In addition, the uneven density of population is also a challenge for a business because it is difficult for a business to cover the whole Finnish population when some religions are too rural and cannot be a market. Thus, if bringing a new thing to Finland, it would be expected to take a long time and efforts to make it successful.

Among other European branches, Selecta in Finland has been the worst performer due to the low rate in economic growth of Finland, which affected the ability of the company to invest in

environmental practices. The activities of the company have mostly focused on reducing costs but an improvement in near future can be expected.

As for technological advances, there is no big improvement in vending machines of Selecta Finland, which is a result of reducing costs. Selecta refurbishes their machines as opposed to purchasing new machines to cut expenses. According to the Managing Director, the setting up a vending machine requires a big investment, especially for the public machines. The company have to build concrete platforms to keep machines stable and elaborate electric system before installations.

# Prediction in near future

According to the Managing Director, in previous years, the trends in terms of innovation and design was very stable. However, in recent years, the industry has experienced big technological leaps as the robotics and the machinery are developing rapidly. Today, people can get a fresh-baked pizza through vending machines just in a couple of minutes. Even with the obstacles of Finnish market and its economy, the Managing Director think vending machines for fresh foods will come to Finland sooner or later since Sweden is practicing this concept now. Sweden is usually known as a pioneer among Nordic countries, therefore, food vending machine can be potential and promising in future.

# Advice

The Managing Director advised that similar to other new concepts, it takes time for the public to digest and adapt to the idea of the concept. Therefore, exercising patience, properly planning, market research, keeping evaluating operational advantages and drawbacks, and searching legislation are important.

# 3.1.3 SWOT of Selecta Finland

SWOT is a great tool to use when analysing strengths, weaknesses, opportunities and threats either within an organisation or in a personal setting. (Pickton & Wright 1998, 102-104), This method of analysis was applied to evaluate Selecta Finland's performance, which is presented in Table 2 below. All data analysed was derived from collection process from net scouting and interview with the Managing Director. The purpose of using SWOT analysis is to learn from their advantages and disadvantages in order to prepare for the future business of the authors.

STRENGTHS	WEAKNESSES
• Product is deep-rooted in national cul-	High operational costs
ture.	• Small domestic market- 5 mil-
Great knowledge and understandings in	lion people
customer/buying convenience.	• Do not practice environmental
Technological innovations - Telemetry	sustainability
Well-established distribution practices	Lack of public awareness
Nationwide presence.	
Refurbishment practice	
• Price - cheaper than coffee shops.	
OPPORTUNITIES	THREATS
• Expansion - opportunities to expand	Competition - Many coffee
product offerings	venders
Innovation capabilities	• The climate and weather

Table 2: SWOT analysis of Selecta.

# Strengths and oppotunities

One of the core strengths of Selecta Finland is their product. Coffee is deep-rooted in the Finnish culture. Despite the tough competition and the disadvantages of small population, demand seems endless. A well-established distribution practices is another strength of Selecta Finland. Having their machines installed in office buildings keeps their clients from leaving the building in search of the product elsewhere, which additionally promotes convenience and loyalty. As mentioned above, to minimise costs, Selecta Finland avoids constantly buying new machines by refurbishing old machines in terms of upgrading the technology and in some cases, physical parts of the machine. Furthermore, price and nationwide presence are also considered as their strengths due to the accessibility of the product in terms of their prices and availability in the public and in offices.

On the other hand, possibility to expand the company is a core opportunity. Coffee is understandably Selecta's main product but as mentioned in the Threats, the increase in the number of competitors offering the same products with competitive prices put pressure on the company. Thus, although Selecta has loyal office clients that bring most of their income, there is still the urge to find ways in which they could differentiate themselves from their competitors. Moreover, because vending machines industry heavily depends on innovative technology which is changing rapidly and easily outdated, Selecta Finland has many opportunities to refresh their business and image by keeping up with new model of vending machines and updating new technologies.

### Weaknesses and Threats

The high operational cost of the vending machines was mentioned as a core weakness. Sourcing the machines itself is a big investment, especially for the public vending. Besides purchasing machines, building security barriers and electronic system in public places also are even more significant expenses. The other significant weaknesses are the limited population and lack of environmental sustainability practices. The limited population makes the expansion of product range and product variety difficult to be carried out. The environmental sustainability is not executed due to cost minimization by the company. The last weakness is considered as lack of public awareness. Even with the long history and the availability in public places, Selecta Finland does not receive much attention from the public as expected. They are likely to doing their business with office clients better than with public vending segment. The evidence is that revenue from their public vending segment takes up only 20 percent of their total revenue.

The first threat of Selecta Finland business is the high competition, which urges them to constantly improve their products and at the same time, opens a new path for them to adopt other types of products. Additionally, the climate and weather also pose a threat for their public vending business. Public vending segment of Selecta Finland's business usually require a big investment to establish a selling point. However, the climate in Finland is quite tough along with fast-changing weather, which easily causes damages to public vending machines.

# 3.2 Competitor analysis

Since the automat concept has not been widely adopted in Finland, fast food restaurants operated by vending machines in other European countries and Selecta Finland will be examined and analysed by primarily using net scouting and benchmarking methods.

Besides Selecta Finland which was already introduced in the earlier section, the benchmarking process started by identifying the potential competitors for the future business of the authors. After doing net scouting to discover the food vending machine industry across Europe, FEBO franchise in the Netherland and Let's Pizza franchise in Italy are chosen to deeply examined. In addition to the popularity of these two franchises in their home countries, they also succeeded to gain the public's attention abroad when mentioned in well-known newspapers such as New York Times, the Guardian, and BBC.

### 3.2.1 Competitive benchmarking

In the thesis, competitive benchmarking is employed. According to Kelessidis (2000), competitive benchmarking is conducted against competitors to explore their best practices and then data obtained from this method is analysed in a later stage to explore the cause of those practices. The purpose of using competitive benchmarking is to identify advantages and drawbacks of potential competitors in food vending industry in Europe in order to find out the best practices which benefit the authors' future business.

To carry out competitive benchmarking, the authors first identified potential competitors which are FEBO franchises in the Netherland, Let's Pizza franchises in Italy and Selecta company in Finland. These companies were chosen based on their reputation and public attention which were generated through net scouting. Specifically, FEBO franchises is considered as a tourist attraction in the Netherland, Let's Pizza is a new and creative automat which has brought a completely interesting way to enjoy this traditional Italian food, and Selecta company has provided and operated a lot of snack-and-drink vending machines which can be found at railway stations, metro stations, shopping malls and business offices. Among above-mentioned companies, Selecta company is viewed as a special case since their business concept is quite different in some aspects, which will be further discussed in the analysis.

After competitors had been selected, the benchmarking process started to be planned. The authors decided to use net scouting as a research method to collect the background data of competitors. Net scouting is considered as a good method of online data collection for establishing the initial understanding of a research problem via the Internet. The data obtained from net scouting is usually the secondary data which is available on the Internet. Net scouting can be used for many purposes such as gathering statistics, identifying the existing trends and updating advanced solutions in various fields. (Moritz 2005, 194), Net scouting provides researchers an advantage to easily and quickly collect initial data with low costs. Nevertheless, this method also contains drawbacks. The usefulness of the secondary data obtained is quite limited in addressing the research problem. In addition, due to the easy accessibility of online data, the reliability and accuracy of those data are not secured. Therefore, it is suggested that secondary data should be evaluated before putting into use (Malhotra 2004, 103). In the thesis, the primary sources of background data of competitors are their companies' websites and articles from high impact journals like New York Times due to their validity.

It is suggested to have a plan on target measures or so-called benchmarks before doing research to avoid wasting time and effort on collecting and examining invaluable information (Kelessidis 2000, 3). In other words, the type of information needed should be decided in advance for relevant information to be quickly spotted and gathered. Seeing the importance of this step, the authors agreed on some benchmarks which are the history of the competitors, their market, domestic and international reputation, products, price range, and special practices. These benchmarks were chosen according to the requirement of understandings of competitors' background, their performance and the key to their success. As predetermined target information, the process of net scouting happened mainly on specific tabs of competitors' websites such as home page, the company's story, and their product offerings. However, in practice, due to the less informative websites of some competitors, articles of dependable journals and primary data from the interview with Managing Director of Selecta in Finland were fully utilized to address this issue.

# 3.2.2 FEBO franchises in the Netherland

FEBO is a popular fast food chain in Netherland and become a local feature with 60 stores all over this nation. FEBO was first founder under the name FEBO Bakery, which was later changed into Maison FEBO. The slogan of the chain is 'De Lekkerste' which means 'The Tastiest', which indicates that the quality of the products is always secured by daily fresh-made products, long history of experiences, decent recipes and practices of sustainability. The automate has played the starring role in FEBO business concept for more than 40 years. (FEBO 2017)

Since 1960, Johan Izaäk de Borst was the pioneer to reshape his pastry snack into a 'hit-andrun' snack bar selling a variety of products including cheese soufflé, croquette, hot dogs and hamburgers. Customers can purchase almost all products automatically in FEBO. They can choose their preferences, insert the coins into the relevant slot, open the glass compartment and take out their foods. FEBO does not totally depend on vending machines because there is still a counter where customers can purchase other items such as other types of hamburgers, beverages, ice cream, and French fries. The wall of vending machines separates customers and staffs replenishing products into compartments. (Holland 2017; FEBO 2017.)

Sustainability is one of the important elements facilitating FEBO's success and making this brand popular all over the Netherland. FEBO carefully choose local suppliers for long-term partnership with good reputation. Specifically, the beef ingredient used in the products has been totally Dutch original and supplied by a family business for more than 40 years from Amsterdam, which shows that besides healthy and strong partnership, FEBO also promotes local support. The products of FEBO have FSC (Forest Stewardship Council) trademark and labels attached, ensuring the credibility and verification of their origins. For example, raw material used to produce FEBO's products is not originated from high natural value forests or plantations having detrimental impacts on tropical rainforests. (FEBO 2017)

# 3.2.3 Let's Pizza franchise in Italy

Let's Pizza is the name of a vending machine franchise whose machines have the ability to make fresh pizza from scratch. The machine was invented by Mr. Torghele, an Italian who first got his idea when he was working in a pasta manufacturing company in California in the mid 90's. With help from a Dutch investment fund, borrowed money from family and friend and his capital he began to work on a technology that would make frozen pizza. The First plan failed. Then in 2003 Mr. Torghele altered his plans and managed to produce a machine that was to be

tasted and presented in trade fairs in the U.S. The machine Mr. Torghele and his engineers had produced, with the help of Unilever they managed to test-market 20 machines in Germany. (New York Times 2009.)

The machine is outfitted with windows, so customers can observe how the pizza is made. When a customer chooses a pizza from a variety of ingredients, machine then combines water, flour, tomato sauce, and fresh ingredients places it in the infrared oven to make a pizza in approximately three minutes. The baked pizza then slips onto a cardboard tray and delivered to the customer. A pizza currently costs from 4 to 7 euro according to the variety and location. The machine is equipped with an oven and a fridge it is made to create 100 pizzas before it needs to be refilled with its ingredients. It requires a weekly cleaning of about 45 minutes, and it also requires a daily cleaning that takes about 10 minutes. (Let's pizza 2012.)

# 3.2.4 Competitor benchmarking

The Table 3 summarizes the overall secondary information of FEBO, Let's pizza, and Selecta Finland through net scouting. After putting those three companies in comparison, the authors figured out some elements contributing in their success.

	FEBO	Let's pizza	Selecta Finland
History	76	8	60
Market	The Netherlands	Italy The United Kingdom	Finland
Reputation	Domestic and International	Domestic and International	Domestic
Main prod- ucts	Traditional Dutch foods (krokets, frikandellen, kaas- soufflé, etc.)	Traditional Italian food - pizza	- Coffee vending ma- chines - Snacks - Drinks
Price range	Under 3€	Around 6€	Under 3€ (for snacks and drinks)
Special practices	<ul> <li>Decent recipe</li> <li>Local support</li> <li>Long-term partnership</li> <li>FSC trademark and label</li> </ul>	-Technological advance which allows pizza to be made freshly from scratch.	- Telemetry technol- ogy - Various payment mechanism

Table 3: Benchmarking of FEBO, Let's pizza, and Selecta Finland

These elements are expected to benefit the future business of the authors when implemented. First of all, both FEBO and Selecta Finland have a long history in the industry. They have gained a lot of knowledge and experience through many years in order to establish their credibility and reputation. In addition, the product is also an element which make a business successful. Specifically, FEBO is selling their traditional Dutch foods, which covers a majority of population and tourists who are always interested in local foods. Regarding Let's pizza, pizza is not only a traditional Italian food but also popular worldwide. Therefore, there is a large market available for their business, which gives them an initial advantage. In Selecta Finland case, their dominant role in the market is understandable given that coffee is an indispensable part of Finnish culture. Most of Finnish people loves coffee and enjoy it almost every day. Thus, offering coffee machine in office buildings is a right focus for the company. Besides, Selecta Finland also established a system of public vending machines selling snacks and drinks. This practice is considered as a wise move for them to broaden their influence on the market.

In regards to reputation, while FEBO is well-known among local people and tourists for their good quality foods and interesting concept, Let's pizza also successfully attracted the international attention with their debut by bringing a new technological innovation into their business. Compared to those two companies, Selecta Finland seems a bit weaker as coffee vending machines are too familiar with most people, therefore, it does require an innovative idea to make their business a success.

All of three companies have different practices which contribute to their success. After evaluation, the authors have selected some of them which are believed to benefit the authors' future career. First of all, the authors think practices of corporate social responsibility are worth being implemented. Long-term partnerships, local support, and the environmental protection have been a business trend, which secures the sustainable development of a business as well as allows them to add more value to their society and to appreciate the nature. Furthermore, keeping up with the technological innovation is important to a business, especially those executing technology to operate their business. Another good practice discovered via the interview with the Managing Director of Selecta Finland is creating convenience to improve customers' experience. Selecta Finland have implemented various payment mechanism to facilitate the buying process, which does not only provide convenience to customers but also allows them to enhance their revenue.

### 3.3 Results of survey

To begin this chapter, theory of survey and the process of conducting this research method will be reviewed to reflect the knowledge and understanding of the authors as well as to make the research process more transparent. Next, the results of survey will be analysed and presented in figures. In the beginning, the authors planned to collect 100 responses from survey. Luckily, 196 responses were gathered, which provides more reliable, unbiased, and objective data.

### 3.3.1 Survey

Among various quantitative methods, survey is chosen in the thesis. Survey is a popular quantitative research method in hospitality field. Researchers will design a questionnaire including a set of standardized questions aiming to stimulate and collect predetermined data. The questionnaire will be sent to a target group of informants among population and in the end, the inferences of this group will be generated. There are two types of survey which are descriptive and analytic ones. The descriptive survey focuses on specific characteristics of the target group of informants and its main goal is to collect information on what those informants do and think. Unlike the descriptive survey, the analytic one is concerned with answering "research questions or test hypotheses". If the descriptive survey emphasizes on the portrayal sample of the population, the analytic one highlights the variables of the research problem and their relationships. (Altinay & Paraskevas 2008, 82.)

In the thesis, descriptive e-survey particularly are executed for about one month from October 20, 2017 to explore the popularity of vending machine business among Finnish residents, their perception on the food vending machine concept particularly and the understandings of potential customers in future. E-survey is a method which utilize an online survey platform to create questionnaires, send them to the target recipients through emails, web links, and online invitations in order to gather data for analysis. The advantages of e-survey are quickly collecting information, a higher rate of response compared to other research methods, a low cost thanks to the "do-it-yourself" process with the support of available online platforms such as Google Surveys, SurveyMonkey, and SurveyHero, and the easy-to-interpret results which are usually performed in graphs or charts (Hague et al. 2013, 166-167). Besides advantages, e-survey also contains some drawbacks which should be took into account. Despite the potentially high rate of response, practice shows that the quality of responses and expected response rate are hardly secured since recipients rarely see the motivation and necessity of filling in questionnaires whose topic does not matter to them. While designing a questionnaire, it is important to generate easy-to-understand questions which should be arranged logically to avoid confusions and facilitate the validity of responses.

In the thesis, SurveyMonkey is hired as a platform to carry out the online survey. SurveyMonkey is an online platform which provides software packages which allows the authors to create the desired questionnaire with the different formats of questions, responses and templates. After informants complete the questionnaire, they can submit their response by clicking the "submit" button. All responses are gathered in one place and separately generalized for each question with accurate figures and percentages. With the help of SurveyMonkey, the authors were able

to produce two versions of questionnaire with a set of 10 questions for each in both English and Finnish which are shown in Appendix 1 and 2. The purpose of creating two versions of questionnaire is to allow the authors to target a majority of people living in Finland and collect more diverse information. The target number of response was expected to be around 100 responses. The survey was mainly conducted online by sharing web links to the questionnaire among the authors' personal network. However, foreseeing a common challenge of doing survey research which is the low rate of response, the authors decided to go around the central railway station and ask people to fill in the questionnaire through iPad. In addition, the author applied for research permit of Laurea University of Applied Sciences to be allowed to dispense online questionnaires to their students via email. The results collected through survey will be analysed by mainly using filter and crossbar tools provided by Survey Monkey.

Regarding the format of questionnaire, there are three types of questions used in the questionnaire including closed, open and scale questions. The purpose of using closed types in the first four questions is to quickly collect the informants' background such as age, location, and occupation, their notice on food vending machine industry, and their opinions on adopting food vending machine idea in Finland. The fifth question allows informants to scale how strongly they like the idea of purchasing foods without human interaction. The remaining questions are produced in the open type, which allows informants to express their opinions in unconstrained way without word limit. With open questions, the authors aim to collect more detailed and personal data of informants on the frequency they use vending machines for snacks and drinks, the frequency they purchase takeaway food, their budgets, their food preferences, and the location they prefer to have food vending machines installed.

### 3.3.2 Feasibility of the business idea of food vending machine

The feasibility of business idea of food vending machine is evaluated by the willingness to try the new concept and to adopt it in Finland. Additionally, the extent that people like the automat and self-service concept will also act as a measure of the feasibility of the business idea. The quantitative data collected is analysed and presented in pies as Figure 3 and 4, which makes the figures easy to understand and followed.

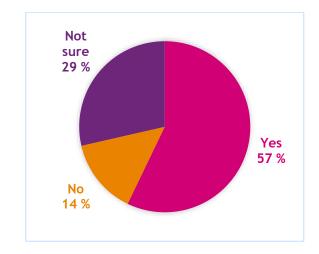


Figure 3: The willingness to try food vending machine. n = 196

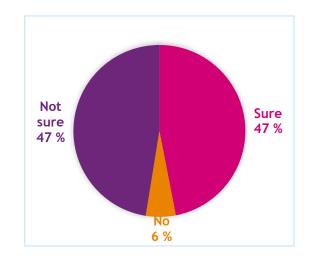


Figure 4: The possibility to adopt food vending machines in Finland. n = 196

The results of survey show that the business idea has potential in Finland. Specifically, more than half of informants wanted to try food vending machines and only 14 percent of people was not interested. Regarding the ability to adopt food vending machine, there is an equal proportion of people supporting the idea and being not sure about it. The number of people thinking the concept would not work well in Finland took up a small proportion of only 6 percent.

Regarding the extent to which people like the idea of automated and self-service concept, the result indicates that on a scale of 1 to 5, informants rated 3.7, which means that people are quite interested in this concept. Captivating people's attention and interest is one of initial step for a business to be successfully launched.

The authors consider these figures are positive signs for their future business since it is quite hard to ensure the success of the business, especially when most informants either had never heard of the food vending machine concept or were aware of but does not have knowledge about it. Thus, it is reasonable that there is a large proportion of people that are unsure if Finland should adopt this concept. It is impossible for them to give an exact answer or this question when they do not have enough information of food vending machines.

The popularity of the public vending machines for snacks and drinks in Finland is also considerably low. Specifically, more than half of the informants do not use snack-and-drink vending machines regularly. Only around 37.24 percent of people use machines from 1 to 5 times per months and mostly they use coffee vending machines. The situation is understandable because the product range offered via vending machines is not diverse and their prices are higher than those sold in the supermarkets. However, in the business idea of the authors, a variety of nutritional foods will be provided through vending machines with competitive prices. The price is expected to be lower than in traditional restaurants.

# 3.3.3 Target customers

Target customers are identified by their support of the food vending machines, their budget, and the frequency they buy takeaway foods. Target customers will be classified in age groups because potential customers of food vending machines are significantly wide. Initially, the authors aimed to two groups of customers which are students and businessmen, therefore, the informants mainly come from these two groups. The authors considered schools, business parks, and office buildings as strategic locations since there is high demand for a solution for quick lunch. The results of target customers according to age group is displayed in Figure 5 below.

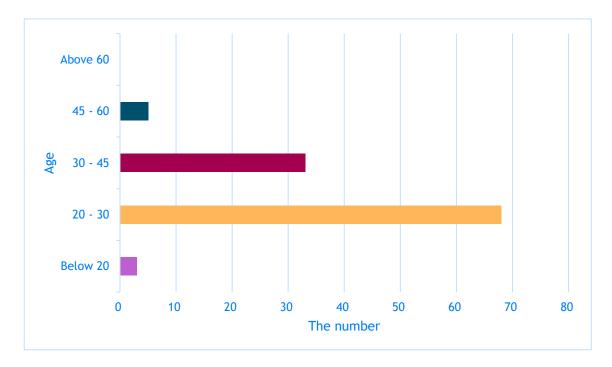


Figure 5: Target customers according to age group. n = 109

As can be seen in the graph, there are obvious differences in proportion of age groups. The age group of 20 - 45 can easily be spotted since this group of people are significantly larger than others. The outcome of the results was relevant to the author's aim, which to some extent can explains why the age groups of 20 - 30 and 30 - 45 are dominant. Conducting research among students and businessmen usually indicates these two groups.

Obviously, the majority of people from 20 to 45 years old are attracted to the concept of food vending machines. They are willing to try and adopt it. They usually buy takeaway foods with the average of 5 times or more per month. Their budget for one takeaway portion is around 5 - 10 euro. The data allows the authors to establish a profile of target customers.

# 3.3.4 Products

From the beginning, the authors considered Asian food. However, they still decided to carry a research to learn about people's preferences. Surprisingly, the results were the same with the authors' initial plan, which makes them more optimistic and confident about their future business.

Informants suggested a wide range of foods which they would like to have on menu. The suggestions primarily were Asian foods such as noodles, vegetarian woks, and fries. Among all suggestions, the majority of people preferred noodles which is potable to carry around and tasty. Vegetarian options should be the focus of development as well considering today people are more aware of their health and other ethical issues. People also expect to have healthy foods which can be served quickly in vending machines. The Figure 6 below shows suggestions on foods obtained through research.

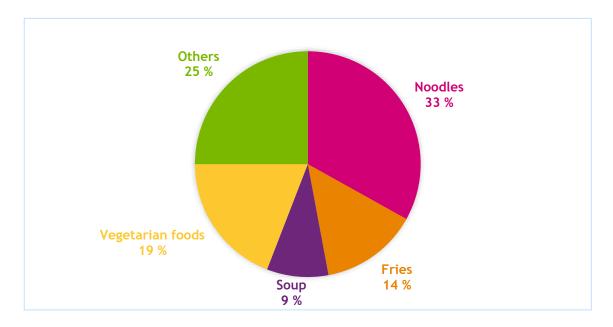
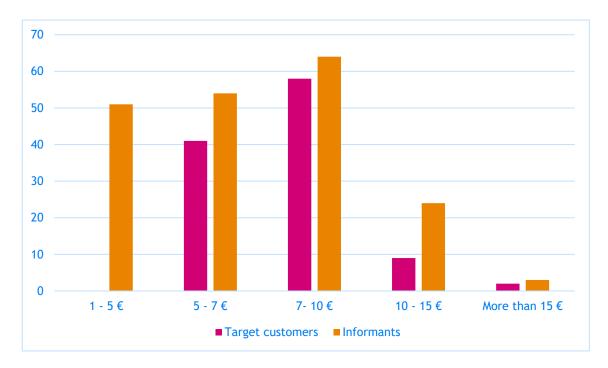


Figure 6: Product suggestion. n = 196

The results of survey show that noodles and vegetarian options are the right focus when developing menu for the authors' business in future. Fries also should be taken into account because it is really convenient to take away and suitable for people that just want a quick hot snacks. In regard to soups, people prefer to have some hot soup especially in winter. They want to have something hot and easy to warm them up. However, soup is not easy to carry around and might leak accidentally.

# 3.3.5 Price range

Price range will be determined by the suitable budget of all informants and especially target customers. Deciding price range allows the authors to plan their finances in the future and have affordable offers to customers. The Figure 7 below shows the suggested price range from both target customers and all informants in general.





Most informants participating in research favor the price range of 1 - 10 euro. However, in target customer group, the price range is narrowed to 5 - 10 euro. There is a small difference in these two price ranges, which requires the authors to carefully consider when creating menu and price for each dish. If the authors only focus on target customers' budget, they might limit their customers and miss a considerable number of other customers.

The suggested price ranges are one of the authors' considerations. They want to offer better quality of foods compared to other fast-food restaurants and franchises. Thanks to the cost minimization feature of food vending, the authors believe that it is possible to gain profit while providing nutritional foods with affordable prices.

# 3.3.6 Location

Locations analyzed in this part was collected from informants through research. There are three main locations including shopping malls, schools, and public transport stations which are suggested by majority of people. The Figure 8 below will show the extent to which people favor these locations.

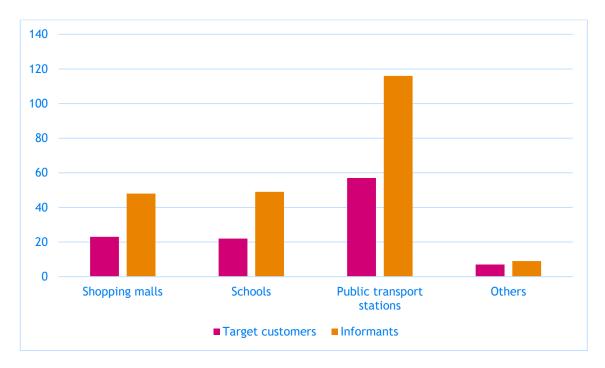


Figure 8: Main locations for instalment of food vending machines.

Even though the authors aimed at schools, business parks, and office buildings, the figure clearly indicates that public transport stations are the most favourable places to install food vending machines. The data appears to be reliable and reasonable given that public transport stations are where people visit almost every day. They are convenient places to purchase take-away foods because those places are accessible to all people.

Schools and shopping malls are also good locations; however, they have a disadvantage of operation time limit of food vending machines because the vending machines should follow the opening and closing time of these organizations. According to the research, people also suggested office buildings at their convenience because many organizations do not have a canteen for their staff. Thus, office buildings are also a promising market for the authors' business. Again, the outcome of research is to a certain extent similar to the authors' target.

# 4 Business plan

Business plan is produced by cooperating theoretical background and data collected from research. The business plan will act as an actual plan for the authors' future business. It is worth noting that financial part will not be included in the business plan due to the lack of financial data which requires to be updated by the authors before their business is launched.

#### 4.1 Executive summary

The authors' future business is selling Asian foods through vending machines which is anticipated to make its debut in the beginning of 2019. The concept of business is automat without human interaction, which has not existing in Finland yet. The office and selling points are located in southern Finland. The main locations of selling points are in public transport stations, shopping malls, and schools in metropolitan area. The business focuses on offering real warm dishes with fast service through innovative vending machines.

The authors' vending machines is going to offer a variety of Asian foods with a wide range of fresh ingredients. The operation time of vending machines much depends on the locations. If the machines are installed in public transport stations, they can operate continuously 24 hours per day. However, if selling points are located in schools and shopping malls, the operation time depends on the opening hours of the organizations. Even though there is no human interaction in service, we still have staffs to do maintenance, logistics, replenishments, and 24-hour customer services. Customers can contact our support team at any time when they have problems with vending machines or inquires.

The business will be legally operated under the registration of a limited liability company, which will be found in 2019. Both Ms. Kamuya and Ms. Nguyen will be responsible for human resource, customer relationship, supply, menu development, and customer service.

Through creative approach, the authors aim to provide customers with a blend of outstanding products, affordable prices, attractive and fun packaging and services. With an increasingly excellent demand for service innovation around the world, introducing this automat concept to the Finnish market will be a solution for consumers who wish to have a quick meal or snack on the way heading to any destination by having vending machines installed in public transport station or while shopping in malls or studying in schools.

The key success of the business will be special features of the automat concept. Selling fresh and healthy foods with fast-food service allows the business to differentiate itself from others in food industry. Price is another advantage of the business since there is a reduction in overhead costs by the use of vending machines.

## Mission

The authors' business promises to bring an innovative ways to enjoy fresh foods. The mission is to quickly provide quality, hygienic and nutritional foods with fresh ingredients. The variety of

dishes are developed to satisfy any customer. The business also helps to reduce people's waiting time, which is important to many people, especially in the fast pace of living today.

Another mission of the business is to conduct sustainability practices. Protecting the environment is the first consideration. The business will reduce carbon footprints by using up-to-date technology, eco-friendly packaging and utensils. Moreover, the well-being of employees will be appreciated. Employees will receive fair treatment with respect. Finnish labour laws will be obeyed when staff are paid legally. Staff play an important role in the success of a business. Only when their welfare is ensured, they wholeheartedly devote and contribute to the company.

## Objectives

To succeed, the company sets out important objectives which act as a five-year guideline to ensure the business is on the right track. First of all, the authors want to build a strong presence among the locals as a reputable fast-food company offering healthy and quality food in fast-food service manner. Along with reputation, market share is the company's target. There are many big players in fast-food and vending machine industry in Finland such as Hesburger, Burger King, McDonals', and Selecta company. Since the concept of the business is a combination of vending machines and fast-food, the authors want to gain market share from both industries.

with respect to sustainability, the authors want to have practical experience in one year. Materials which are friendly with the environment need to be fully utilized as soon as possible when the business starts. Supporting local business and activities of local communities are also important practices.

#### **Guiding principles**

First of all, the quality and hygiene of foods are the ultimate focus. The authors want to make a difference by offering tasty and healthy foods through fast-food service. To keep fresh ingredients in vending machines, it is important to do maintenance and cleaning every day.

Gratitude is one of the principles which should be highly appreciated. With only support from customers can a business exist and survive. Thus, adding more values to the society is vital to express the gratitude. Sustainability will aid the company with this principle.

Customer satisfaction is the last principle. It is important to keep customers happy with the products and services. Because there is less human interaction in the business model, quality foods and proper function of vending machines play key roles to satisfy customers. In addition, efficient customer service and support teams are also crucial factors.

#### Key to success

Given that the business aims to offer real food through vending machines, which has not existed in Finland yet, the concept itself is a key to success. It allows the business to bring more values to the society, which will be deeply examined in Business Model Canvas section. Quality foods, affordable prices, and time saving are elements contributing to the business' success.

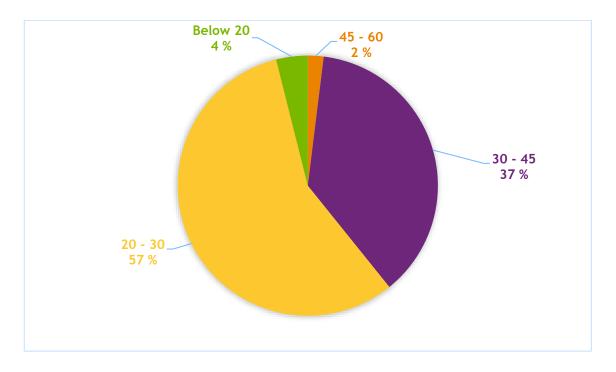
Using up-to-date models of machines allows customers to easily use them without human errors. To facilitate the user friendliness, in machines, there will be visual instruction in both Finnish and English. Implementing a wide range of common payment mechanism optimizes the purchasing chance from customers and at their convenience.

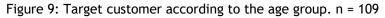
The unlimited operation time of vending machines is an advantage for the business. As mentioned above, if machines are installed in public transport stations or outside public places, the machines can run 24 hours per day. This advantage allows the business to cover more people who stay out late or go out too early and have more time to generate profit. Furthermore, even machines operate overnight, there is no big difference in costs since expenses in labour are quite low compared to the traditional models of restaurant.

Another key to success is cost efficiency. Due to the feature of automatic concept and the size of machines, expenses in labour, as mentioned above, is insignificant and the rent is not supposed to be expensive, even at night or weekends. Therefore, the profit generated from this business model is more effective.

## 4.2 Target customer

Target customers of the business aimed by the authors are businessmen and students. However, after carrying a research, the most favourite location to set up selling points is public transport stations, which broaden the potential customers of the business. In other words, anyone can be a customer of the business since the machines are installed in public places, which makes them accessible to all people. Another reason is that the wide price range is up to 10 euro which is affordable and allows people to have many options according to their budgets. Therefore, target customer will be categorized according to the age group as illustrated in the Figure 9.





The purpose of identifying target customers by the age group to gain understandings of why people from these age groups can be potential customers. As can be seen in the pie, the target customers are those from 20 to 45 years old. The results from research seems reliable and creditable because people from the age group of 20 - 30 are young, so they tend to be attractive to new things and willing to obtain new experience. With people from 30 to 45 years old, they have often obtained significant knowledge and experiences, they can have their own justification on an idea is good or not and if it is worth being adopted widely.

# 4.3 Competitor analysis

Competitor analysis was presented in section 4.4. Therefore, the authors will only sum up main points to avoid repetition. Due to the concept which the authors aim for their business has not existed in Finland yet, the authors selected FEBO and Let's pizza which plays in the same field from other European countries to compare with Selecta Finland. Even though Selecta only operates snack-and-drink vending machines, it is a big player in Finnish vending industry. Therefore, studying it allows the authors to obtain valuable understanding of Finland market.

# 4.4 Product and service description

The business commits to provide fresh and quality foods with fast-food service. In other words, customers can purchase good food quickly. The results of research indicated that people love Asian foods and they want to have noodles, fries, and vegetarian dishes in menu. The offer is customer-oriented, which means that customers can easily personalize their dishes. For example, if a customer wants to buy noodles, he/she can choose his/her favorite ingredients from

the wide assortment of meats and vegetables. Additionally, the vending machines will also conveniently provide drinks and sweet treats.

All ingredients are prepared in a warehouse, which allows to quick replenishment and avoid interruption of operation of machines. Besides fresh ingredients such as noodles, meats, and vegetables, different types of sauces and spices can be added to broaden the selection and enable customers to have their own creative recipes. The product the business offers are served as takeaway portion. In other words, customers can only buy foods to go since the machines was installed in public places and there is no room for seating.

Basically, there is no direct service in this business model because the concept is automatic self-service. However, to make the business more transparent, it is necessary to mention that the business still have staffs who takes care of supply, stocking, preparing ingredients, logistics, replenishment, maintenance, cleaning, and customer support. These back-house services play an important role in ensuring flawless function of the machines as well as direct repair.

#### 4.5 Marketing strategy

The business is positioned as a fast-food business. However, the special feature of the business is the automatic concept which is still new to most of Finnish population. The authors consider this business model is their advantage in marketing since they can build their own image and reputation for new concept. When people talk about it, people will think of the authors' business first.

Due to the financial limit, the authors aim to simple but effective marketing strategy. Vending machines themselves act as a marketing channel for the business. The eye-catching ads can be designed to be the outfit of the machines. In addition, social media such as Instagram, Facebook, and Twitter, provides an effective digital platform to market the business with low costs. Registering a Youtube channel to post short videos of the business should be taken into account. Advertising in newspapers such as Helsinki Sanomat, Kansan Uutiset, and Taloussanomat should be executed since Finnish people still prefer to read newspaper on public transports, which allows the business to be known by the public. Another marketing channel which requires no expense with high effectiveness is mouth-of-word marketing. When people today want to purchase any good or visit any location, they tend to search for review. The review from their close cycles such as family, friends, and colleagues, have a considerable impact on their purchasing choice. The review can be spread from person to person or through forums or chatrooms. The mouth-of-word marketing can be developed as the core tactic of marketing strategy.

An attractive brand that is playfully fun should be a consideration, which allows the business to be easily distinguishable from others. The logo should be eye-catching and easy to memorise.

The company will aim at combining the marketing and advertising of the business in order to avoid unnecessary cost. A functional website where the business is able to communicate its values virtually with the public should be established. It is also important to create a platform on website for people to easily contact the company via email, phone, social media sites or leaving feedback, a platform displaying the list of products and offerings with pictures, prices, and special discounts.

Additionally, the company plan to be involved in community programmes such as charitable donations, fairs, and other community programmes that aims to give back to the community. This impact helps the company to gain attention and reputation, which benefits sales, marketing, and business networks since they are opportunities for face to face meetings to form relationships with potential customers and clients.

To boost sales and approach target customers, there is a proposal of promotion strategy including offering 15 percent discount on the first 100 orders and regular customer benefit with 50 percent off every 10th meal.

#### 4.6 Operational plan

Operational plan will focus on the personnel and distribution plan. Personnel mainly emphasizes the personnel structure of the business and different positions. Distribution plan visualizes the process of delivering products to vending machines.

#### 4.6.1 Personnel

Both authors have equal responsibilities for operations, developments, and liabilities of the company. They together form a management team which follow and make important decisions in each stage of the development of the business.

Because of the advantage that the vending machine is fully self-operational, there is limited human intervention in the operational process, especially when activities on the machine is automatically tracked and transmitted to the offices via telemetry. This means that there are only a handful of employees needed at a time. Specifically, if five machines are operational, a minimum of five employees will be required. One employee takes care of all technical and maintenance issues for all machines, two employees work in the warehouse, one employee do replenishment and the remaining does office tasks and handles finances. The number of staffs much depends on the growth and the size of the business. However, compared to other traditional fast-food chains, the business model the authors aim to implement have them a significant advantage on expenses as well as price competitiveness. A summary of the structure of the personnel is displayed in Figure 10 below.



Figure 10: Personnel structure in the size of five vending machines.

All the employees directly handling with foods are required to have all necessary requirements such as hygiene certificates from the public health authority Evira, certificates to use the forklift in the warehouse, and other health and safety qualifications. The driver will need to have a clean driving record and other necessary requirements. The office employee will need to have to prove proficiency and experience on financial matters and handling office bureaucracy.

# 4.6.2 Distribution plan

Distribution plan depicts the process of how the products are prepared and delivered to customers from scratch. This process is visualized in the Figure 11. As can be seen, the process is simplified to be easy to understand, which makes the business more transparent to customers.

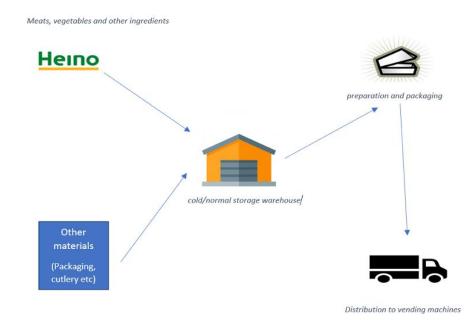


Figure 11: Distribution network of the business.

At the first stage, necessary fresh ingredients including meats, vegetables, etc. will be daily supplied and delivered to the warehouse where all of them are stored for later preparation. In the same stage, materials such as packaging, cutlery, and others will be transported to the warehouse. However, this activity does not occur every day like the ingredient stocking since these types of material does not need to be fresh. The company can purchase a lot of material at once and store them in the warehouse for gradual use, which helps the company to reduce delivery costs.

After all ingredients are delivered to the warehouse, the employees responsible for warehouse tasks will be arrange and put them into the right storage section. They also will take care of ingredient preparation and packaging to make the products ready to be transported to vending machines. The driver whose task is catering will deliver products to vending machines for customers to purchase.

## 4.7 Sustainability

Only with a healthy environment and a sustainable lifestyle, mankind can survive and develop further. Environmental friendliness and sustainability therefore is a trend affecting governments, NGOs, and many industries, including the health and wellness industry. According to Yale's Environmental Performance Index (EPI) ranking countries based on how well they perform in aspects human health and ecosystem protection, Finland took the top spot and has committed to keep the carbon level not exceed the carrying capacity of nature by 2050. This is a clear sign of the dedication with which Finland conserves the environment with care. For this reason, adapting to the trend of environmental friendliness and sustainability is considered essential to our business case, which is set in Finland. (Hsu et al. 2016.)

The products from vending machines are offered as take away, which means that packaging is one of the main concerns. The packaging can rely on recyclable, compostable or biodegradable materials, helping to reduce waste burdening the environment. In Finland, public spaces always offer green trash bins since sorting out trash has long been introduced to Finnish society, becoming a habit of all potential customers. To make the business stand out more, a recycling program could be introduced to the company policy, in which the company would dedicate all internal operations to preferring the most environmentally friendly materials over other options. Even though this could mean increasingly high cost, business sustainability and environmentally friendly branding could earn the company the trust and satisfaction of customers, resulting in more sales. (Maggioli 2016.)

## 4.8 SWOT analysis

SWOT analysis helps to bring a clearer picture of the business when it evaluates the internal and external factors affecting the business, which is demonstrated in Table 4 below. Internal

factors are the business's strengths and weaknesses while external ones are opportunities for business to develop and threats which the business should be aware of and generate solutions for dealing with them.

<ul> <li>STRENGTHS</li> <li>The first business model of its kind in Finland</li> <li>High quality products</li> <li>Public health authority certificates (Other proficiency certificates)</li> <li>Mobility of vending machines</li> <li>Low rentals for the vending machines compared to traditional restaurants</li> <li>Interesting/attractive concept of ordering meals</li> <li>Operating in metropolitan area</li> </ul>	<ul> <li>WEAKNESSES</li> <li>Expensive/limited manpower</li> <li>High costs of machines and equipment</li> <li>Limited expansion ability</li> <li>Limited capital</li> <li>Lack of experience</li> <li>Outstanding expectations from customers</li> </ul>
<ul> <li>OPPORTUNITIES</li> <li>Less tough competition</li> <li>Branding as a unique concept in Finland</li> </ul>	<ul> <li>THREATS</li> <li>The concept can be easily copied</li> <li>Changing food habits of customers</li> <li>Vandalism and theft</li> </ul>

Table 4: SWOT analysis of the business.

The business model has many strengths which are shown in the table above. The vending machine business being the first of its kind is a strength because it is an interesting concept which is viewed as a look into the future and technological advances in the food industry. And pioneering the trend will bring great recognition and growth of the business through offering quality products. The automated concept offers an advantage in terms of costs as there are fewer costs and costs such as rent and overhead costs are lower compared to the traditional model of restaurants. Another strength is mobility feature of vending machines since they can be moved easily to follow customers. Lastly, the hygiene standards will be maintained and checked regularly to ensure safety of customers.

In the beginning, the business is expected to experience more weaknesses than later when it is well established. There will be less manpower in the beginning to minimize costs incurred as most of the available funds will be directed to capital and acquiring adequate equipped machines. The high cost of machines will also have a significant impact on the ability to expand the business. The other weakness is the lack of experience in the early stages, but this should be resolved rather quickly after establishment. Lastly, customers might have really high expectation of the whole concept, product and service, which poses a risk of customer dissatisfaction.

Regarding opportunities, since the authors might be the pioneer in bringing a new concept of selling meals via vending machines, there is not a tough competition. This opportunity is expected to provide enough time for the business to get awareness from the public, which strengthens the business's position in the market before other businesses join the market. The authors also see the opportunity to brand their business as providing unique experience for people living in Finland for the aforementioned reason that Finland has not adopted this concept yet.

It is important for the authors to identify possible threats of their business. First of all, the concept of business is easy to be copied. Therefore, it is important that the business has to make do fairly well before jump in the market. Vandalism, theft, and the ever-changing preferences of the customers are other threats that the authors have to take measures to avoid and carry out frequent customer surveys to keep updated on new food trends.

## 4.9 Critical risks

The Table 5 shows risks which could have a potential to affect our business. The risks have to be managed and measures to prevent them have to be set up. The risks listed in the table include general risks that almost all other businesses encounter, and risks which are unique to the vending machine industry.

Risk	Level of risk	Impact	Action to reduce risk
Theft and vandalism	Medium - Loss of funds - Expenses on repair rs dissatis- rith mal- Low Bad reputation		Take adequate security measures. (security guards, surveillance cameras, etc.)
Customers dissatis- faction with mal- functioning ma- chines			Ensure that machines are daily well-maintained and clean.
Changing prefer- ences of customers	Medium Lo		Conduct survey on customer satis- faction and preferences.
Food hygiene and safety	Medium	Bad reputation	- Employees are required to ob- tain adequate hygiene certifica- tion.

			- Employees' qualified attitude and manners in handling foods and obeying the rules.
Broken delivery/re- plenishment vehicles	Medium	Customer Dissatisfac- tion	<ul> <li>Vehicles have to be well-main- tained daily</li> <li>Have a backup vehicle to imme- diately address the issue.</li> </ul>
Warehouse/ vending machine fire	Low	<ul> <li>Loss of property</li> <li>Expenses on replace- ments</li> </ul>	- Fire risk equipment - Good insurance

Table 5: Company risk analysis.

The general risks listed above that can occur also in other business other than the vending machine business would include; warehouse fires, food hygiene and safety, customers constantly changing their preference in a product/service offerings and theft and vandalism. The risks specific to the vending machines may include; vending machine fires and malfunctioning machines.

These risks may have a negative impact on the business if they occur frequently. Like the table illustrates, they may amount to loss of property, unsatisfied customer, bad reputation, loss of funds and can financially injure the business's key activities.

Luckily, a chance of some of this risks occurring in Finland are low to medium. This is due to strict operational regulations of health and safety and minimized chances of theft and vandalism due to most Finns being respectful of public property. Even Though the chances of these risks occurring is low, a business needs to implement preventional measures such as those listed in Table 5.

# 4.10 Business Model Canvas (BMC)

There are nine blocks in Business Model Canvas including key parts, key activities, key resources, value proposition, customer relationships, customer segments, channels, revenue stream, and cost structure. The Figure 12 visualizes the BMC of the business with full nine blocks which will be deeply examined in following sections.

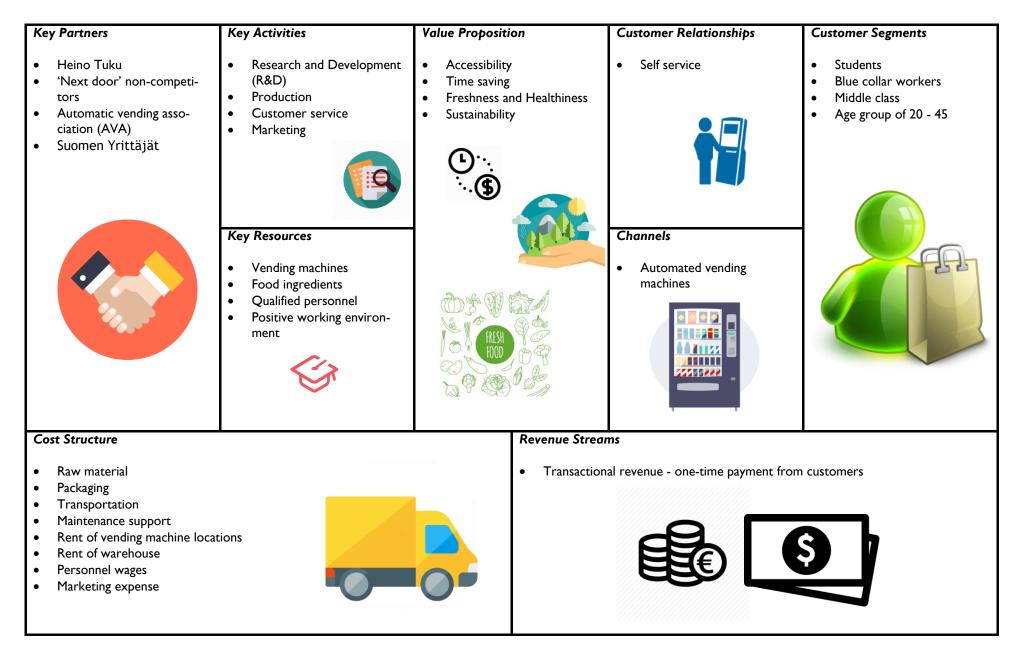


Figure 12: Business Model Canvas of Asian food vending business (Osterwalder & Pigneur 2010, 44.)

#### Customer segments

In the initial commencement of the business, the main customer segment will be consumers in the southern Finland including students, workers from business parks, passers-by and shoppers in malls. According to the results of research, target customers are ranged from 20 to 45 years old. In order to reach these target groups of customers, the vending machines should be located in the aforementioned highlighted areas such as schools, malls, and public transport stations.

#### Channels

The products of the company will be purchased via vending machines. Vending machines act as contact points between the company and customers. The distribution strategy of this business model is simplified, which was discussed in section 5.6.2. The vending machines is a testing ground for the products. With the help of Telemetry technology as well as the replenishment activities, the most favourite ingredients and products of customers will be discovered. This advantage allows the company to gain more customer understandings and acts as an indicator for the company in later decisions on business strategy. According to locations and customer groups, vending machines enables the company to design different price range for each selling points. Due to the distinct locations of selling points, this practice can be easily implemented and managed.

Vending machines reduces weaknesses of human interactions. However, even technical problems occur, personnel have to efficiently intervene and support customers. This risk should be prevented by well maintaining and cleaning the machines.

#### Customer relationships

As the vending machines are self-service, the customers who use the vending machines will have a comfortable and automated customer experience when buying and consuming the food from the machines. Have no human interaction with the customers means that the machines are working as expected. By operating automatically, vending machines offer a tremendous amount of simplification to how the customers eat on the go. Having the customers make a payment and then select their food does not only promote a sense of freedom, but also incorporates our product as a reliable source of much-needed nutrition in their everyday lives.

Furthermore, by making the business process transparent through the internet, and sharing policies about the product, environmental friendliness and sustainability, the company ensures a good reputation. Additionally, customers can evaluate the company online and on paper, this will aid with the goal to constantly improving the products and services.

#### Value proposition

The value proposition will be an important aspect in the management plan. What the customers will pay for is not only the nature of the product but also the ability our company has in adopting new trends in the vending industry. By making our vending machines accessible to a wide variety of potential customers, we ensure that we have a lot of sales possibility, but also a great opportunity to reach as many people as possible. Besides accessibility, time saving is another important value of the business. The fact that all ingredients are prepared portioned and well-stored in vending machines before purchase helps customers save a considerable amount of time waiting, reduce stress as well as increase comfort while eating because they can focus on the meal.

The most important value the company want to give to our customers is by far the variety from fresh healthy to junk of the carefully prepared foods. The transparent process of food distribution helps increase the awareness of how beneficial the alternative nutrition solution of the company is. The customer's satisfaction is subsequently one of the main concerns.

The final value is environmental responsibility and sustainable practice. The company wants to ensure to keep updated to innovative approaches to the environmental protection by adopting eco-friendly practices. This will allow the company to proposition its business in customers' perception with a 'green, clean and healthy' image.

#### Key activities

Research and Development (R&D) was conducted to explore the potential of Finnish market because the company brings a new concept which has not been adopted in this country. Researching vending machine characteristics in depth and keeping up with contemporary business trends should be practiced consistently because without catching up with the technology, it is easy for a business to be eliminated out of the competition. R&D will be conducted alongside with the existence of our business from introducing new products, improving existing products, quality checks as well as keep up with innovations and business trends.

The most important key activity in our business will be production. After developing menu, the next step is the selection of production process requiring automated technology, vending machines, inventory system, and logistics. A production plan should be created to have an efficient schedule of daily tasks to ensure the smooth flow of work. Making a production control is also important to evaluate the effectiveness of production plan by comparing it with the actual production and hence possible changes. The ultimate mission is to satisfy customers with the products, therefore, quality control is one important activity. Running a business through vending machines undoubtedly requires in-depth and continuous inventory checks and replenishment. Accurate inventory process allows the company to control the expenses by avoiding surplus stock of ingredients, which will be aided by the installed telemetry system. The last key

activity of our business should be marketing which plays an important role in promoting the business as well as values the company wants to deliver to their customers.

## Key Resources

Physical resources in our business refer to the vending machines and quality food ingredients. The machines will be bought with new and modern designs, which gives them a high usage rate. The machines will be refurbished as they age to save the company money. Additionally, during recruiting of personnel, employees have to be ensured to be qualified to the company's requirements in terms of knowledge, skills, and experience in related fields, which promises the good performance of human resources. The requirement of personnel's up-to-date competences is also necessary. Therefore, the membership and participation in different educational programs are vital to have more value in our human capital. Membership with AVA (automatic vending association) and certification for personnel to handle the products, for example, nutrition support certifications from Elvira would give right educational tools for us to increase our educational resources.

Finances play an important role in the establishment of a new company. Lack of funds means difficulty in running any aspect of the business. Hence, in the commencement of the business, the authors will invest half the funds needed and the government entrepreneur grant will be pursued from the TE-office for the remaining half of the investment.

## Key partners

In regards to partnerships, the business will focus mainly on buyer-supplier relationship for our products and strategic alliance between non-competitors. With the buyer-supplier relationships, the main partner will be Heino. Heino is reliable Finnish wholesaler specializing in providing daily consumer goods, beverages, meat or fish foods and importing different products to Finland. Table 6 shows the companies and organisation that have a potential to have partnership with our company.

CATEGORY	PARTNERSHIP COMPANY
Vending machine and equipment Cutlery and packaging	FVF (Food Vending Finland)
Suppliers	Heinon Tukku + others
Banking /Accounting/Grants	Bank Accounting/bookkeeping firms TE-office
Networking	Automatic Vending Association (AVA) Suomen Yrittäjät

Security	Securitas/ISS
Employees	Recruitment companies
	Personal networks

Table 6: Potential key partners of the company.

As listed above, other potential partners will include FVF (Food vending Finland) this is a vending machine company based in Finland but that provides vending machines abroad. The authors will make inquiries about the FVF machines and if there's a possibility to modify them according to preference and this will determine the future of the partnership.

Also, the financial aspect of the business is important. It will determine the scale of the business. The authors intend to take out an entrepreneur loan from the bank through the TE-office therefore that will be an important partnership. Additionally, in order to keep the financial books in check, an accounting firm needs to be responsible for that.

Other partnerships include security company to provide security for the vending machine which helps reduce risks of damage, Recruitment companies to provide the business with adequately skill equipped employees, suomen yrittäjät who specialize in helping and supporting different businesses and individual entrepreneurs in Finland. And lastly Automatic vending machine association (AVA), even though located in England, they can be a partner. Their primary concern is to promote, protect and enhance the vending industry globally so their gain is ours as well.

## Cost structure

All possible costs including variable and fixed costs analysed in this building block are expected from the authors.

Variable costs are those varying with the volume of the output such as electricity costs or material costs. In this case, material costs include all raw ingredients such as daily fresh vegetables, different types of fishes, meats, and noodles are stocked up and expenses on necessary to-go packaging and utensils. Transportation either if the company uses delivery service or the company transports all stuff by themselves since fossil fuel is also an expense.

Fixed costs are those remaining the same regardless of the volume of the output such as rent, wages and marketing expenses. In this case, rent of locations where vending machines installed and rent of warehouse are main fix costs. In respect to vending machines locations, they are the previously highlighted areas such as schools, shopping malls and public transport stations. Rent of these places much depends on locations and positions of vending machines. Likewise, rent of warehouse is also an unavoidable cost since it is a must to have a place to stock up all material. Another fixed cost which should be taken into account is personnel's' wages. Wages

are viewed as fixed costs since they normally remain the same even though monthly salary may vary. It is true that marketing plays a key role in business's success. Therefore, investing in marketing is essential to bring our business and products to public. Marketing expense is a fixed cost since it normally does not change during one year due to the annual marketing budget allocation.

### **Revenue Stream**

In the business, transactional revenue from one-time payment will be the model utilized. Due to vending machines' characteristics, fixed pricing method will be in use considering that different ingredients have different pricing. However, price elasticity will also be implemented by offering different prices in different places. Therefore, the specific pricing mechanism applied in the business model is customer segment dependent. For example, the price offerings in schools and business parks will differ slightly given that mainly students earn less.

Additionally, we intend to offer advertising space for other companies on our vending machines. This will enable additional inflow of funds.

#### 5 Conclusion and discussion

The main purpose of the business plan was find out the feasibility of the business idea and produce a practical business plan for the authors' future business. In order to achieve this, the authors focused on developing a good marketing strategy, promotional strategies, highlighting key activities, highlighting the target market and target customers, highlighting the key resources of the business.

After studying, researching, and analysing the feasibility of the business concept, the authors have concluded that the concept has full operational potential. Therefore, it is important for the owners of the business to maintain the customer interest and curiosity once the business is running by keeping the customers satisfied with the service and the product offering. Given the potential, it is also quite evident that there exists a substantial amount of limitations with the business plan regarding detailed financial aspect of the business plan, and other resources.

The SWOT analysis of the business indicated that the strengths and opportunities outweigh the weaknesses and threats. This is a positive sign as it also shows the feasibility of the business idea and its stance in the food industry. Although the interviews and surveys provided a good insight, more research on the target customers, target market, operation, development and expansion still need more research on a larger scale.

The business plan strategies can reflect the stability of the business and its ability to acquire success with positive factors such as the wide target group, convenient locations, and the pioneer advantage in the Finnish market. Therefore, the business plan needs to be continuously

updated as competition grows, customer preferences change, new trends occur, etc. Keeping the business plan up-to-date is one key to success of the business. Also, the development of the business is conducted more easily if there are existing updated projections and plans for the company. There is still room for generating more complete business plan which requires more research on financial aspect and Finnish market to collect deeper data for planning the future business of the authors.

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## Appendix 1. Interview guide

The authors conduct an interview with the Managing Director of the Selecta Company in Finland to gain deeper understandings of vending machine industry in Finland, learn from their experience and get inspiration.

(Ask permission to record the interview)

(Convey gratitude to the Managing Director for agreeing to meet us despite her busy schedule) (Brief introduction of ourselves)

(Brief introduction of our thesis and goals)

(Brief mention of what we want to achieve from the meeting with the Managing Director)

# A. Background of Selecta Company

- 1. Could you briefly tell us about your company if that is ok?
- When did the company expand to Finland?
- What is the main business sector of the company?

# B. Entrepreneur

2. We know that Selecta is a company found in Switzerland. What are the advantages and challenges the company has faced when running business in Finland compared to in other European countries?

# C. Selecta in Finland

- 3. What are the target customer of the company?
- 4. What products and services does the company offer to its clients?
- 5. In which locations are your machines mainly installed?
- 6. Do your company have special practices?
- 7. What do you foresee are the future trends in the industry?

# D. Food vending machines

8. What do you think about the business idea of food vending machines?

(Give examples of FEBO and Let's pizza)

9. Do you think Finland should adopt this concept or not?

# E. Advice

10. According to your experience, what do you think would make a vending machine business successful in Finland?

# F. Ending question

11. Would you like to add anything else?

(Ask if it is ok to use her name and the company name in our thesis / Convey closing gratitude)

Appendix 2: Survey on food vending machine in Finland

- 1. What is your age?
- a. Below 20
- b. 20 30
- c. 30 45
- d. 45 60
- e. Above 60
- 2. Have you ever heard of the automat concept which depends on vending machine to dispense a variety of hot snacks/foods?
- a. Never heard before
- b. Am aware but never used it
- c. I used abroad and like it
- d. I used it but still not sure about it
- 3. Are you willing to try a vending machine that dispenses a variety of warm Asian meals such as noodles, stir fries with rice, and different assortment of meats and vegetables?
- a. Yes
- b. No
- c. Not sure
- 4. Do you think Finland should adopt this concept?
- a. Sure. It is a good idea
- b. Not really. Not sure about it
- c. No. It will never work
- 5. To what extent do you prefer the idea of purchasing meals through vending machines quickly and conveniently without human interactions?

	1	2	3	4	5
Not at all					Very much

- 6. Approximately how many times have you used a regular vending machine (for a snack or drink) in a month?
- a. 0
- b. 1-5
- c. 6 10
- d. More than 10
- 7. Approximately how many times do you buy takeaway foods per month?
- a. 0
- b. 1-5

- c. 6 10
- d. More than 10
- 8. Approximately how much are you willing to spend on one take away serving?
- a. 1-5€
- b. 5 7 €
- c. 7 10 €
- d. 10 15 €
- e. More than 15€
- 9. What type of Asian foods would you prefer to have on the vending machine menu?
- 10. Where would you prefer to see these vending machines installed at your convenience?
- a. Shopping malls
- b. Schools
- c. Public transport stations
- d. Other (please specify)

Thanks a lot! Your time and your input are highly appreciated!

Appendix 3: Ruoka-automaattikysely

- 1. Mihin ikäryhmään kuulut?
- a. Alle 20
- e. 20 30
- f. 30 45
- g. 45 60
- h. Yli 60
- 2. Oletko koskaan kuullut liiketoimintamallista, missä suoraan automaatista voi saada lajitelman valmiita lämpimiä annoksia?
- a. En ole koskaan kuullut
- b. Olen kuullut, mutta en käyttänyt
- c. Käytin ulkomailla ja pidin konseptista
- d. Olen käyttänyt vastaavaa palvelua, mutta en pitänyt siitä
- 3. Haluaisitko kokeilla ruoka-automaattia, joka tarjoilisi itämaista ruokaa, pikaruoka-annoksia ja erilaisia liha- ja kasvisannoksia?
- a. Kyllä
- b. En
- c. En ole varma
- 4. Luuletko, että konsepti sopisi Suomeen?
- a. Kuulostaa hyvältä
- b. Ei välttämättä, en ole varma
- c. Ei, se ei kuulosta toimivalta
- 5. Miten arvioisit ruoan automaatista ostamisen miellytävyyttä, kun se käy nopeasti ja ilman ihmiskontaktia?

1	2	3	4	5	
Erittäin epämiellyttävää				Hyvi	n miellyt-

tävää

- 6. Kuinka monta kertaa käytät keskimäärin ruoka-automaatteja (välipala, juoma) kuukaudessa?
- a. 0
- b. 1-5
- c. 6 10
- d. Yli 10
- 7. Keskimäärin kuinka monta kertaa kuukaudessa ostat take-away ruokaa

- a. 0
- b. 1-5
- c. 6 10
- d. Yli 10

8. Kuinka paljon olet tyypillisesti valmis käyttämään rahaa yhtä ateriaa kohti?

- a. 1-5€
- b. 5 7 €
- c. 7 10 €
- d. 10 15 €
- e. Yli 15€
- 9. Minkälaisia ruokalajeja haluaisit ostaa ruoka-automaatista, onko joitain aasialaisia ruokalajeja, jotka haluaisit valikoimaan?
- 10. Missä olisi mielestäsi luonnollisin ja kätevin paikka ruoka-automaatille?
- e. Kauppakeskus
- f. Koulu/Yliopisto
- g. Asemat
- h. Muut mainitsevat

Kiitos vastauksistasi!