LAB University of Applied Sciences

Entering the Finnish car market

Case: Vinfast electric cars

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Abstract

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Electric vehicles are a technology that will replace traditional internal combustion engine vehicles. It reduces the amount of carbon dioxide released into the atmosphere. BEV batteries are one of the batteries that vehicle manufacturers are focusing on increasing output in their vehicle lines at an unprecedented rate due to changing consumer values and stringent emissions requirements. of regulatory bodies.

Vinfast is one of the big companies in the auto industry in Vietnam - not only serving domestic customers and serves foreign markets such as the US. Therefore, this study aims to survey the Finnish market, and to see if Finland would be a potential market for Vinfast to enter.

The quantitative and qualitative were two vital research methods, which are carried out in this thesis. The potential of this concept has been further explored with data analytics, macro, industry and concept levels. Based on the results of various analyzes, a conceptual analysis was performed using the tools such as Swot, Pestel, and 5 Forces.

This study shows that Finland is a country with a lot of potential when it comes to electric vehicle market. Although there are many difficulties Vinfast faces when entering the new international market, Vinfast always makes a good impression on consumers and other brands in the market.

Keywords

Vinfast company, market selection, market-entry

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1 Introduction

1.1 Research Background

Nowadays, countries have taken part in the global world due to technological progress and socio-economic, political, and environmental developments. Globalization is the process of interaction and integration around the world. To be clear, globalization is the term used to describe the world's growing interdependence of economy, culture, and population, due to cross-border trade in goods and services, technology and investment flow, people, and information. (Piie 2021.)

Recently, one of the topics that people have been interested in and discussed is global warming and environmental change. Many factors cause these phenomena, such as the greenhouse effect, extraction of natural gas and oil, and burning fossil fuels to generate electricity and energy. For example, burning oil and gasoline represents an energy source to power vehicles. Therefore, the government and organizations implement many policies and measures to improve the environment and build sustainable development by encouraging renewable uses such as wind, water, and nuclear energy use. One of the sectors and industries that huge investors pay attention to nowadays is the vehicle industry, specifically electric vehicles. Moreover, 70% of passenger vehicles use transportation oil. Globally, the growing middle class in China and India has caused the demand for passenger cars to skyrocket, leading to oil consumption. There could be up to 1.5 billion cars on the road by 2050, up from 750 million in 2010. Oil is increasingly a limited and scarce resource, so the industrial giants take advantage of electric energy as an alternative transportation fuel to reap significant benefits in terms of economy and environment. (Jennifer T, Jess C,Frankie C &PhD 2013, 4).

Taking advantage of the changing trend, VinFast, a Vietnamese automobile manufacturing company has just launched two new electric car brands to market. The company aims to explore new opportunities globally. This study aims to help VinFast to understand if Finland would be a potential new market area for the company in the future.

1.2 Thesis Objectives, Research Questions, and Limitations

This research aims to study the electric vehicle market in Finland and explore if it would be a potential market area for VinFast electric vehicles.

The research question is considered as a process by which people systematically carry out to find out things, thereby improving their knowledge (Saunders 2015,5).

The main research question of this thesis is: "Is Finland a potential market area for VinFast electric cars?”

The sub-questions of this thesis are:

- Who are the existing competitors?
- How is the consumers´ perception of the VinFast electric car brand in Finland?
- Who would be the potential target customers?

Every study has limitations. This study is an industry-specific study and it studies car markets, especially electric car markets. This study is also geographically limited as it studies Finland as a potential target market for VinFast, Vietnamese electric car produces.

Electric cars are trending around the world.vehiclehas the lowest environmental impact. But it has some limitations such as the initial purchase price of these vehicles is now on average 15–30% higher than that of conventional vehicles. Next, the driving range is also limited. There may be higher ranges, which will once again increase the price. moreover, due to some technology-bound features, it also changes the consumption habits of customers. Moreover, electric vehicles are a new market and have not been popularized, so it is difficult for people to receive and perceive new products., the product design is fundamental. It has a simple yet sophisticated style.

Finally, the population density in Finland is less than the population density in Vietnam. It is also a small point to define customer segments. For example, the ages between 35 and 50 have extremely high demand to buy a car, but the country's population density in that age group is not high. (Statistic Finland 2021.)

1.3 Theoretical Framework

The authors use Sven Hollensen's book "Essentials of Global Marketing" as the vital source of this thesis. He divides his theoretical model into five parts. Part one is the decision to internationalize. Part two about deciding which market to enter. Market entry strategies is part number three. Part four is designing the global marketing program and implementing and coordinating the global marketing program is part number five. (Hollensen 2012.)

The figure below illustrates the five - stage decision model in global marketing.

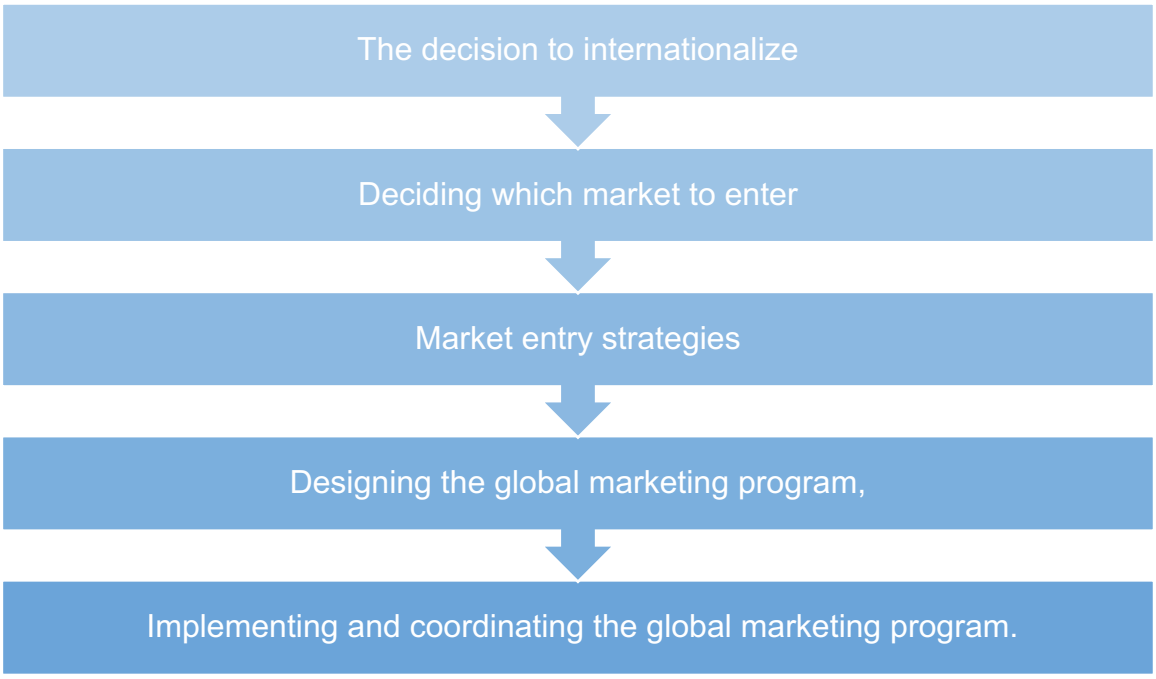

Figure 1. Five stage decision model in global marketing (Hollensen 2012, 5).

To assist in answering the research question "Is Finland a potential market for Vinfast electric cars?" the authors focus on analysing the second part of the theoretical model, "deciding which market to entry". Three situational analysis tools, including PESTEL, Porter's five forces, and SWOT analysis can be used and analysed to support Hollensen's theory in this thesis.

PESTEL analysis tool helps the author understand the Finnish macro factors affecting the company. The six factors discussed are political, technological, economic, social, environmental, and legal. Its results are used to identify threats and weaknesses in a SWOT analysis. Porter's five forces is an industry analysis tool. It is used to determine the primary sources of competition in an industry or sector. A company's strengths and weaknesses can be understood and identify key factors that can affect profitability. Meanwhile, the SWOT analysis tool helps the author understand both the company's internal and external factors, including the strengths, weaknesses, opportunities, and threats.

1.4 Research Methodology and Data Collection

There are many different research methods. However, there are three standard research methods, including qualitative, quantitative, and mixed method. Quantitative research uses numbers to test hypotheses and make predictions using measured quantities and describes an event using the data. Qualitative research includes words, opinions, thoughts, feelings, and behaviours. It is used to understand concepts, beliefs, or experiences. The qualitative methods include interviews with open-ended questions, verbally described ob-

servations, and literature reviews that explore ideas and theories. Mixed method research is an approach that uses both above. (Creswell & Creswell 2017.)

The authors decided to use mixed-method research methods in this thesis. The aims are to collect opinions of a group of customers in Finland about people's attitudes towards using electric vehicles as an alternative to vehicles using gasoline or diesel fuel. Vinfast brand recognition, as well as the adoption of a new product.

There are two data sources used in the study, primary and secondary. The researcher directly collects preliminary data through experiments, surveys, questionnaires, focus groups, conducting interviews and measurements. In contrast, Secondary data is published book publications, magazines, and newspapers, etcaccurate, However, both also have a little bit disadvantage. The primary data are more accurate, while secondary can be old and irrelevant. Secondary benefits are quickly and easily to find, while the primary takes a long time and money. (Creswell & Creswell 2017.)

In this thesis, the authors use both primary and secondary data. The published books, surveys of others, and journal articles will be used as secondary sources, while the opinions from a target group in Finland will be the primary sources.

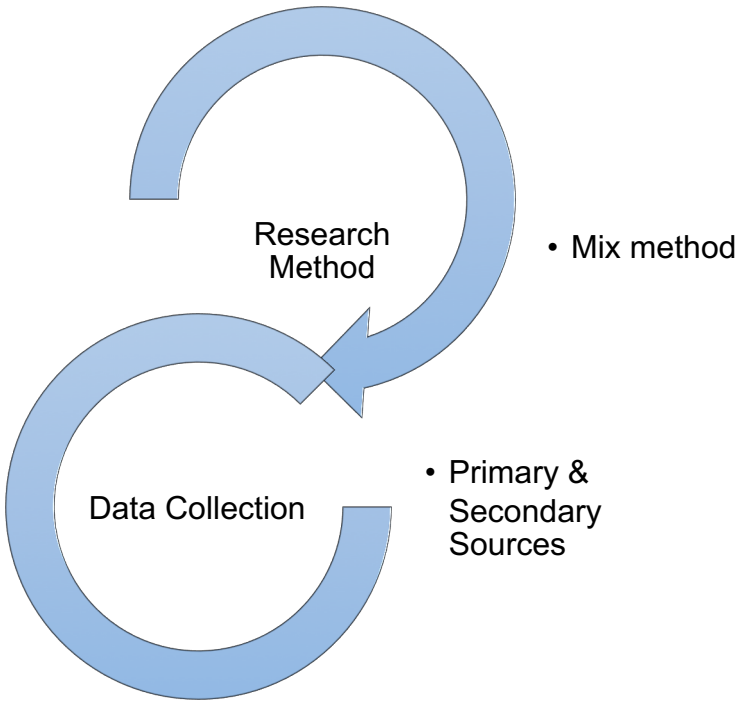

Figure 2. Research methods and data collection of the thesis

The figure above shows the research methods and data collection of this thesis

1.5 Thesis Structure

The authors present six chapters in this thesis. The figure below illustrates the structure of the idea.

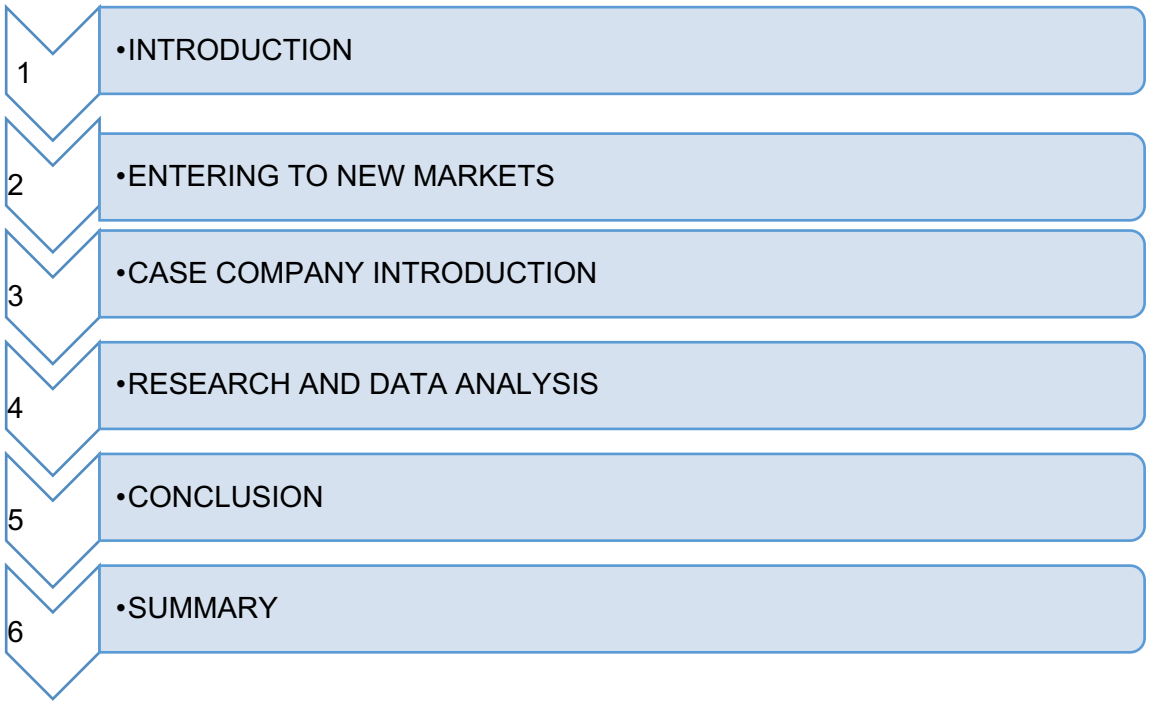

Figure 3. Thesis Structure

The first chapter consists of five subsections. It introduces the background of the thesis, thesis objectives, research questions and sub-questions. The research scope of the idea is also limited to make it easier to answer the main question. This chapter also covers the theoretical framework, research methodology and data collection. Finally, the thesis Structure will help readers closely follow the content of the thesis.

The second chapter will present a theoretical framework to clarify the actual situation of the Finnish electric car market. The authors will use situation analysis tools in this thesis, including macro environment analysis - PESTEL, industry environment analysis, Porter's five forces, and SWOT analysis.

Chapter three will introduce the company case. In this thesis, the authors will refer to Vinfast, an electric vehicle company headquartered in Vietnam.

Chapter four will focus on data collection and analysis. The authors will begin with an interpretation of the design and construction of empirical research. Then, the authors will analyze the data using tools to answer the main research question is “Is Finland a potential market area for VinFast electric cars?”

The authors will present the conclusion of this thesis in chapter five. It includes answering the research questions and suggestions for the company.

Chapter six is the last chapter of this thesis. The content is a summary of this thesis from the author's view.

2 Entering to new market

This thesis focuses on the second step of the five-step internalization process model of Hollensen to answer the research question. Entering a new market presents many opportunities. However, it also includes many risks. Therefore, choosing the right market will determine the success or failure of the company. The second step of this model is "Deciding which markets to enter". To do this well, the company carefully analyzes and studies the different environments of the selected countries. Factors that should be mentioned include the macro environment, the industry environment, and the internal environment. From there, the company adjusts to customers' needs, laws, and the culture of the chosen market. (Hollensen 2012.)

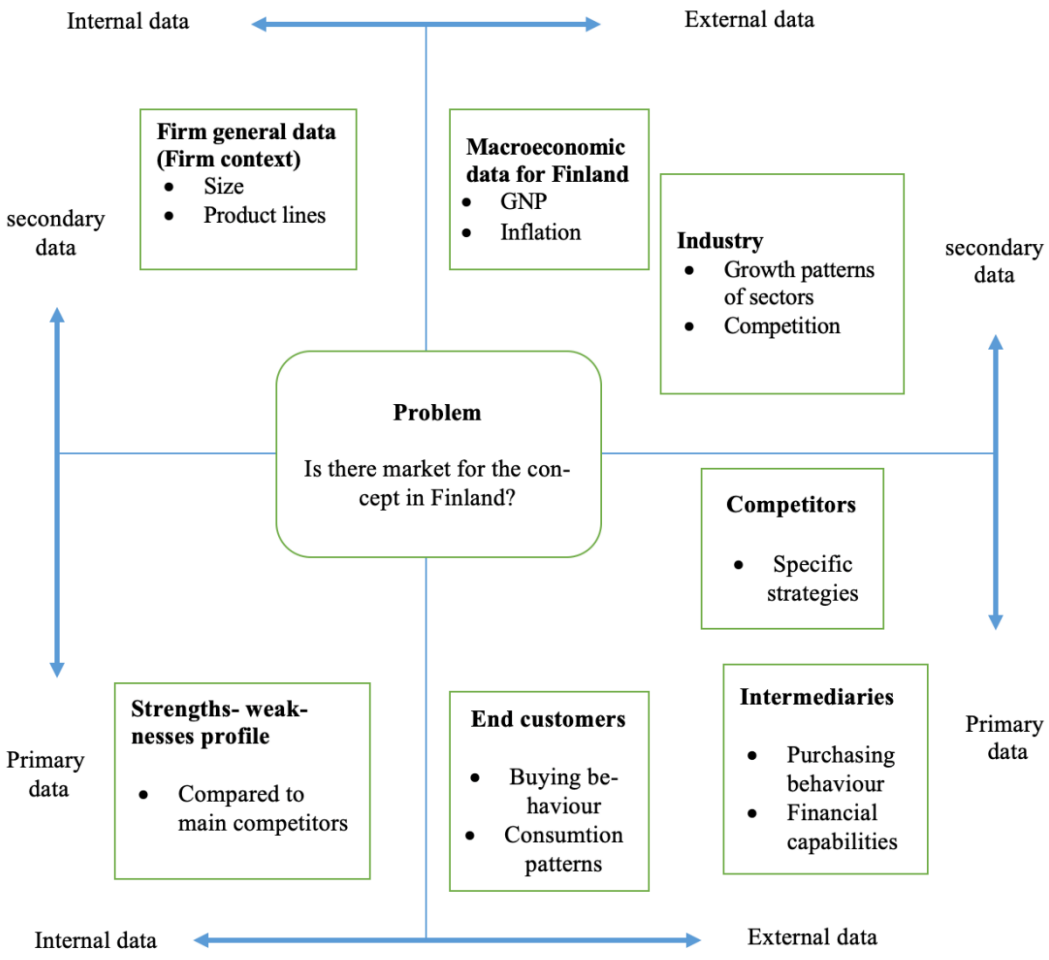

Figure 4. Categorization of data for assessment of market potential in a county (Hollensen 2012)

The figure above shows the categorization of data for assessment of market potential in a county adapted from Hollensen.

To answer the research question, it is necessary to analyze a company's internal and external factors through primary data and secondary data. These types of data are often combined to analyze better the influence of environments and elements on a company's competitiveness when developing a new project or entering a new market. Through internal and secondary data, it is possible to understand the basics of a company, from its size to its economic health. It will understand the company's strengths and weaknesses when analyzing internal and primary data. On the other hand, when analyzing secondary and external data, the company can understand the macro and industry environments from the degree of government influence to the competitive strength of rival companies or potential risks. Finally, the company can understand buyer behavior and habits, competitors' specific strategies, and the development of purchasing channels that the customer wants by combining primary and external data to analyze.

2.1 Macro-Level Analysis

PESTLE is a tool for analyzing situations at the macro level. Companies use it to monitor the environment in which they operate or are planning to enter a new market. PESTLE is an extended mnemonic that denotes Political, Economic, Social, Technological, Legal and Environmental. The company has a bird's-eye view of the entire environment from various angles to check and monitor while contemplating an idea or plan. All aspects of this technique are fundamental to any industry where a business can engage the organization's goals and strategies. Each factor plays a different importance for some industries. However, any process that a company wants to develop must undergo a PESTLE analysis because it constitutes a complete strategy version. It is unnecessary to categorize each problem raised when using the PESTLE technique because the tool aims to identify as many factors as possible. (Perera 2017.)

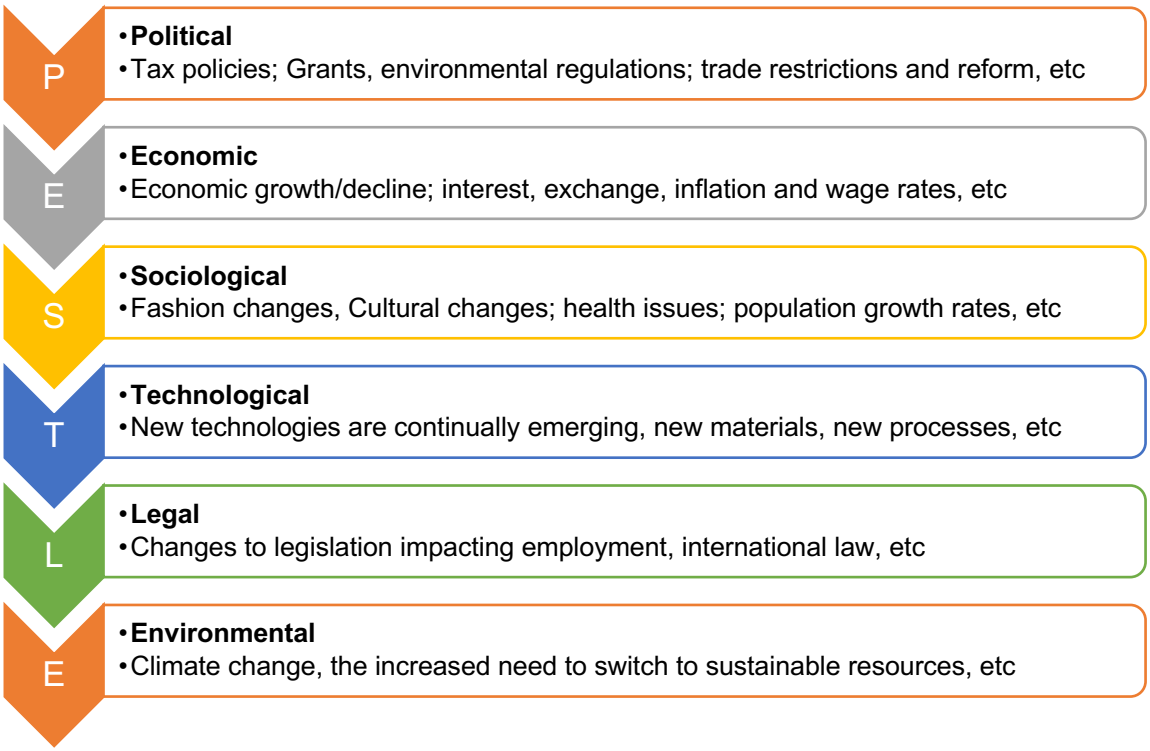

Figure 5. PESTEL Framework (Marmol, Feys & Probert 2015.)

The figure above shows the framework of the PESTEL.

Political

Political factors determine how a government can influence the economy or a particular industry. Political factors include tax policy, fiscal policy, trade tariffs, etc. Government can impact year-round and affect the business environment to a significant extent. These factors often impact organizations and the way they do business. Organizations need to respond to current and anticipated future legislation and adjust their marketing policies accordingly. (Marmol, Feys & Probert 2015.)

Several trade barriers and tariffs can hinder a business, including customs policies and export subsidies. Meanwhile, non-tariff trade barriers include the determination of minimum import prices and bans and restrictions on exports. (Perera 2017.)

Economic

Economic factors determine the performance of the economy. It has a direct effect on a company and has resonant long-term effects. It will affect the purchasing power of consumers and change the supply and demand pattern for that economy. These factors include inflation, interest rates, exchange rates, economic growth patterns, etc. It also looks at FDI depending on some specific industries performing this analysis. These factors can be further subdivided into macroeconomic and microeconomic factors. Macroeconomic

factors are related to the management of demand in any economy. The government controls interest rates, tax policy, and government spending as the main mechanisms. (Marmol, Feys & Probert 2015.)

Social

Sociocultural factors are related to shared beliefs and attitudes. These factors take a close look at the social environment and assess determinants such as cultural trends, demographics, population division rates, health consciousness, occupational attitudes, etc. These factors are of particular interest because they directly affect how marketers understand customers and what drives them. (Marmol, Feys & Probert 2015.)

These factors make sense for marketers as they target specific customers. In addition, they also highlight the local workforce and their enthusiasm to operate under certain circumstances. (Perera 2017.)

Technological

Technological factors mean innovation and development of technology. These factors affect the performance of an organization. Several new developments such as Artificial Intelligence, Machine Learning and Deep Learning are being made in technology. It also includes the rate of technological change and the evolution of infrastructure. (Perera 2017.) It can affect industry and market performance favorably or adversely. It refers to automation, research and development, and the amount of technological awareness a market possesses. The technology landscape changes rapidly, and how this affects how we market our products. Technological factors affect marketing and its management in three distinct ways. It includes new ways to produce goods and services, new ways to distribute them, and new ways of communicating with target markets. (Marmol, Feys & Probert 2015.)

Legal

Legal elements have both external and internal aspects. Various laws affect the business environment in a particular country, while companies maintain specific policies for themselves. The legal analysis looks at both angles and then outlines strategies based on these regulations. Legal factors include health and safety, equal opportunity, advertising standards, consumer rights and laws, product labels, and product safety. Companies need to know what is legal and not to be traded successfully. Each country has its own rules and regulations. So, if an institution were to trade globally, this would become a challenging area to get right. (Perera 2017.)

Environmental

In recent years, environmental factors have been increasingly a concern by countries. They have become essential due to increasingly scarce resources. The government requires companies to operate ethically and sustainably with pollution and carbon emissions targets. In addition, more and more consumers are demanding that the products they buy be reasonably sourced and from a sustainable source where possible. Some industries, especially tourism, agriculture, agribusiness, etc., should be considered. (Perera 2017.)

Environmental factors are essential for the image of the surroundings. It deals with liquid handling laws, environmental protection laws, and energy consumption regulations. However, with increasing global warming and the need to switch to resources, every organization must consider the operating system sector. The corporate board of directors has begun to perform concerning the organization. (Marmol, Feys & Probert 2015.)

2.2 Industry Analysis

Porter's Five Forces is a tool that identifies and analyses the five competitive forces that shape every industry and helps identify industry strengths and weaknesses. Five Forces Analysis is often used to determine the structure of an industry to determine a company's strategy. It helps to explain why different industries can maintain various levels of profitability. The five forces are commonly used to measure the intensity of competition, attractiveness, and profitability of an industry or market. This model can apply to any economic segment to understand the level of competition in the industry and improve its long-term profitability. It includes the competition in the industry, the potential of new entrants, suppliers' power, the threat of substitute products, and the power of customers. Firms can understand Porter's Five Forces and how they apply to industry to use their resources better to adjust their business strategy to generate higher returns for their businesses. (Stéphaie 2015.)

Figure 6. Porter's Five Forces model (Stéphaie 2015.)

The figure above illustrates the Porter's Five forces.

The threat of intense segment rivalry

The first forces refer to the number of competitors. The larger the number of competitors, the more comparable products, and services they offer, the less powerful a company is. Suppliers and buyers seek corporate competition to provide a better deal or lower price. Conversely, when competition is intense, a company has greater power to charge higher fees and set the terms of agreements to achieve higher sales and profits. (Stéphaie 2015.)

The threat of new entrants

A company's power is also influenced by the force of new entrants in its market. An industry with many barriers to entry is ideal for companies already in that industry. The company can charge higher prices and negotiate better terms. For a competitor, if it takes less time and money to enter a company's market and become an effective competitor, the position of an already established company can be significantly weakened. (Stéphaie 2015.)

The threat of suppliers' growing bargaining power

The supplier factor in the five competitive forces model can easily affect input costs. It is influenced by the number of suppliers, the uniqueness of the inputs, and the price a company must pay to switch to another supplier. The fewer suppliers to the industry, the more

dependent a company is on one supplier. As a result, suppliers have more power, increasing input costs and fostering other commercial advantages. Conversely, when there are many suppliers or low switching costs between rival suppliers, a company can reduce input costs and improve its profits. (Stéphaie 2015.)

The threat of buyers' growing bargaining power

Customers' ability to push prices lower, or be forced to buy higher, will depend on their power level. When customers have more choices, it means more power customers. Conversely, if customers have few choices, they will be less able to influence the price of a company's products or services. The number of buyers or customers a company has, the importance of each customer, and how much it will cost the company to find new customers or markets for its output are factors that a company needs attention .(Stéphaie 2015.)

The threat of substitute products

The last force focuses on substitute products. Substitute goods or services of competitors can substitute for the company's products or services that pose a threat. Companies will have more power to raise prices and lock in favourable terms if they produce goods or services with no close substitutes. When comparable replacements are available, customers will have the option to forgo purchasing the company's product, which may weaken the company's strength. (Stéphaie 2015)

2.3 Concept Analysis

Companies use the SWOT analysis tool to assess their business's and competitors' competitive position, thereby generating an appropriate strategic plan. SWOT analysis focuses on internal and external factors and current and future potential. Internal factors are strengths and weaknesses. Opportunities and threats are external factors. A SWOT analysis is designed to facilitate an objective, data-driven view of an organization's strengths and weaknesses, initiatives, or industry. The main goal of a SWOT analysis is to help organizations develop a full awareness of all the factors involved in making business decisions. Since its inception, SWOT has become one of the most valuable tools for business owners to start and grow their companies. (Sarby 2016.)

Figure 7. SWOT analysis (Sarby 2016.)

The figure above illustrates the SWOT analysis.

Strengths

Strengths describe positive attributes in the organization. It can be tangible or intangible. They are within the control of the company. It explains what an organization excels at and what sets it apart from its competitors. A strong brand, loyal customer base, strong balance sheet, and unique technology will enhance the company's competitive edge. It could also be employee motivation, access to certain materials, or a robust set of manufacturing processes. (Sarby 2016.)

Weaknesses

Businesses need to improve on weaknesses to stay competitive because it prevents the organization from operating at optimal levels. Companies need to keep in mind weak branding, low turnover, high debt, inadequate supply chains, or lack of capital. (Parsons 2021.)

Opportunities

Opportunity refers to favourable external factors that can give an organization a competitive advantage. These are attractive external factors that represent why a business is likely to prosper. (Parsons 2021.)

Threats

Threats are factors that can potentially harm an organization or a company. It includes external factors beyond a company's control that can put its strategy at risk. The company has no control over these, but they can make contingency plans to deal with them should they occur. (Sarby 2016.)

3 Case company introduction

3.1 Vingroup Joint Stock Company

Vingroup Joint Stock Company, formerly Technocom Group, was established in 1993 in Ukraine. Initially, the company produced dry food and achieved great success with the instant noodle product Mivina. In the early years of the 21st century, Technocom always appeared in the ranking of the top 100 most prominent joint-stock companies in Ukraine. However, with the desire to contribute to enriching the country, Technocom - Vingroup has returned to Vietnam to invest since 2000. (Vingroup 2019.)

Vingroup is the largest private enterprise in Vietnam. It also has the largest market capitalization on the Vietnamese stock market. Starting a business in Vietnam in tourism and real estate with the brands Vinpearl and Vincom, Vingroup constantly develops and expands its business activities in the spirit of sustainable and professional development. (Vingroup 2020, 17.)

Vingroup is known for its two initial strategic brands, Vinpearl and Vincom. Vincom has become a leading brand in the real estate field with constant efforts with a series of commercial centres, offices, high-class apartments in big cities, and the trend of intelligent and urban areas. Vietnam's leading luxury eco-market. Vinpearl also became the leading backpacker resort with a chain of hotels, resorts, villas, and amusement parks. In January 2012, Vinpearl Joint Stock Company merged with Vincom Joint Stock Company and officially operated under the model of a group named Vingroup. After its establishment, Vingroup restructured and focused on developing with many brand groups such as Vinhomes (high-class villas and serviced apartments) in the spirit of sustainable and professional development. Vincom (Luxury Trade Center), Vinpearl (Hotel, Tourism), Vinpearl Land (Entertainment), Vinmec (Health), Vinschool (Education), VinCommerce (Retail business: VinMart, VinPro, Adayroi, VinDS, etc.), VinEco (Agriculture), Almaz (International Culinary and Convention Center),. In 2021, Vingroup achieved a net revenue of about 125.7 trillion VND. The Vietnamese conglomerate focuses on technology, real estate development, retail and healthcare, and hospitality. (Statista 2022.)

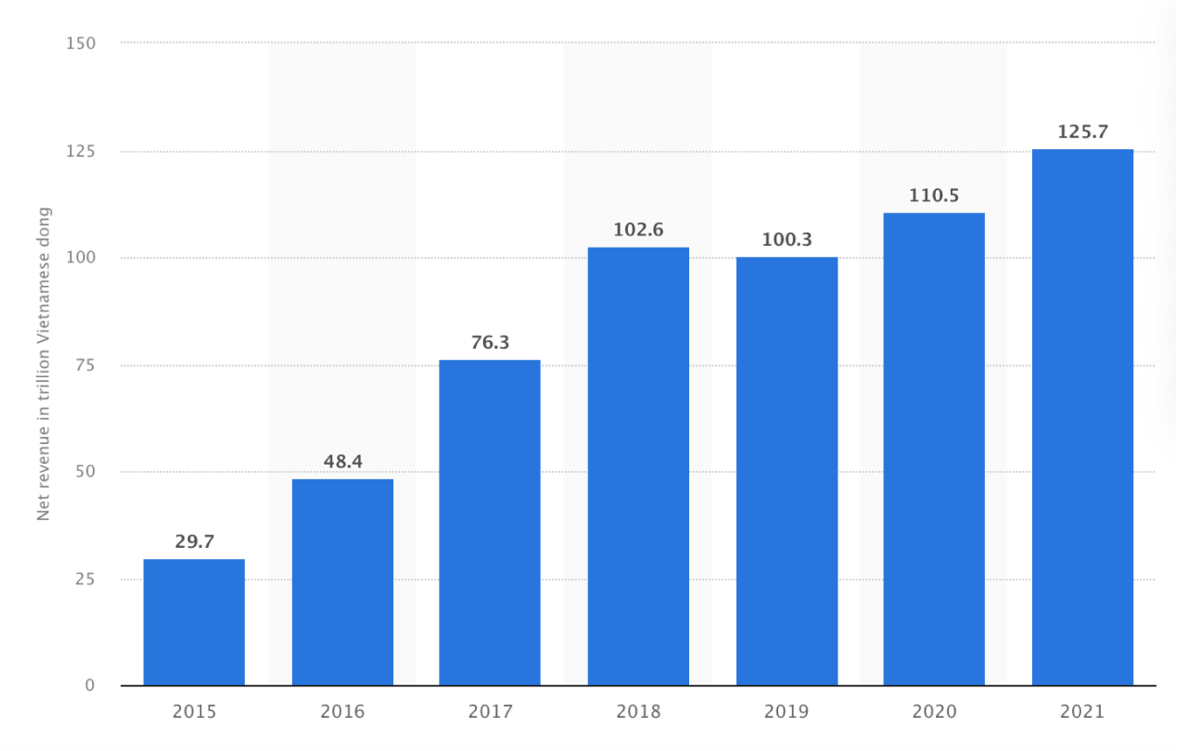

Figure 8. Vin Group JSC annual net revenue from 2015 to 2021 (Statista 2022.)

The figure above illustrates the revenue of Vingroup achieved annually from 2015 to 2021.

3.2 Vinfast Manufacturing and Trading Co., Ltd

In 2017, Vinfast Manufacturing and Trading Company Limited were established as a Vingroup Corporation subsidiary. It is also the 7th core business of Vingroup, with the head office located in Hanoi, and the General Director is Mr. Pham Nhat Vuong. The birth of VinFast not only contributes to making the automobile dream of Vietnamese people come true but also opens an era of development based on Vingroup's technology and knowledge foundation and, at the same time, contributes to promoting the automotive industry in Vietnam.

Vinfast is an abbreviation of Vietnam - Style - Safety - Innovation - Pioneer. Vinfast's vision is to become one of the world's leading intelligent electric vehicle companies. Vinfast's essential products are intelligent electric vehicles, including electric cars, buses, and motorbikes. Vinfast is constantly innovating, researching, and developing to bring the best products and services, the best value and experience to customers, contributing to promoting the conversion of the habit of using petrol cars to electric cars. At present, Vinfast has introduced and launched three innovative electric car models, one electric bus model and six electric motorbike models. In particular, the electric car model VF e34 has officially been ordered and will be handed over at the end of 2021 in Vietnam; Vinfast will widely

introduce two electric car models, VF e35 and VF e36, in the Vietnam market. international market including (Usa, Canada, Europe) in 2022. (Vingroup 2020, 21.)

In early 2021, Vinfast first introduced three new smart car models to the market, including the VF31 (now VF e34), a medium-sized SUV (segment C) and only one electric car version, the VF32. (Now VF35) is a mid-size SUV (D segment), VF33 (now VF36) is a large SUV (E segment). The VF35 and VF36 are both available in electric and petrol versions. It is an important milestone, confirming Vinfast's vision of becoming a globally popular smart electric car company and bringing Vietnam to a new position on the world map of the automotive industry.

The Image below illustrates the Vinfast VF E35 model

Image 1. The Vinfast VF E35 model (Motorauthority 2021.)

Image 2. The Vinfast VF E36 model (Motorauthority 2021.)

The Image above illustrates the Vinfast VF E36 model

Image 3. Inside the Vinfast VF E36 model (Motorauthority 2021.)

The Image above illustrates inside the Vinfast VF E36 model

Vinfast cooperates with global partners and technology institutes, and companies under Vingroup have launched innovative products in the exhibition based on infotainment and advanced vehicle assistance systems (ADAS). In september 2020, Vinfast officially announced the limited edition Vinfast President SUV with only 500 units. As one of the most powerful commercial vehicles on the market, Vinfast President possesses a strong and luxurious exterior design, luxurious interior space, and a 6.2L V8 engine block with 420 horsepower. They are equipped with advanced safety technologies that bring a strong, smooth, and safe operating feeling with a maximum speed of 300 km / h. Vinfast President is one of the clear proofs of Vinfast's production, research and development, and technology knowledge capabilities. (Vingroup 2020, 8.)

4 Empirical research and data analysis

4.1 Situational Analysis

Situation analysis is the analysis of internal and external factors affecting a company. The analysis can assess the risks and benefits to the project and related organizations from the way the communication process is carried out. This research use tools such as PESTEL, Porter's five forces, and SWOT to analyse.(IAEA 2022.)

4.1.1 Macro environment factors

Political

Finland has not reached the heights of its Scandinavian neighbours regarding electric car sales. However, that will change in the future as parties want to compete for votes in elections. (Bellona 2019.)

In 2016, Finland had about 500 electric cars. In 2018, the number of new electric cars registered in Finland was 2,404. The number was closer to 5,000 units by the end of 2019. Meanwhile, Norway had about 70,000 electric vehicles running on the country highways. While Finland's numbers may appear modest, they represent a dramatic increase in electric vehicle ownership in only a few years. (Bellona 2019.)

Finland has about 77,000 hybrid cars and 22.9 thousand electric cars registered as of the end of 2021. Since 2015, the number of plug-in hybrids has increased significantly. However, the number of electric cars increased more slowly. (Statista 2021.)

The figure below illustrates the number of electric and hybrid passenger cars in Finland from 2010 to 2021

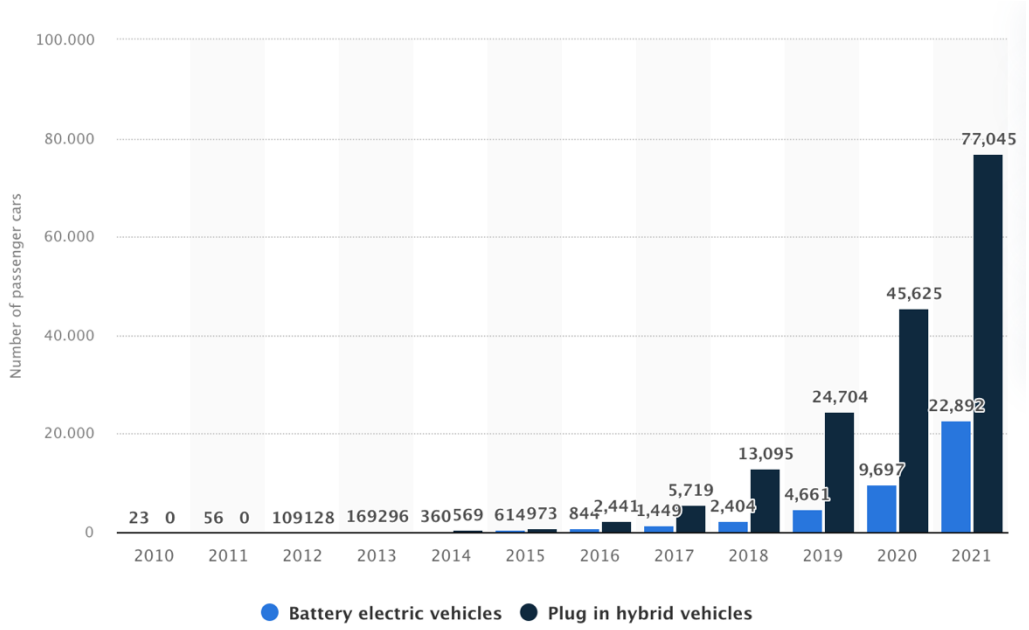

Figure 9. The number of electric and hybrid passenger cars in Finland from 2010 to 2021 (Statista 2021.)

The Finnish Government is looking to eliminate the nation's carbon footprint and expanding the use of electric cars is at the heart of their proposals. (Bellona 2019.)

Finland's Social Democrats led the charge in favor of selling conventional gasoline-powered cars within a decade. They also discussed forming a coalition with the Green Party to make significant progress in stemming the effects of climate change. (Bellona 2019.)

Owners of electric cars in Finland are used to the perks. Domestic electric car buyers only pay a quarter of the tax to buy a car with an internal combustion engine. Owners of electric vehicles will be reimbursed an extra €2000 on top of the price of their car directly from the government between 2019 and the end of 2021. (Bellona 2019.)

The Finnish government says its goal is to have about 225,000 electric cars registered by 2025, to 670,000 by 2045, and this number will reach 2 million by 2045. freight facilities, about 45,000 of which will also be brought to the routes. (Bellona 2019.)

Finland's current target is 250,000 plug-in hybrid and electric vehicles by the next decade. They propose to raise the electric and hybrid vehicle target to 700,000 cars by 2030. The country could achieve this new target by introducing tax incentives, fixed-term procurement subsidies, or merchant programs trading traffic emissions. (YLE 2020.)

Finland has plans to introduce a ban on internal combustion engines sooner, like Sweden in 2030 and Norway in 2025. However, Finland is still facing the same problem that other

countries have big ambitions for electric cars to face. That's where to charge those vehicles. Finland is responsible for building 71,000 electric car charging stations by 2020. The directive requires that every five parking spaces in each new building be dedicated to electric vehicles and be provided with chargers. Much of this has been funded by the Finnish government. Over the past three years, the capital of Helsinki has invested 4.8 million euros in the construction of charging stations. The number of public toll stations will triple when completed. (Bellona 2019.)

The current government has proposed implementing a ban on conventional fuel-powered cars by 2045. However, the Social Democrats and Greens have questioned the timetable for phasing out the engine. Internal combustion is not fast enough. They believe that running on gas engines will end by 2030. (Bellona 2019.)

Currently, the south of the country and around Helsinki have about 42.2% electric cars. With the rapid development of electric cars, it comes with a requirement of many fast-charging stations, and it is indispensable. It is a much rarer place in the frigid north of the country. (Bellona 2019.)

Environment

The Finnish Climate Change Commission estimates that electric cars emit 60-70% lower lifetime emissions compared to standard cars with internal combustion engines. It is also less expensive to operate in the long run. Although the production of electric vehicles (EVs) produces higher emissions, in the long run, they still produce far fewer greenhouse gases than standard vehicles of the same size. It is the result of a car computer that allows consumers to compare the emissions and running costs of different vehicles. (YLE 2019.)

According to the latest projections, Finland's current policies aim to halve emissions. Specifically, the Finnish government will reduce emissions by about 3.2 million tons by 2030. According to a working group from the Ministry of Transport and Communications, it also needs to increase the number of electric cars on the road significantly. Vehicle rental accounts for about a fifth of Finland's greenhouse gas emissions. Road transport accounts for nearly 94% of traffic emissions in the country. (YLE 2020.)

Economic

Finland is an example of economic efficiency, competitiveness and success in innovation. However, economic activity reached pre-crisis levels in mid-2021 after undergoing a re-franchise in 2020 due to the Covid-19 pandemic. GDP grew by 3% in 2021, supported by public and private consumption. The IMF forecasts a projected growth of 2.9% in 2022,

followed by 1.5% next year. Rates will rise further this year as consumers readjust their consumption, employment, and wages. (OECD 2022.)

Finland's GDP per capita is $51,867 (As per IMF estimates for 2021), which is one of the highest in the world. Although social inequality has increased in recent years, the distribution of wealth is even. Finland is the European country hardest hit by public finances because of its ageing population and shrinking workforce. Reduced productivity in traditional industries and the need to reduce high labour costs are other challenges the country will face. Unemployment stands at 7.8% in 2021 but is expected to continue falling to pre-pandemic levels, with crisis-affected sectors projected to catch up significantly in 2022, when the general rate will fluctuate around 6.8%. (International 2022.)

The table below illustrates the Finland Economic Outlook Database.

Finland Economic Outlook Database

Main Indicators	2019	2020	2021 (e)	2022 (e)	2023 (e)
GDP (billions USD)	268,81	269,56e	296,02	314,54	329.68
GDP (Constant Prices, Annual % Change)	1,3e	-2,9	3	3	1.Jan
GDP per Capita (USD)	48,716	48,786	53,523	56,833	59,545
General Government Balance (in % of GDP)	-0,7	-2,4	-3,1	-2,4	-2
General Government Gross Debt (in % of GDP)	59,5	69,5e	72,2	72,2	73,6
Inflation Rate (%)	1,10	0,4	1,10	1,60	1,60
Unemployment Rate (% of the Labour Force)	6,70	7.8e	7,80	6,80	6,70
Current Account (billions USD)	-0,84	2,06	-0.30	1,13	1,23
Current Account (in % of GDP)	-0,30	0,80	-0,10	0,40	0,40

Source: IMF – World Economic Outlook Database , October 2021
Note: (e) Estimated Data

Table 1. The Finland Economic Outlook Database (International 2022.)

Unfortunately, Russia's invasion of Ukraine slowed Finland's growth and increased inflation. The extent and duration of the fight are still unknown. Growth will slow from 0.5% to 2% in 2022. The economic impact will be longer as it takes time to find a replacement for the lost Russian market. The Russian invasion has led to a stigma about the company's ties to Russia. Finnish companies will reduce or stop doing business with Russia, and even many Finnish companies have announced to stop doing business in Russia. About 2,200 Finnish companies are exporting to Russia, and the war-induced export restrictions apply directly to the exports of about 500 of these companies. In addition, the applicable sanctions are extended in phases. (Bank of Finland 2022.)

Legal

The Ministry of Transport has petitioned the Government to continue subsidizing purchase and conversion prices for passengers in 2018–2021. Buyers or long-term renters of a new electric car can receive a 2.000 euro car subsidy from the central Government. The conversion allowance is 1.000 euros to convert a petrol or diesel car to gas and 200 euros to ethanol. This legislative project is also preparing new subsidies for purchasing gas and electric vans and trucks. (Helsinkitimes 2021.)

To encourage households and companies to switch from fossil fuels to alternative fuels and propulsion systems, reducing greenhouse gas emissions from transportation, the President of Finland has passed legislation to support purchase and conversion costs for low-emissions vehicles. This act goes into effect on January 1, 2022. New funding programs are approved for a fixed period. The current purchase subsidy for all-electric passenger cars and gas-powered trucks and the conversion subsidy for electric passenger cars and trucks may apply for 2022 and 2023. Another purpose is to reduce the cost of purchasing electric or gas-powered vehicles to make low-emissions cars more affordable to many buyers. (Government and Ministries 2021.)

Based on the European Union's Clean Vehicles Directive (CVD), the law on environmental and energy efficiency requirements for the procurement of vehicles and transport services came into force in Finland on August 2, 2021. The law says, "Up to half of the vehicle capacity of cities in Finland must soon be covered by trams". Public sectors have to consider emissions when buying new cars, or they don't want to pay some fines. In addition to central and non-central cities, the new rule applies to state-owned companies such as Alko and Yleisradio. Finland has a general obligation that there must be zero emissions by 38.5% of all new passenger cars and vans purchased by the public sector. Even in the 17 largest cities in the country, stricter procurement criteria have been set. (Vedia 2021.)

Social

Finland ranks third in the Global Index of Social Progress, published by the Washington-based NGO, the Order of Social Progress. The index, first launched in 2014, measures 50 different variables that affect development and social well-being and looks at the performance of 193 countries. (YLE 2020.)

The total population of Finland has about 5.55 million people in 2021. Between 20 and 39 has about 1.38 million, and 40 to 59 years old 1.38 million, accounting for more than half of the population. The group of people aged 60 and over is more than 1.6 million people.

From 2016 to 2021, the increase in the number of individuals aged 60 years and over reflects a shift to an older population structure. (Statista 2022.)

The figure below illustrates otal population of Finland from 2016 to 2021 by age group

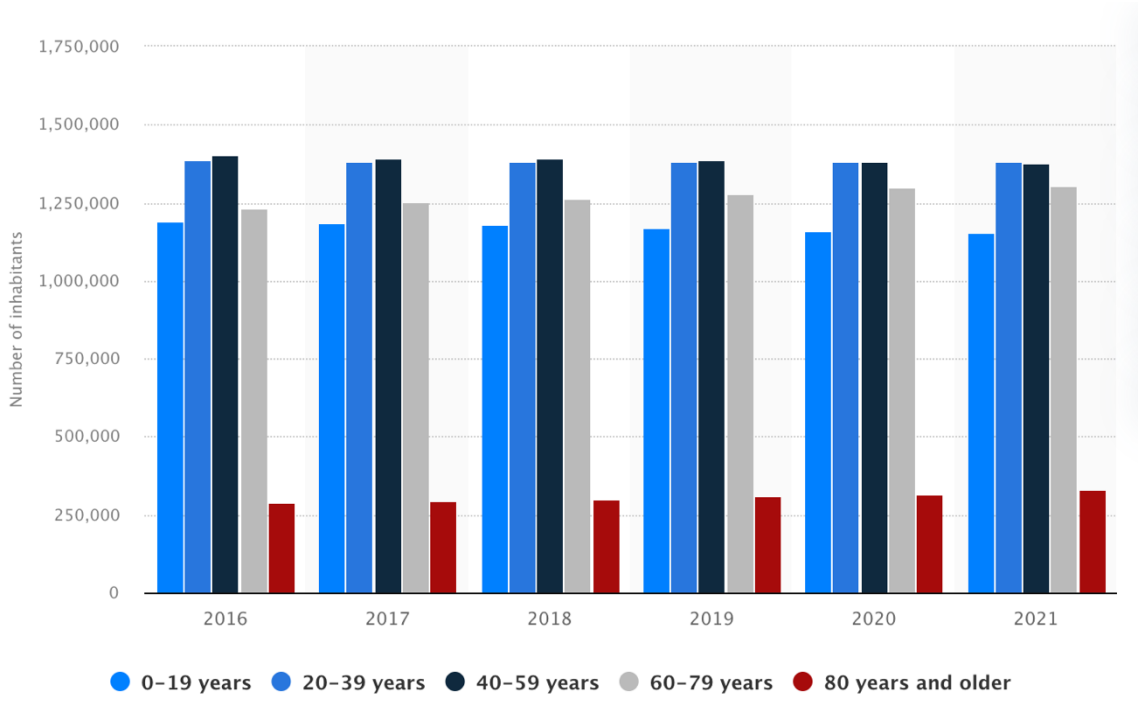

Figure 10. Total population of Finland from 2016 to 2021, by age group (Statista 2022.)

As of 2021, more than half of Finland's population are women, 2.81 million, compared with about 2.74 million men. The number of males increased slightly faster than females from 2011 to 2021. Overall, Finland's population is growing steadily but has tended to slow down in recent years. (Statista 2022).

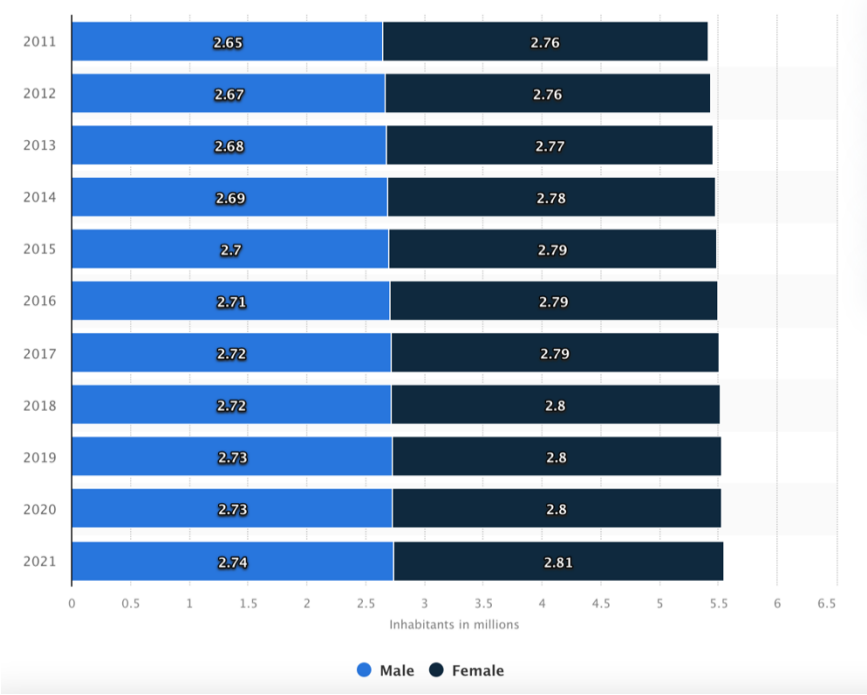

Figure 11. Population of Finland from 2011 to 2021, by gender in millions (Statista 2022.)

The figure above illustrates the population of Finland from 2011 to 2021 by gender in millions

The metropolitan area of Helsinki has the largest population in the country, at 1,231,595. It regularly tops lists of the most liveable cities. The second is Espoo, with a population of 270,416. Espoo is also home to the headquarters of many crucial significant science and technology companies in the country. The southern city of Tampere is Finland's third-largest city, with 230,537 inhabitants, which used to be the primary source of electricity. Tampere is also considered an important economic and cultural center of central Finland. (Worldpopulationreview 2022.)

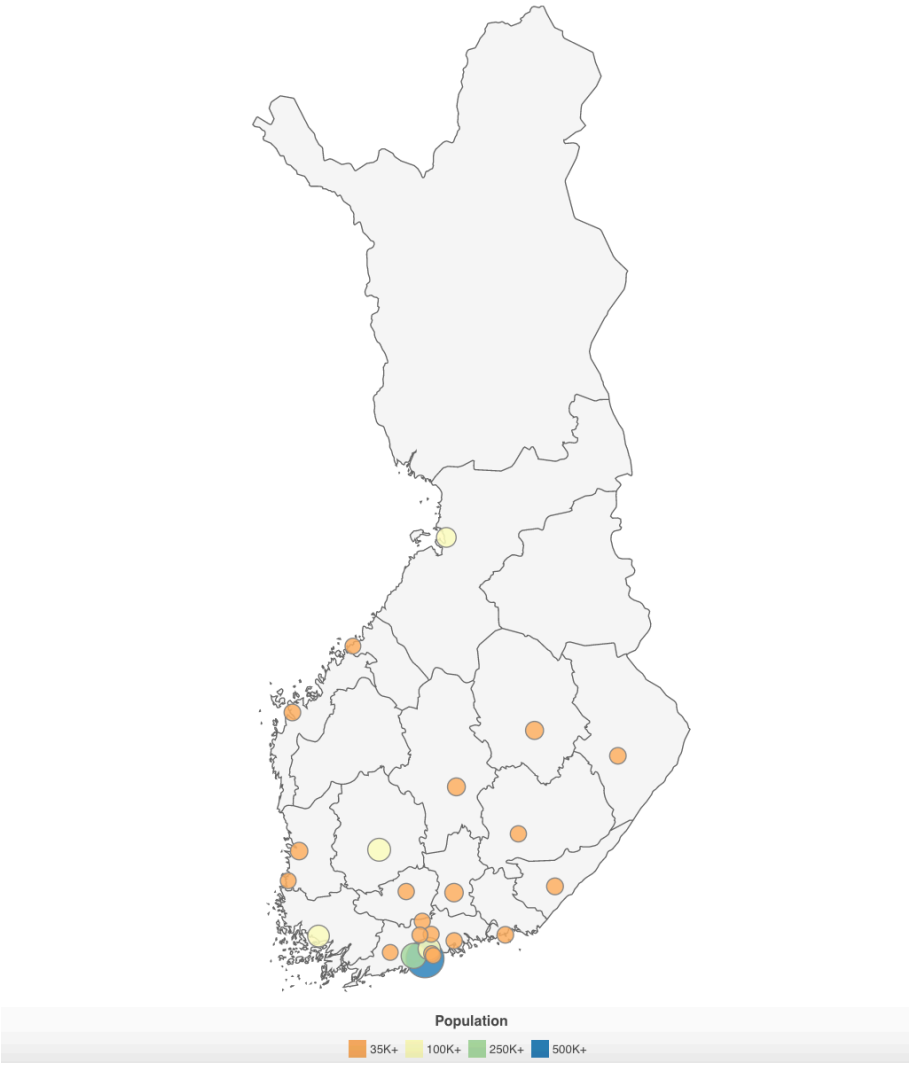

Figure 12. Population of Cities in Finland (Worldpopulationreview 2022.)

The figure above illustrates the population of Cities in Finland

Technological

Finland is a technologically advanced society. It is at the forefront of many technological innovations. The education system focuses on digital and technology-based teaching and learning. In addition, Finland has a high level of informatics in the country. (Howandwhat 2022.)

Finland has performed very well in mobile technology, advanced software, software security, and data analytics. However, it faces a shortage of tech workers. Digitalization, artificial intelligence (AI) and data analytics are critical areas in need of thousands of skilled workers today. (Howandwhat 2022.)

The number of electric cars in Finland continues to grow. The electrification of road transport is progressing rapidly. The electric vehicle charging network has also expanded

significantly. Besides charging at home and work, public charging networks for electric vehicles contribute to the popularity of electric cars. (Government and Ministries 2022.)

The Ministry of Transport has submitted a draft memorandum of understanding on developing an electric car network for comments. The MoU assesses the current state of electric vehicle infrastructure, the development of the project and the prospects for the development of the national electric vehicle network, especially in services. (Government and Ministries 2022.)

Destia, a leading infrastructure services provider in Finland, and Electreon, a wireless technology provider based in Israel, will introduce wireless functionality for electric vehicles in Vantaa, Finland. Companies will be testing this solution to prepare Electreon's technology to work in Destia's power solution. The company signed a Memorandum of Understanding. First, the companies will try a wireless charging solution by integrating Electreon's wireless system into a commercial electric vehicle (EV). It will allow fleet operators to experience the benefits of using wireless charging. Both companies see massive potential for wireless charging and wireless power lines, which are avenues for powering electric vehicles, especially vehicles professionally. The implementation of power lines could also help reduce emissions from the transportation sector and facilitate the commercialization of electric cars. (Futuremobilityfinland 2022.)

The table below shows the Pestel analysis of Vinfast

Political	• Government has proposed implementing a ban on conventional fuel-powered cars by 2045 • Currently, the south of the country and around Helsinki have about 42.2% electric cars • The Finnish Government is looking to eliminate the nation's carbon footprint • The Finnish government tries its goal is to have about 225,000 electric cars registered by 2025, to 670,000 by 2045, and this number will reach 2 million by 2045. • Finland's current target is 250,000 plug-in hybrid and electric vehicles by the next decade. They propose to raise the electric and hybrid vehicle target to 700,000 cars by 2030. • Finland is responsible for building 71,000 electric car charging stations by 2020. • the capital of Helsinki has invested 4.8 million euros in the con-

	struction of charging stations for 3 years. • The number of public toll stations will triple when completed
Enviornment	• Electric cars emit 60-70% lower lifetime emissions compared to standard cars with internal combustion engines • The Finnish government will reduce emissions by about 3.2 million tons by 2030
Economic	• GDP grew by 3% in 2021, supported by public and private consumption. The IMF forecasts a projected growth of 2.9% in 2022, followed by 1.5% next year. • Finland's GDP per capita is $51,867 • Finland is the European country hardest hit by public finances because of its ageing population and shrinking workforce. • Unemployment stands at 7.8% in 2021 but is expected to continue falling to pre-pandemic levels, with crisis-affected sectors projected to catch up significantly in 2022, when the general rate will fluctuate around 6.8%.
Legal	• Buyers or long-term renters of a new electric car can receive a 2.000 euro car subsidy from the central Government. • The conversion allowance is 1.000 euros to convert a petrol or diesel car to gas and 200 euros to ethanol. • To encourage households and companies to switch from fossil fuels to alternative fuels and propulsion systems, reducing greenhouse gas emissions from transportation, the President of Finland has passed legislation to support purchase and conversion costs for low-emissions vehicles. • The law says, "Up to half of the vehicle capacity of cities in Finland must soon be covered by trams". Public sectors have to consider emissions when buying new cars, or they don't want to pay some fines.
Social	• Population of Finland has about 5.55 million people in 2021. Between 20 and 39 has about 1.38 million, and 40 to 59 years old 1.38 million, accounting for more than half of the population. • The group of people aged 60 and over is more than 1.6 million

	people • The metropolitan area of Helsinki has the largest population in the country, at 1,231,595. It regularly tops lists of the most liveable cities. • The second is Espoo, with a population of 270,416. • The southern city of Tampere is Finland's third-largest city, with 230,537 inhabitants
Technology	• Finland is a technologically advanced society • Finland has performed very well in mobile technology, advanced software, software security, and data analytics • The electrification of road transport is progressing rapidly. The electric vehicle charging network has also expanded significantly. • The Ministry of Transport has submitted a draft memorandum of understanding on developing an electric car network for comments.

Table 2. The Pestel analysis of Vinfast

4.1.2 Industry-level factors

The authors will focus on Porter's five forces in this chapter. It includes the threat of intense segment rivalry, the bargaining power of suppliers, the bargaining power of buyers, the threat of substitute products, and the threat of new entrants.

The threat of intense segment rivalry is high: Vinfast's competitors are electric vehicle start-ups, fossil fuel-powered vehicles and traditional car manufacturers switching to electric cars. Their competitive advantage is further enhanced by access to the largest consumer markets, well-established supply chains and government support. As of 2021, the number of electric passenger cars is about 22.9 thousand. The number of electric vehicles more than doubled in a year. About 6.5 thousand electric vehicles in traffic are from car manufacturer Tesla Motors. Volkswagen's second most popular car brand, followed by Nissan and Hyundai. (Statista 2022.)

Third-quarter sales in Finland show Germany's Volkswagen Group accounting for 41.9% of the country's BEV sales, followed by Tesla with 18.5% and Hyundai – Kia with 11.2%, Ford with 8.8% and Geely with 6.7%. (Cleantechnica 2021.)

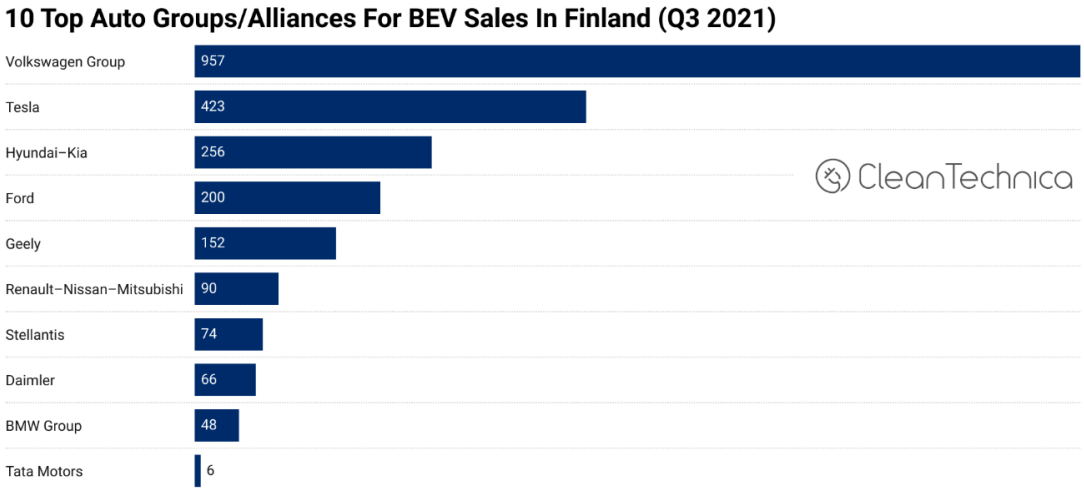

Figure 13. The top 10 auto group for BEV sales in Finland (Q3 2021)

The figure above illustrates the top 10 auto group for BEV sales in Finland

The Volkswagen Group has 3 companies in the top 10. Volkswagen brand holds the No. 1 position (27.1%), SKODA ranks 3rd (8.9%), and Audi ranks 7th (4.1%). Tesla is in second place with the same BEV market share as above (18.5%), Ford has the same 8.8% and then Hyundai with 8% market share. (Cleantechnica 2021.)

Volkswagen ID.4 has topped the list of vehicles purchased. It accounts for 18.3% of the market. It was followed by Tesla Model Y (9.6%), Tesla Model 3 (8.9%), SKODA Enyaq (8.9%), Ford Mustang Mach-E (8.8%), and Volkswagen ID.3 (7.8%). (Cleantechnica 2021.)

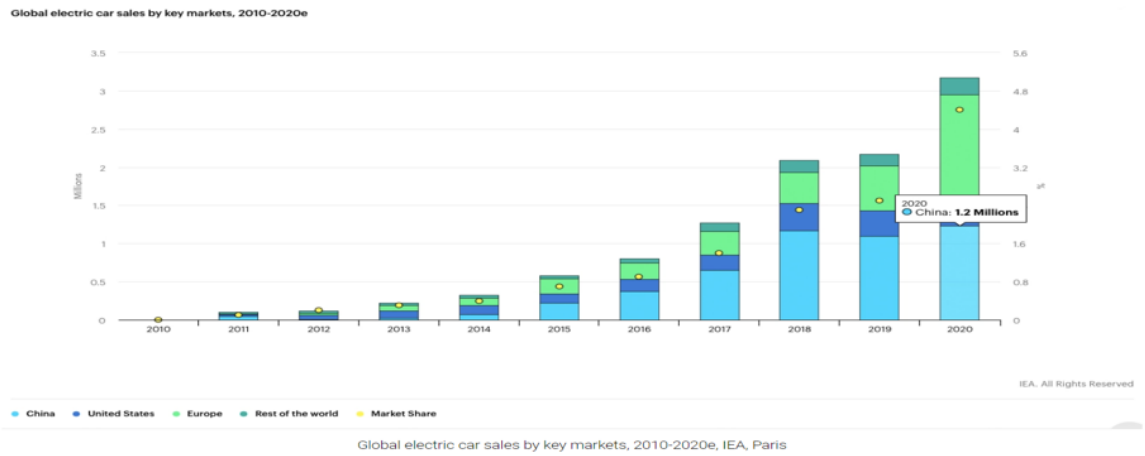

Figure 14. Global electric car sale by key market, 2010-2020e (Schroders 2021.)

The figure above illustrates the global electric car sale by key market from 2010 to 2020e

American and European companies dominate traditional automakers and companies converting to electric vehicles. Volkswagen was the leader of the five companies during this period. In addition, Ford Motors launched an electric Mustang, while GM introduced an all-electric Hummer in 2035. Volvo will be all-electric by 2030, while BMW, Volkswagen and Mercedes-Benz will account for 50% of sales. electric vehicle sales number 2035 (Schroders 2021.)

The bargaining power of suppliers is medium: Vinfast has no suppliers in Finland. Recently, Vinfast suppliers are primarily in Vietnam and China, and Germany and America in the future.

Vinfast cars get spare parts from many reputable suppliers around the world, most of which are still in the country. In 2021, Vingroup will establish VinES Energy Solutions Joint Stock Company to develop and manufacture battery solutions for electric vehicles. As part of the autonomous development strategy in the field of battery technology, on March 3, 2021, VinES signed a memorandum of strategic cooperation with Taiwan's ProLogium Technology Company. VinES and ProLogium will establish a joint venture to produce solid-state batteries for electric cars in Vietnam. The joint venture will approach and use solid-state battery technology to create solid-state batteries in Vietnam. (Annual report 2021, 48.)

Vinfast plans to build a factory in the US after opening showrooms, service centres, and research and development centres. Vinfast set up a showroom and service centre system in California during a research office with 50 members in San Francisco. The company plans to sell cars in the US by 2022. (Smith K, 2021.)

The bargaining power of buyers is medium: There are no companies in Finland that directly manufacture electric vehicles. All-electric vehicles are imported from abroad. Germany, Sweden, and the US are the three countries with Finland's most popular electric cars.

On the one hand, with the support of the government. On the other hand, the conflict between Russia and Ukraine has caused fuel prices to rise, increasing the demand for electric vehicles.

Due to continued shortages and backlogs, some used electric vehicle models are now being sold at higher prices than new models. As the backlog of new trams has built up, it will take some time to hit Finnish roads as registration queues remain congested. A potential electric car owner needs to be prepared to wait at least six months due to slow delivery times and the slow process of applying for a brand-new car. (Yle 2020.)

The threat of substitute products high: Many products can replace Vinfast's electric cars in Finland. Vinfast targets middle- and upper-class customers as the primary customer segment. Gasoline or diesel cars are typically cheaper and have a more comprehensive range of vehicles to a lesser extent. More broadly, public transport could also replace the electric vehicle industry. Although, it will not cater to the same target market segment and is not a valid substitute. Many luxury cars serve the same target segment.

Furthermore, customers do not face any high switching costs when switching to alternative products for their transportation needs. In the long run, although electric vehicles are more cost-effective, charging infrastructure still needs to be developed in many countries so that customers can switch to alternative products. Thus, the threat of substitute products is a powerful driver for the electric vehicle industry.

The threat of new entrants is low: For any potential new entrant in the market, the auto industry poses significant barriers to entry. Several factors lead to this. Companies like Tesla, BMW... Moreover, brand image plays a positive role in the purchasing decision of customers. Finns tend to have a challenging time accepting new brands. It is also a difficulty for Vinfast.

Besides, the capital requirements to establish and maintain an auto company are enormous. It includes setting up infrastructure, supply chains, and marketing channels. In addition, it is not easy for customers to switch to another company's services for significant investments such as automobiles. While there is no targeted retaliation against new entrants from incumbents, incumbents can always offer better prices due to large-scale production.

The table below shows the 5 forces analysis of Vinfast

	Key finding	Rating:low-medium-high
The threat of intense segment rivalry	Vinfast's competitors are electric vehicle start-ups, fossil fuel-powered vehicles and traditional car manufacturers switching to electric cars.	High
The bargaining power of buyers	There are no companies in Finland that directly manufacture electric vehicles.	Medium

	All-electric vehicles are imported from abroad	
The threat of substitute products	Well-known brands are present in Finland with various customer segment	High
The threat of new entrants	Other new brands to enter	Low

Table 3. 5 Forces analysis of Vinfast

4.2 Concept Analysis

This sub-chapter focus on the SWOT analysis of Vinfast concept. The analysis identifies the research's internal and external factors based on various electronic sources. The SWOT analysis helps the authors to maximize strengths, eliminate weaknesses, take advantage of opportunities, and address threats when entering new potential markets. Therefore, the SWOT analysis allows the authors to determine the advantages and disadvantages for Vinfast when entering the Finnish market. Furthermore, mention the company's opportunities and risks in the new market.

Strength

VinFast has many car models with many different segments, meeting the needs of Finnish customers. Besides, the price of VinFast's cars is low compared to competitors' cars, such as Tesla or Volkswagen.

Vinfast has stable and quality human resources. The leaders all have many years of experience in large corporations. The current Vice President and General Director of VIC is Ms. Le Thi Thu Thuy. She worked at Lehman Brothers before joining VIC. Previously, this position was held by Mr. James B.DeLuca. Mr. Vo Quang Hue is the deputy general director of the mobile car industry overseeing the Vinfast project. He was the general manager of Robert Bosch Viet Nam. (Vinfastauto 2021.)

Vingroup Financial Group is also a solid financial group, so Vinfast has sound financial backing. It also partially inherits that positive brand image.

The factory has advanced technology with colossal investment capital of up to 3.5 billion USD. (Vinfastauto 2018.)

VinFast has cooperated with Gotion High-Tech (China) to own the most popular LFP battery soon globally. The factory has advanced technology.

VinFast has cooperated with Gotion High-Tech (China) to own the most popular LFP battery soon globally. (Vinfastauto 2021.)

VinFast established an electric vehicle factory in the US. The 800-hectare factory will focus on manufacturing and assembling electric cars, buses and EV batteries and supporting industries for suppliers. Vinfast also plans to invest up to A$2 billion in the project's first phase. (Techinasia 2022.)

Weakness

VinFast does not have much of a reputation and advantage in the Finnish market. There are currently four models offered for sale in Finland, including three petrol models and one electric car model. It is divided into three different sections. The low segment is Vinfast Fadil 2022, priced at 22,084 euros. The mid-segment is Vinfast Vf8 2022 for €48,585, Vinfast Lux Sa 2.0 2022 for €82,950 and Vinfast President 2022 for €194,340 in the high segment. (Okwheeler 2021.) However, none of VinFast's cars has been officially present in Finland.

Although the dealer network is expanding, production is of clear origin and affordable prices. The number of dealers and the popularity of repair parts manufacturers are not much because the company has just joined the market. Besides, VinFast does not have a branch in Finland, so its warranty, maintenance and service costs will be high.

The Vinfast brand is also a weakness compared to its predecessors, especially Tesla, in the international arena.

The ability to market and PR for products is not an advantage of Vinfast. Car buyers will often choose a model that suits a personal style. The marketability of the goods also determines the appropriate unique design. VinFast's success comes from its out-of-the-box thinking, product quality, and service superior to domestic rather than international suppliers, namely Finland.

Vingroup posted a pre-tax loss of about VND23.9 trillion ($1.05 billion) in manufacturing last year due to sluggish domestic sales of gasoline-powered cars. (Asia.nikkei 2022.)

Opportunities

Governments in general and the government of Finland in general prioritize reducing carbon charges by increasing the number of electric vehicles. It is an excellent opportunity for Vinfast to enter this market.

Most Finns care about the environment. In addition, their income ranks among the top in the world. They also want to keep up with modern technologies. Electric cars are the option they are aiming for.

Vinfast has taken the initial steps by cooperating with strategic partners such as Italian design firms or the BMW group. The company creates products suitable for most customers by inheriting and improving technology from partners. Leveraging technology from partners to self-produce and create ideal products will be the strength and determining factor of Vinfast's existence.

Threats

It is not easy for Finnish people to accept a new brand, especially since they do not have much experience in electric car production like Vinfast.

The automobile manufacturing industry is particularly complex and requires high technology. Besides, Vinfast's brand is still young and has not built a reputation in the Finnish market. Brand barriers for new car models and brand value are essential criteria affecting customers' decisions because they will hesitate to buy Vinfast products or other brands that are already in stock. Decades asserted in the market. Vinfast will have to confront experienced names in Finland such as Tesla, Volkswagen, or Hyundai with the same price segment.

The domestic supporting industry is still underdeveloped, producing only a few components and spare parts such as frames, bodies, cabins, doors, tires, radiators, heater wires, and brakes. In addition, the investment in the production of auto parts and components remains minimal. Products made are less diversified and less productive. The localization rate in the industry is still low. Finding an outlet for products to compete with reputable brands is not easy, so the cost will be huge, leading to higher prices. Therefore, Vinfast will be under much pressure on its products.

The table below shows the SWOT analysis of Vinfast

Strength	**Weakness**
• Foundation of internationalization • Sustainability of products • Solid finance	• New brand in target market (Finnish) • Lack of local experience, brand

• Quality of human resource	awareness • Advertising brand is not high
Opportunities • Potential market • Finland - Caring about environment people/society and sustainability • Attractive business environment	**Threats** • Local and global competitors • Culture barriers • Other new competitors to Finland

Table 4. The SWOT analysis of Vinfast

4.3 Data collection

4.3.1 Quantitative data collection

In this thesis, Quantitative data is a collection of information from various surv eys about consumption of electric car in Finland. These statistics are identified and analyzed numerically. It allows the authors to have overview sight on electric car consumption in Finland and then have situable strageties to enter.

Quatitative data collection part of the thesis is based on desktop study and presents key findings based on four different surveys conducted in Finland. These surveys have been conducted by Danske Bank, Pohjola Insurance, Finland's Central Organisation for Motor Trades and Repairs, electricity distribution company Caruna.The survey results below provide information on Finnish people's needs for electric vehicles, consumer behaviour, and their factors when buying an electric vehicle.

According to a survey conducted by Danske Bank in 2019, There are more Finns interested in electric, natural gas and hybrid vehicles. The poll found that 18% of respondents said they would like to buy a hybrid next, compared with 12% who said they would select a diesel vehicle. 5% of people would choose an electric car, and 3% would prefer a car that runs on natural gas. Even 31% of respondents are willing to buy an alternative fuel car as their next car. (YLE 2019.)

Three main factors limit their interest in cars with lower-emissions alternative propulsion systems. That is price, driving range, and availability of charging or refuelling points. 54% of respondents said they doubt their next car will be electric, natural gas or hybrid. The number of people thinking about buying a new vehicle has remained steady at around a

fifth. These people are men, high earners, students, and parents with young children. (YLE 2019.)

In addition, 45% of those planning to buy a car said they had abandoned the purchase decision because of the political debate over fuel handling. (YLE 2019).

Finland's Central Organisation for Motor Trades and Repairs surveyed demand for electric vehicles and hybrids in 2019 with 4,400 people. It showed that almost half of people in Finland are interested in buying a hybrid car, and more than one-third said they would also consider purchasing an all-electric vehicle. (YLE 2019.)

The survey of more than 4,000 Finnish residents also showed that drivers care about the environment. However, the most critical issue concerning vehicle ownership is reducing driving distances, driving times, and cost. (YLE 2019.)

More than 50% of survey respondents said that they thought it was a clever idea for Finland to introduce a vehicle tax based on mileage. However, one in three people believes it is a bad idea.

Gasoline vehicles are still the most popular vehicle on Finnish roads. Most owners of diesel cars say they choose them for their more extended range, as diesel is a cheaper fuel in kilometres per litre than gasoline. (YLE 2019.)

Respondents in Finland's larger cities and households with two cars tended to be more excited about driving an electric vehicle. People who say they are interested in electric cars are concerned about climate change and air quality. (YLE 2019.)

Those who drove less than 15,000 km per year said they did not want to drive a gasoline-powered car. Two-thirds of those who drive more than 20,000 kilometres a year say diesel is a suitable alternative. (YLE 2019.)

About half of survey respondents said they would like to see Finland introduce a kilometre tax on vehicles. In contrast, a third said they would not allow anyone to monitor their driving habits. (YLE 2019.)

New car safety technologies, such as alcohol lock and driver assistance technology, also seem to attract the attention of Finnish people. However, drivers are not interested in self-driving vehicles. Drivers are also not very keen on car sharing. According to the survey, most people want to keep the car they drive in a household. (YLE 2019.)

However, Finland's Central Organisation for Motor Trades and Repairs says there seem to be two obstacles in attracting more people behind the wheel of electric vehicles. The first is that their cost is higher than cars powered by internal combustion engines. The

second is that finding car charging stations is uncertain because drivers tend to charge their vehicles at home. (YLE 2019)

According to a survey conducted by Pohjola Insurance in 2021 from 2,011 Finnish adults, about 20% of Finns dream about a hybrid or electric car. However, only 5% intend to buy one this year. Correspondingly, half of these dream of an internal combustion engine car and 7% of Finns plan to buy one this year. The results show interest in hybrid and electric vehicles, but many people are still considering this issue before deciding to buy. (Helsinkitimes 2021.)

Finnish Transport and Communications Agency Traficom show the growing popularity of electric cars. There were almost 48,000 rechargeable hybrid and fully electric vehicles in Finland at the end of September 2020, and their number has nearly doubled compared to the corresponding period in 2019. (Helsinkitimes 2021.)

Pohjola Insurance's portfolio for all-electric cars has grown sixfold in just two years. The number of covered electric vehicles has increased in absolute terms and relative to the entire coverage category. (Helsinkitimes 2021.)

A citizen survey commissioned by electricity distribution company Caruna reveals a clear trend among consumers: 55% of Finns will choose a hybrid or all-electric vehicle as their next vehicle. People aged 25-44 will choose a hybrid or an all-electric car over other age group. People living in Southern Finland also tend to choose electric cars over gas cars in other regions. (Caruna 2022.)

There are many aspects to be considered. Buying decisions are influenced by home charging at 49%, the life cycle cost of a rechargeable vehicle at 46%, and the price of electricity versus gas at 46%. 51% of people living in Eastern Finland consider the life cycle cost of a car significant compared with Western Finland, where 43% rate the life cycle cost as particularly important. In addition, about 75% of Finns consider emissions a necessary feature. All of the above factors play an essential role in attracting the purchase of a hybrid or electric vehicle. (Caruna 2022.)

By region, 69% of Eastern and Northern Finland respondents consider low emissions significant, compared with 76% in Southern Finland and 75% in Western Finland. (Caruna 2022.)

4.3.2 Qualitative data collection

The authors collected qualitative data by interviewing 15 people belong to the age group from 27 to 40 years . Qualitative part included five interview questions for each person.

The survey results will discuss the demand of electric vehicles in Finland. Besides, it also provides information on the factors that determine the choice of electric vehicle brand and the acceptance of a new electric vehicle brand.

Since the interview included five questions for 15 people, and some of the questions were open-ended, the answers were quite long. Therefore, the authors documented the interviews and wrote analysis based on the interview documentation. Here are the interview results

The table below shows the names, genders, and ages of the interviewees.

Name	Genders	Ages
Sara	Woman	32
Maija	Woman	37
Pekka	Woman	27
Peter	Man	42
Anna	Woman	34
Mika	Woman	35
Jukka	Man	41
Jenny	Woman	30
Esa	Woman	28
Tomi	Man	44
Pauli	Man	27
Sam	Man	35
Carola	Man	32
Hector	Man	29
Andy	Man	43

Table 5. The names, genders, and ages of the interviewees

Question 1: Are you using an electric car or interested in electric vehicles?

Two of the interviewees are using electric car. At the same time, 6 men and 4 women are interested in electric vehicles in the future. 3 people of them are not yet interested in an electric car.Since they are not interested in electric cars, we do not continue to interview them.

Question 2: Why are you interested in electric vehicles?

Everyone replies that they care about the environment. Arguably EV cars are zero-emission and polluting. It gives a sense of responsibility to planet earth. Trams are suitable for commuting in the city. There are 8 out of 12 people interested in electric cars be-

cause the cost of electricity is cheaper than gasoline. It is minimal maintenance cost, and no oil change every three months. There are virtually no 'moving parts' due to the absence of an engine, apart from regular wear and tear maintenance. 10 out of 12 say they like technology. They also do not need to care about the gearshift when driving.

Question 3: What factors help you choose an electric vehicle brand?

The interviewers gave many factors to help them choose an electric vehicle brand. However, there are four main factors that they mention:

Most people assume that they will choose a reputable brand in the electric vehicle field that has a long-standing brand name.

They are interested in the warranties of car brands, especially the time and cost of the warranty.

Everyone cares about the price of electric cars, and they prioritize vehicles that match their capabilities.

The technology and battery capacity of electric vehicles.

Besides, they are also interested in the electric charging network and fast charging capabilities of the vehicle.

Question 4: Have you heard about Vietnam's Vinfast electric car brand?

With this question, most people have not heard about Vietnam's Vinfast electric car brand. Specifically, only 3 people have heard of it but have not been impressed and have never seen it.

Question 5: Do you think a new brand of electric vehicles such as Vinfast can enter the Finnish market?

Peter, Jenny, and Mika said that it is not easy for Vinfast to enter Finland. Since their brand is a new brand, there is not much feedback on the quality of the car. The rest think that Vinfast still has a chance to enter the Finnish electric car market because electric cars are in extremely high demand, especially after the conflict between Russia and Ukraine caused the price of vehicles to increase. If Vinfast has the right strategy and chooses the right segment, the brand will also be welcome in Finland.

5 CONCLUSION

The aim of this thesis is to study Finnish market and to see if it would be a potential market for Vinfast to enter. First three sub-questions will be answered and after that the the authors will present the answer to the main research question “Is Finland a potential market area for Vinfast electric cars? Besides, Validity and Reliability are also discussed. Last but not least, the authors give some suggestions about strategy development for Vinfast in the future.

5.1 Answers for Research Questions

The main research question: Is Finland a potential market area for Vinfast electric cars?

Recently , Finnish people's demand for electric vehicles has increased, especially after the war between Russia and Ukraine pushed gas prices to a peak. The Finnish government is trying to accelerate the process of reducing carbon emissions. Therefore, they have developed many preferential policies for people to access and own an electric vehicle. Finnish people are also concerned about the environment. Taking advantage of it, Vinfast brings its products to enter the market to develop its reputation in the international market. As customers are loyal for well-known brands, Vinfast as a new brand entering to the Finnish market have to be ready to study market needs carefully and to put effort on increasing brand awareness. Therefore, Finland is a potential market for Vinfast electric cars.

Sub-question

Who are the existing competitors?

Many major electric vehicle brands exist in the Finnish market, such as Tesla, BMW, Volkswagen, Ford, Hyundai – Kia, etc. These brands are favoured and trusted by customers. They also have many advantages that VinFast does not have. It can be mentioned as the brand's popularity, customer service, and market coverage. These companies are direct competitors as it has achieved high sales in the Finnish market. How is the customer’s perception about VinFat in the Finnish market

How is the consumers´ perception of the VinFast electric car brand in Finland?

VinFast is a new electric vehicle brand from Vietnam that has never been present in the Finnish market. It was just released during events in Vietnam and the US. So most Finns do not know about this brand. A few Finns have heard of VinFast, but are not impressed.

Who would be the potential target customers?

Many Finland people are choosing electric vehicles as their aim. Most people with high income in Finland can be customers of VinFast. However, the group ages between 27 and

45 living in southern Finland, especially the capital, the Helsinki area, has a higher demand for electric vehicles.

5.2 Validity and Reliability

This thesis focuses on the Finnish market. Validity and Reliability are high. The Secondary data is collected through official and reliable sources, such as printed books, reputable reports, reports, and Vinfast's website. The authors obtained primary data by interviewing a selected group of subjects and then analyzed it thoroughly. However, geographical restrictions made the authors interview only in the Helsinki area . The interview was conducted with 15 participants with questions related to the demand for electric vehicles, Which is a bit limited about spreading the survey and Vinfast’s brand awareness.

5.3 Suggestions for Further Research

Finland is a potential market for electric vehicles. However, customers here are not easy to accept new brands. So, to enter this market, VinFast needs a suitable and long-term penetration strategy. The company should pay special attention to the issue of product quality and customer satisfaction. This study was researched mainly in Helsinki. In order to gain a deeper understanding or have a broader perspective, VinFast or someone interested in this topic should research on a larger scale.

6 SUMMARY

This thesis aims to study the possibilities of expanding the international market of Vinfast electric cars to Finland. The main research question is "Is Finland a potential market area for VinFast electric cars?". A long with three sub-question answers to the primary research. The sub-questions are How is the consumers' perception of the VinFast electric car brand in Finland? "What is the existing competition in the market area?" and "Who are the potential target customers?". Empirical research and data analysis play an essential role in this thesis. It provides vital statistics and analysis to have the best answer to questions.

First, a company overview is introduced. The Framework is then divided into three parts, macro level, sectoral and conceptual analysis. Then, it is the research and data analysis section; this chapter clearly defines the concepts. Situation analysis includes analytical tools such as Pestel and five competitive factors. It allows us to analyze macro-environmental and industry-specific factors. We then continue to collect data and analyze it. These sub-chapters consist of an interview between authors and consumers with the response to each question.

Finally, we have complete statistics for the main question's results. It is based on Pestel, Swot analysis from inside and outside perspectives. All questions have been answered. Besides, we also need to do further research in the future to confirm that Finland will be a potential market for Vinfast electric cars to penetrate the market.

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Appendices

Appendix1: Interview

Question 1: Are you using an electric car or interested in electric vehicles?

Question 2: Why are you interested in electric vehicles?

Question 3: What factors help you choose an electric vehicle brand?

Question 4: Have you heard about Vietnam's Vinfast electric car brand?

Question 5: Do you think a new brand of electric vehicles such as Vinfast can enter the Finnish market?