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The Nordics' underdeveloped e-commerce food sector

How can e-commerce strategies be enhanced?

Metropolia University of Applied Sciences

Bachelor of Business Administration

International Business and Logistics

Bachelor's Thesis

20 April 2023

Abstract

Author(s): Chaeun Lee
Title: The Nordics' underdeveloped e-commerce food sector:
How can e-commerce strategies be enhanced?
Number of Pages: 49 pages
Date: 20 April 2023

Degree: Bachelor of Business Administration
Degree Programme: International Business and Logistics
Specialisation option: Marketing
Instructor(s): John Greene, Business Lecturer

The purpose of this study was to explore ways to enhance the Nordic region's underdeveloped e-commerce food sector strategies to gain a sustainable competitive advantage. The study conducted a literature review covering topics such as e-commerce, business models, food e-tailing strategies, consumer adoption models, and consumer behavior and food consumption in the Nordic region. The study primarily focused on identifying strategies that could enhance the Nordic food market.

This study applied a qualitative research method to provide a comprehensive view of the question. The study employed a case analysis through exploratory research. Secondary data was gathered from the case company's annual reports, statistics, news media, and press releases.

The study's key findings indicate that case companies mainly focus on the consumer-centric approach and cost leadership strategies. The study identified strategies that can be implemented in the Nordic region to succeed with the direct-to-consumer model and reduce steps and intermediaries in between, including automation, data analytics, artificial intelligence, cashier less stores, and scan and go technology. These approaches can help to reduce costs, increase profitability, and gain sustainable competitive advantage. By implementing the strategies discussed before, retail can move closer to the consumer directly and tackle the challenges in the online grocery retail sector.

Keywords: e-commerce, strategies, online grocery, automation

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Glossary

B2B	Business-to-business. A form of transaction between businesses
B2C	Business-to-consumer. A commerce model between a business and an individual consumer
C2C	Customer-to-customer. A business model that enables customers to trade with each other
D2C	Direct-to-consumer. A business model that sells directly to the consumer
E-commerce	Electronic commerce. Trade activities that enhance the process of buying and selling as well as the delivery of services
O2O	Online-to-offline. A business model that seamlessly integrate online and offline experiences
QR	Quick response. A machine-scannable image
ROI	Return on investment. Calculated by dividing the profit earned on an investment by the cost of that investment

1 Introduction

The objective of this paper was to find a successful food e-commerce strategy that can be implemented in the Nordic area. E-commerce has revolutionized the way people shop. Many customers have changed their shopping habits, causing businesses to shift from traditional to digital modes of operation.

The food retailing market in the Nordic countries has been mostly carried out in the traditional bricks and mortar store format. The main retail chains in the market appeared to be significantly behind in their implementation of e-commerce strategies compared to other markets. Many changes in food purchase habits occurred during the pandemic 2020, and meal delivery for restaurants such as Wolt and Foodora generated significant revenue and experienced tremendous growth during the pandemic (Bloomberg, 2021). Food retailing groups like S Group and Kesko offered food delivery discounts to customers. Some small, local food stores also provided free delivery services if customers made a purchase over a specific amount. These businesses used these offers as a way to adapt to new circumstances and stay afloat.

Because of the new approaches, some customers who had never considered online shopping before, realized the convenience of the option. Even after the pandemic is over, if customers find this new method of purchasing food useful, it is possible that they may continue to employ digital methods of purchasing food. The goal of this paper is to look into ways to improve the strategy so that customers continue to buy from the company digitally.

There are several challenges to consider. Online grocery shopping offers a convenient way for consumers to receive their orders directly at their doorstep. However, the delivery fee charged by delivery companies tends to be a high percentage of the overall price of the items that retailers and restaurants find it difficult to maintain profit margins (Yle, 2021). To avoid excessive third-party commissions, businesses should seek alternative methods to boost revenue.

The Nordics' high retail density, geographical limitations, shipping costs, and local shopping patterns may pose obstacles to the implementation of enhanced online grocery retail services for customers (Minkeviciute, 2019). Nevertheless, this paper will investigate if there is potential for improvement in this area.

2 Literature Review

To review possible strategies for the development of online food e-tailing, it is first important to discuss the literature around this topic. This part will be split into subsections to define e-commerce, explore business models, and examine e-commerce strategies related to food. The study will then analyze consumer adoption and behavior in the Nordic region, as well as food consumption habits.

2.1 E-commerce

Customers' buying behaviour and lifestyles have evolved drastically in recent decades, forcing businesses to digitally transform their traditional operations. E-commerce is defined by several aspects that have evolved and adapted to the modern world. Electronic commerce (E-commerce) has been an advantage for doing business since the year 2000, allowing for easier digital transactions. Therefore, it is vital to explore the history and redefinition of e-commerce from its emergence to the present day.

In a broad definition, e-commerce refers to any type of commercial action carried out over the internet (Wigand, 1997). When businesses initially began to use e-commerce, the expectation was that it would improve the efficiency of their business processes. It served as a market for exchanging supply and demand in our economic system. Business practices between businesses and customers were transferred throughout the trade activities. According to Vulkan, an Oxford Economics professor, "e-commerce" may be defined as "the practice of commercial operations electronically utilizing digital media" (Vulkan, 2003). Electronic commerce deals with the facilitation of transactions and the sale of

goods and services through the internet or any other telecommunications network (Jelassi and Enders, 2005). According to the 2018 edition of the E-Commerce textbook, it can be used to describe and refer to a range of different perspectives on e-commerce. There are four main perspectives: a communications perspective, a business process perspective, a service perspective, and an online perspective (Turban et al., 2018).

From a communications standpoint, e-commerce is perceived as the delivery of information, products or services, or payments by electronic means. Examples of this will be over computer networks, telephones, and other electronic channels. When it comes to business processes, e-commerce refers to the use of technology to automate transactions and workflows. From a service standpoint, it allows us to lower service costs while increasing the speed and quality with which we offer services. From an online perspective, e-commerce allows for the purchase and sale of items, services, and information through the internet and online (Turban et al., 2018).

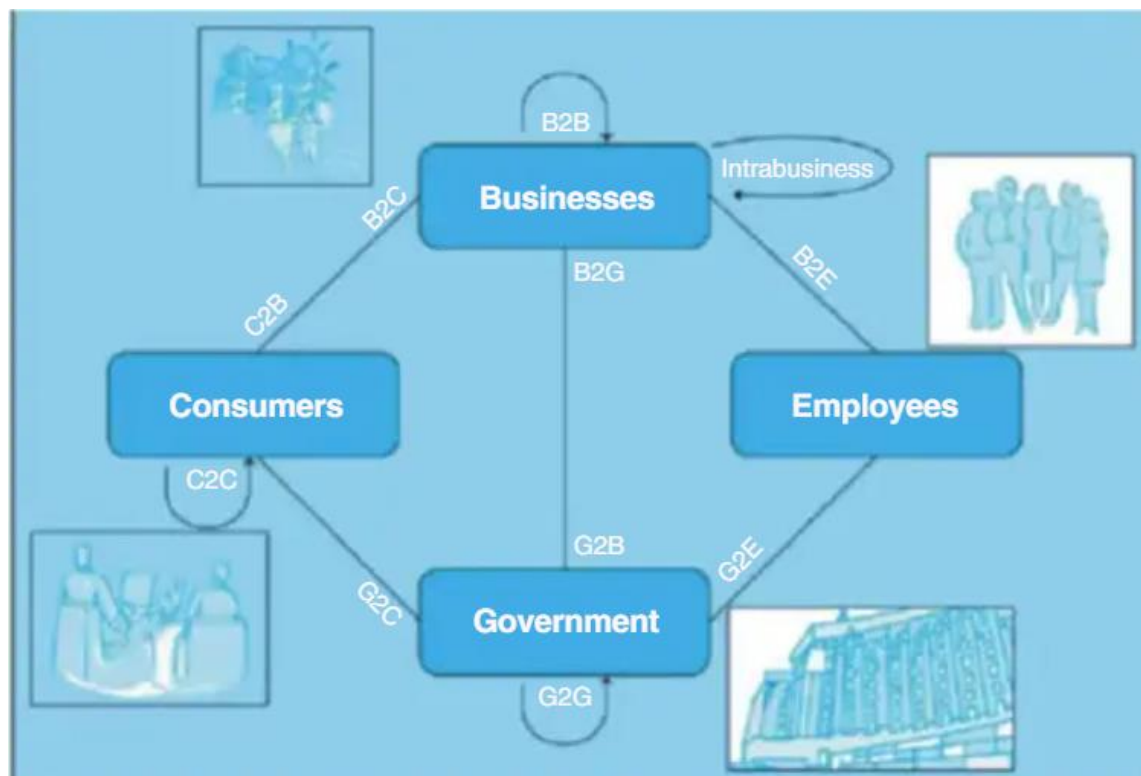


Figure 1. Categories of transactions in e-commerce (Turban et al., 2018).

For the purposes of this study, e-commerce will be defined as trade activities that enhance the process of buying and selling as well as the delivery of services. E-commerce is the integration of an organization's operations with external activities and internal business processes via the use of information and communication technologies. Manufacturing, accounting, sales and marketing, as well as inbound and outbound logistics, are just a few examples. This enables us to remove communication barriers while ensuring the commitment of both the buyer and the seller. Over time, various business models have been developed to better understand the process and how it operates. In the following section, this study will examine and discuss the models.

2.2 Business models

The components of successful e-commerce are constantly changing as new technologies are pressed into service. Attracting enough customers to purchase the organization's products or services is a crucial aspect for the businesses. A business model is a plan or framework that outlines how a business creates, delivers, and captures value. It defines how the company generates revenue, what products or services it offers, how it delivers them to customers, and how it differentiates itself from competitors. Business models play a significant role in defining how e-commerce companies operate and in understanding their value creation mechanisms. To comprehend the concept of business models, it is necessary to explain the basic building blocks of a business model before diving into strategies. Several business theories provide definitions of business models. Rappa describes it as the process of utilizing a revenue model, while Osterwalder and Pigneur define it through nine basic building blocks that show how a company intends to make money.

The business model of a company describes the process of utilizing its revenue model. There are many distinct types of e-commerce business models. Rappa

provides examples and information on typical business models that may be found throughout this literature (Rappa, 2010).

In the view of business theorists Osterwalder and Pigneur, a business model can be depicted by nine essential building blocks that outline the logical framework of how a company plans to generate revenue. These building blocks correspond to four key areas of a business, namely customers, offer, infrastructure, and financial viability. The business model serves as a blueprint for implementing a strategic plan through the integration of organizational structures, processes, and systems.

One effective tool for developing a holistic view of a business model is the business model canvas, which allows businesses to analyze and innovate new or existing business models. It is a flexible and effective tool for assessing businesses, and it can help remind teams to think holistically and prevent them from getting stuck on details.

The business model canvas has nine building blocks. The first block is customer segments, which defines the different groups of people or organizations that a company aims to reach and serve. The value proposition block describes the bundle of products and services that create value for a specific customer segment. Channels describe how a company communicates with and reaches its customer segments to deliver a value proposition. Customer relationship describes the type of relationships a company establishes with customer segments. Revenue streams represent the cash a company generates from each customer segment. Key resources are the most critical assets required to make a business model work. Key activities are the main activities that a company must do to make its business model work. Key partnerships describe the network of suppliers and partners that make the business work. Lastly, cost structure describes all the costs incurred to operate a business model (Osterwalder et al., 2010).

The business model canvas is an effective tool for understanding, analyzing, and innovating new or existing business models, and its nine building blocks provide a comprehensive framework for understanding the logic of how a company intends to make money.

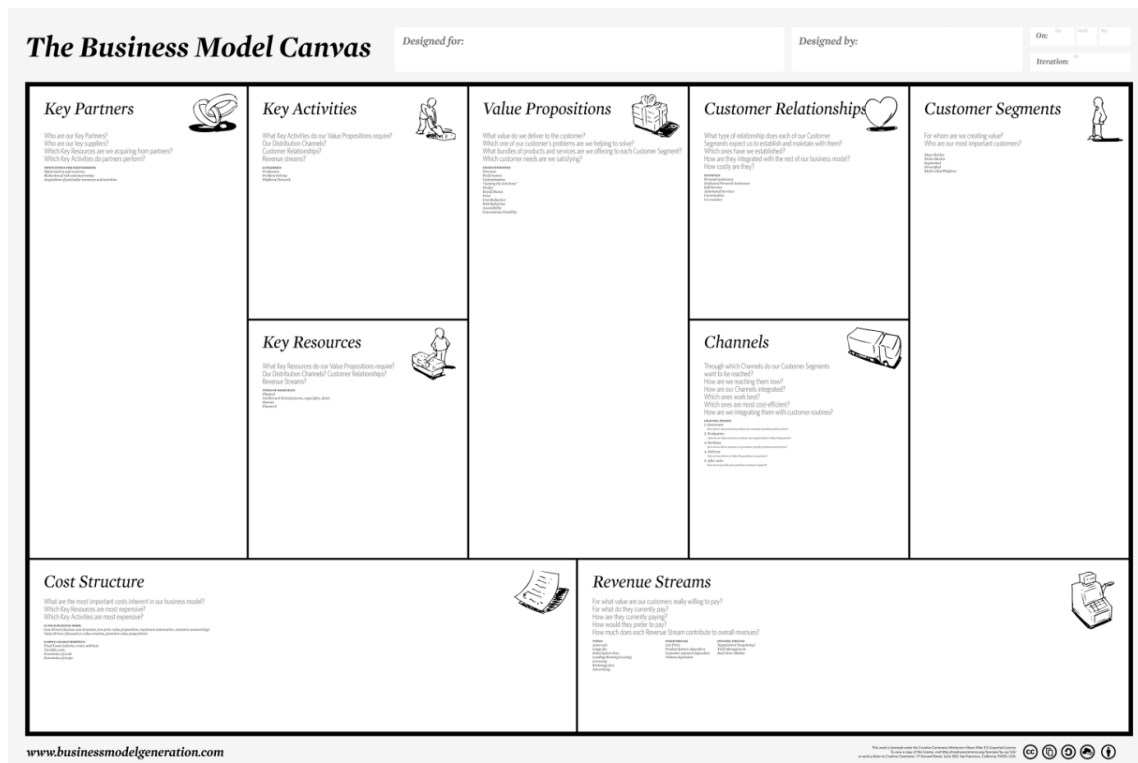


Figure 2. Business Model Canvas (Osterwalder and Pigneur, 2010)

E-commerce has various business models, with business-to-business (B2B) and business-to-consumer (B2C) being the major ones. B2B involves selling products or services to other businesses, which is the most extensive form of e-commerce. On the other hand, B2C involves businesses selling to individual consumers, and is the most widely discussed type of e-commerce. One of the B2C models is online retailing. Additionally, consumer-to-consumer (C2C) e-commerce provides a platform for consumers to sell to each other, with the help of an online platform provider, such as Etsy or eBay. Companies such as Airbnb and Uber provide on-demand services that operate on a C2C model. Direct-to-consumer (D2C) business model refers to companies that deliver their products

straight to consumers, bypassing third parties. This model has been challenging traditional retailers by offering cost savings and improvements in quality and customer services (Laudon and Traver, 2022).

The revenue model in e-commerce refers to how a company intends to generate profits. There are several primary revenue models for an online business to consider, such as sales, transaction fees, subscription fees, advertising fees, affiliate fees, and licensing fees (Turban et al., 2018).

Online direct marketing is the most obvious method of selling products or services over the Internet. Direct sales come from manufacturers directly to customers, bypassing middlemen such as physical stores or retailers. This improves distribution efficiency. One such example is Walmart Online. This model is particularly beneficial for digital products and services that may be delivered electronically. This concept is used in B2C and is known as e-tailing.

Group buying is a business-to-business (B2B) and business-to-consumer (B2C) approach. It is based on the notion of a quantity discount. Group buying is a popular approach where individuals collaborate for large-quantity benefits (Turban et al., 2018).

Rappa categorizes e-commerce business models into eight groups. Brokerage refers to market makers who charge a fee for their services. Websites that give content and charge advertisers for relevant adverts are known as advertising. Infomediary gives information and infrastructure to buyers and sellers, as well as charges for their services. Merchants and retailers such as Walmart and Amazon buy things and sell them for a profit. The direct model sells without the use of middlemen. Each category contains a wide range of varieties (Rappa, 2010).

There are several different business models that companies can use to generate revenue, including the subscription-based model, drop shipping, wholesale, aggregator, meal kit delivery, franchise, and affiliate marketing

models. In the subscription-based model, customers pay a regular fee for recurring deliveries of food products, while in the drop shipping model, a third-party supplier handles storage, packaging, and delivery of products on behalf of the retailer. The wholesale model sells food products in bulk to other businesses rather than individual consumers. The aggregator model acts as a middleman between customers and sellers, providing a platform for customers to purchase products from multiple sellers, and retailers generate revenue through commission on sales and delivery fees (Mourya and Shalu, 2014).

Understanding revenue-generating business models is crucial for developing better e-commerce strategies. E-commerce businesses often use multiple models, it is important to understand how they generate revenue for stronger strategies.

2.3 E-commerce strategy in relation to food retailing

With the growing trend of online shopping, businesses in the food industry have been forced to adapt and develop effective e-commerce strategies to remain competitive. As mentioned earlier, the business model acts as a framework for implementing a strategic plan (Osterwalder et al., 2010). Meanwhile, a strategy entails the incorporation of particular tactics or actions aimed at accomplishing specific objectives within that model.

Kotler defines strategy as a game plan for achieving the business unit's objectives, which consists of a marketing strategy, a compatible technology strategy, and a sourcing strategy. According to Porter, a strategy is a competitive position where a business deliberately selects a different set of activities to offer a unique mix of values. Michael Porter has presented three generic strategies that provide a basis for strategic planning, namely cost leadership, differentiation, and focus.

Cost leadership involves businesses working to achieve the lowest production and distribution costs, allowing them to underprice competitors and win market

share. Differentiation focuses on achieving superior performance in an important customer benefit area valued by the market, while focus concentrates on one or more narrow market segments and pursues either cost leadership or differentiation within the target segment. Companies can also take a hybrid approach. Porter differentiates between operational effectiveness and strategy, as competitors can imitate the former by using benchmarking, which reduces its effectiveness. On the other hand, a strategy requires developing a distinctive and valuable position that entails carrying out a different set of actions. A company can claim it has a strategy when it performs different activities from its competitors or performs similar activities differently (Kotler et al., 2016).

Therefore, it is important to note that while direct-to-consumer (D2C) serves as the basis of e-commerce strategies, specific strategies are needed for the competitive online marketplace. E-commerce strategies for food retailing aim to attract and retain customers, increase revenue, and reduce inefficiencies. As previously mentioned, the D2C model delivers products directly to consumers, reducing the need for middlemen and increasing distribution efficiency. This approach of lowering distribution time and costs may result in higher profitability. To achieve this model, it is crucial to develop a relevant strategic plan that can shorten the distribution process (Laudon and Traver, 2022).

To effectively implement the direct-to-consumer model, businesses need to prioritize a customer-centric approach. This includes providing exceptional customer service, such as fast and reliable shipping, and offering personalized recommendations tailored to individual customer preferences. Additionally, leveraging data and analytics to gain insights into customer behavior and preferences is essential for success.

A study conducted by McKinsey in 2021 examined the European grocery retail industry, analyzing how previous events such as the pandemic have influenced the market and identifying future trends.

To maintain profitability, grocery retailers must aim for greater efficiency and explore new profit margins, as the expansion of online shopping and the emphasis on value pricing may continue to exert pressure on their margins.

The study highlighted three significant trends responsible for driving changes in the grocery retail industry. These include the growing significance of online retail, consumer sensitivity to value pricing, which is predominantly characterized by downtrading, and a focus on health, sustainability, and convenience. These trends were observed to be consistent across the majority of European markets.

The pressure on grocery retailers to offer convenience while maintaining profitability has led to a focus on increasing efficiency through technology and automation. Retailers are investing in warehouse automation to reduce costs and improve convenience for customers. Furthermore, to discover and maximize new profit margins, retailers are leveraging advanced data analytics to offer consumers personalized shopping experiences, which can lead to additional sales potential. By implementing advanced analytics and pursuing personalization, retailers can develop more unique products and services that cater to their consumers' needs. This is one of the key priorities that retailers must prioritize in their strategy (McKinsey, 2021).

Retailers are turning to automation as a means of leveraging technology to boost efficiency, cut costs, and improve customer convenience. It is recommended that retailers adopt automation in critical processes such as inventory management, pricing and promotions, and supply chain and logistics, with the aim of achieving reduced errors, improved efficiency, and enhanced employee productivity, ultimately leading to an improved customer experience.

While retailers have previously utilized traditional cost-reduction strategies, the current hypercompetitive climate has made it challenging to pass on cost increases to customers. This has made automation a necessity rather than an option.

As a result, automation is increasingly being leveraged by retailers to support and improve margins. For instance, Target and Walmart have collaborated with Swisslog to establish warehouses equipped with automated case picking, while Ocado sells its Smart Platform, a custom e-commerce warehousing solution, to other retailers. Autonomous vehicles can facilitate distribution through the use of self-driving vehicles. Automated smart robots can also be used more broadly to perform tasks such as storing, retrieving, depalletizing, and transporting products, and computing the best routes through a warehouse (McKinsey, 2019a, Automation in retail).

Research suggests that currently available technology can automate more than 55 percent of tasks in a classic grocery store, which would reduce selling, general, and administrative costs, enhance customer and employee experiences, and free up funds for growth in other areas. Additionally, research from the McKinsey Global Institute indicates that the retail industry could benefit globally from artificial intelligence worth \$400 billion to \$800 billion, more than any other industry. While advanced technologies such as automation and AI were once considered too expensive and unproven, their economics now make them feasible options for many retailers. By simplifying processes, automation helps retailers reduce costs and increase efficiency, ultimately leading to improved margins (McKinsey, 2019c, A perspective on US retail).

Gartner defines artificial intelligence (AI) as the use of advanced techniques to teach machines how to perform tasks that normally require human intelligence, such as understanding language, recognizing objects, and making decisions (Gartner, 2023). Machine learning (ML) is a subset of AI that involves teaching machines how to improve their performance on a specific task by analyzing data and learning from past experiences (S&P Global). Artificial intelligence and machine learning can play a key role in solving the challenges faced by food retailers. By analyzing various data streams, such as historical sales data, weather forecasts in logistics, and social media sentiment in marketing, AI and other advanced technologies can help retailers make informed and timely

decisions about replenishment and promotions (McKinsey. 2019b, The invisible hand).

While online food retailers face numerous challenges, one of the most complex is the planning process for perishable goods. This is because inventory must be replenished frequently, yet perishable products have a limited shelf life, and the ordering process must be based on expected demand. The demand for perishable goods can fluctuate dramatically in response to changing weather, events, or even the day of the week. Online food retailers must carefully balance the need to maintain an adequate inventory with the need to minimize waste, which can impact profitability.

"Last mile" is the final step in the supply chain where a product or service is delivered to the end user. This term was first used in the telecommunications industry to describe the challenge of connecting the final consumer to the network (GEP, 2023). In logistics, the "last mile problem" refers to the final stage of the delivery process from the distribution center to the customer's doorstep. This presents a significant challenge as it involves delivering goods from a store or fulfillment center to the customer's house (Zentes et al., 2017).

While customers expect fast and free deliveries, the last mile process is often the most time-consuming and expensive, accounting for more than half of the total shipping costs. Any inefficiency in the last mile delivery process results in increased costs, which negatively impacts the profit margins. Despite the high costs, the last mile delivery services have the most visible impact on the customer journey and satisfaction. Retailers aim to reduce the cost of last mile delivery to improve the bottom line. However, this is easier said than done, as last mile delivery is simple in theory but challenging to execute. Slower travel speeds, lost deliveries, and returns are some of the common challenges that retailers face. Nonetheless, addressing the last mile problem is crucial for the success of online retail. Statistics indicate that the last mile delivery process makes up 53% of overall shipping costs, highlighting the need for retailers to

improve this aspect of the supply chain. Therefore, reducing the cost of last-mile deliveries is a critical objective for retailers seeking to enhance their profitability and customer satisfaction (Shopify, 2022b).

Additionally, online retailers must address the issue of handling a significant volume of returns, which can be tackled through the implementation of drive-in or click-and-collect concepts that allow consumers to order online and pick up their purchases themselves. The choice of an appropriate location for an online retail business relies on various considerations, including the retailer's strategy, the potential profitability and sales in the region, methods for assessing the market, population density, consumer spending power, and competition (Zentes et al., 2017).

To achieve fast delivery in e-commerce, proximity plays a crucial role, requiring a transformation of the supply chain with a focus on hyper-local and micro-fulfillment models. These models are particularly effective in capturing impulse purchases for snacks and providing customers with instant gratification that e-commerce could not traditionally provide (Euromonitor, 2021).

To optimize the supply chain and anticipate demand patterns, retailers can make use of advanced data analytics to predict consumer behavior. By adjusting inventory levels accordingly, waste can be reduced and profitability increased (McKinsey. 2019a, Automation in retail).

Retailers are challenged to maintain profitability as online grocery trends towards price sensitivity and convenience. To address this challenge, retailers need to find cost reduction strategies and identify new ways to generate profit. One effective strategy is through supply chain and process automation. Advanced analytics can also help retailers identify new margin pools and optimize profitability through personalized offerings, optimized prices, and promotions. These strategies can streamline delivery processes and increase consumer adoption rates, resulting in improved efficiency and profitability. To ensure favorable outcomes, careful planning and execution are necessary,

along with ongoing monitoring and adjustment based on consumer feedback and market trends.

2.4 Consumer adoption models

The consumer adoption model is a framework used to understand how and why consumers adopt new products, ideas, and technologies. It explains the purchase behavior of consumers after they become aware of a new product or service. One of the most widely recognized theories in this area is the diffusion of innovation theory, developed by Everett Rogers. This theory describes how innovations are adopted and spread within groups or organizations over time when a new product or service is introduced to the market. It identifies different groups of consumers who adopt or reject new products at different stages of the adoption process. By understanding the factors that influence consumer adoption, businesses can develop strategies to encourage adoption and accelerate the diffusion process.

The success of an e-commerce food business is heavily dependent on consumer acceptance as businesses want people to start using their product or service and make it a part of their daily lives. The consumer adoption process is an individual's decision to become a regular user of a product or service. The successful diffusion of innovation is also crucial, as the wider the reach of the innovation, the more likely it is that consumers will adopt it.

An innovation is any good, service, or idea that someone perceives as new, no matter how long its history. Everett Rogers defines the diffusion of innovation process as the spread of a new idea from its source of invention or creation to its ultimate users or adopters. The mental steps people take from first learning about an innovation to adopting it comprises the consumer adoption process.

The diffusion of innovation theory describes the process by which an innovation is communicated through certain channels over time among different groups. This process is akin to social change, as it involves alterations in the structure

of a social system. New ideas can be invented, diffused, and adopted or rejected, leading to social change. Everett Rogers identified different groups of consumers who adopt new technologies successfully, and as these groups grow, the market share of the innovation increases and eventually saturates. (Rogers, 2010).

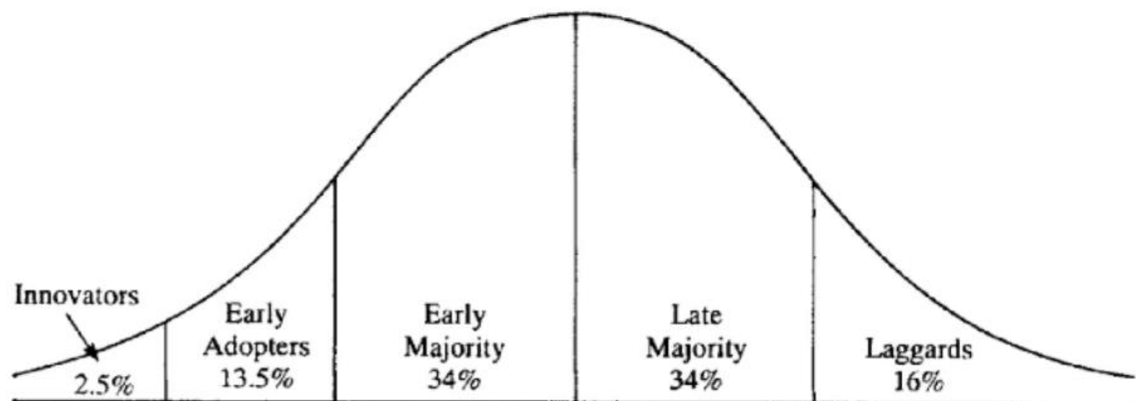


Figure 3. Everett Roger's Diffusion of Innovation (Rogers, 2010).

The curve above depicts the different category of adopters. Roger categorizes consumers into five groups based on their readiness to adopt new technologies. Innovators are willing to take risks and have high social status and financial resources, while early adopters have a high degree of opinion leadership and social status and are more discreet in adoption choices. The early majority adopts innovations after a time lag, although they have above average social status, the late majority typically adopts innovations with scepticism after the majority of society. Laggards are the last group to adopt an innovation and typically have low social status and financial resources, showing an aversion to change. To promote faster adoption, it is crucial to understand the target group and tailor strategies to specific stages of the adoption process.

2.5 Consumer behavior in the Nordic region

Consumer behavior is a vital aspect of business that examines the purchasing patterns and decision-making processes of individuals, groups, and organizations when selecting, purchasing, using, and disposing of goods,

services, ideas, or experiences to satisfy their needs and wants. The study of consumer behavior reveals that cultural, social, and personal factors play significant roles in influencing consumer buying behavior. Cultural factors are the most significant in terms of their impact on consumer behavior, with subculture, social class, and nationality being important determinants.

Culture is a fundamental determinant of an individual's wants and behavior, and therefore understanding cultural values is crucial for businesses seeking to market their products effectively. Subcultures, such as nationalities, religions, racial groups, and geographic regions, provide more specific identification and socialization for their members. Companies can develop targeted marketing programs for these subcultures to serve their needs.

Personal characteristics such as age, occupation, economic circumstances, personality, self-concept, and lifestyle are also important factors that influence consumer behavior. Age and lifestyle, for example, can impact an individual's taste in food, clothes, and furniture. Companies targeting money-constrained consumers can create lower-cost products and services, while those targeting time-constrained consumers can create time-saving products and services that offer multiple benefits.

One good example of a company that caters to the needs of time-constrained consumers is Hamburger Helper. The product is designed to be quickly made in under 30 minutes, which appeals to consumers who are looking for a fast and easy meal solution. However, market researchers found that some consumers don't want the fastest microwaveable solution possible but they also want to feel good about how they prepare their meals. This demonstrates that experiences are just as important as the time factor when it comes to consumer behavior (Kotler et al., 2016).

For this paper, the following Nordic markets will be reviewed: Finland, Sweden, Denmark, and Norway. The Nordic markets have unique environmental and

consuming habits that businesses need to understand to determine market potential. Geographical factors, logistics, and delivery last mile are major determinants for food e-commerce businesses, making it important to investigate these factors in the Nordic market.

In the Nordic market, the geographic situation significantly impacts food e-commerce businesses' choice of delivery models. The last-mile delivery cost is high, accounting for up to 50% of total supply chain costs (Hübner et al., 2016). With the Nordic countries being geographically stretched, it is challenging to expand to other parts of the country within a reasonable pricing model consumers are willing to pay for. According to a study conducted by Minkeviciute, the Nordic grocery retail market is characterized by price-sensitive consumers who prioritize affordability (Minkeviciute, 2019).

Although the Nordic market is advanced in terms of internet penetration and online shopping, grocery shopping via e-commerce channels continues to lag due to various barriers. These include high store density, purchasing behavior, price sensitivity, geographical constraints, profitability concerns, and the risk of store cannibalization. Store cannibalization occurs when the opening of a new store location for the same brand in close proximity leads to a decline in sales at an existing store. By understanding these barriers, businesses can develop strategies to overcome them and tap into the vast potential of the Nordic market.

2.6 Food consumption habits of consumers

The purchasing decisions of many consumers are often made through largely unconscious, habitual processes, in contrast to the rational, conscious, information-processing model proposed by economists and traditional marketing textbooks. To classify the wide range of consumer goods based on shopping habits, they can be categorized as convenience, shopping, specialty, and unsought goods. Convenience goods, which include items such as soft

drinks, soaps, and ketchup, are purchased frequently, immediately, and with minimal effort.

Consumer decision-making is subject to many contextual influences, and they often exhibit low involvement in their decisions, using many heuristics. One such heuristic is the anchoring and adjustment heuristic, where consumers arrive at an initial judgment and then adjust it based on additional information. It is critical to establish a favorable anchor during the first impression, so that subsequent experiences are interpreted more favorably (Kotler et al., 2016).

Food serves as a sign among members of a given culture, and once a need is met through standardized production and consumption, and its function cannot be separated from the sign of that function. Ingredients, cooking techniques, and habits all become part of a system of signification distinctions, expressing communication through food (Counihan, 2013). Customer behavior in Denmark has become increasingly fast-paced in terms of online shopping, with consumers leveraging the convenience provided by food and beverage internet retailers. Meal boxes are also becoming more popular, as are gourmet and specialty products, both of which are seen as additional drivers of online sales.

In Norway, customers favor online shopping over traditional retail channels, with online retailing continuing to outperform all other retailing channels. Online sales of food and beverage products had a 13% growth in 2018, bringing in NOK 2.8 billion in revenue. Meanwhile, in Sweden, online sales of food and beverages grew by 19% to SEK 7.7 billion in value in 2018, despite the delayed opening of large grocery stores. According to experts, the growth in the first half of 2019 was even higher, with a 24% increase in the online food industry compared to the previous year (Minkeviciute, 2019).

Establishing different e-commerce business models in food retailing can present several challenges for companies, including consumer adoption and delivery, specifically the "last mile problem". The population density and logistics in the Nordics can impact the success of delivery, therefore companies must have a well-planned delivery strategy in place to overcome this challenge.

3 Research Methodology

The research methodology section of this paper will cover an explanation of the chosen research design and its suitability for answering the research questions.

Burns identifies market research as the process of designing, gathering, analyzing, and reporting information to solve specific marketing problems.

Marketing research is defined as a process that reports information that can be used to solve a marketing problem. It differs from market research, which defines the market size, location, or makeup.

The benefits of marketing research include identifying opportunities and problems, refining potential actions, and monitoring performance. To determine which opportunities are feasible and likely to generate a good ROI, marketing research studies assess consumer problems and evaluate proposed solutions (Burns et al., 2017).

3.1 Research Design

Marketing research can be beneficial if it is conducted properly. There are three primary research design categories: exploratory, descriptive, and causal, each with its own unique purpose.

The selection of an appropriate research design largely depends on the research objectives. The objectives may include gaining background information, developing hypotheses, measuring the state of a variable, or testing hypotheses. Prior knowledge affects the choice of research design.

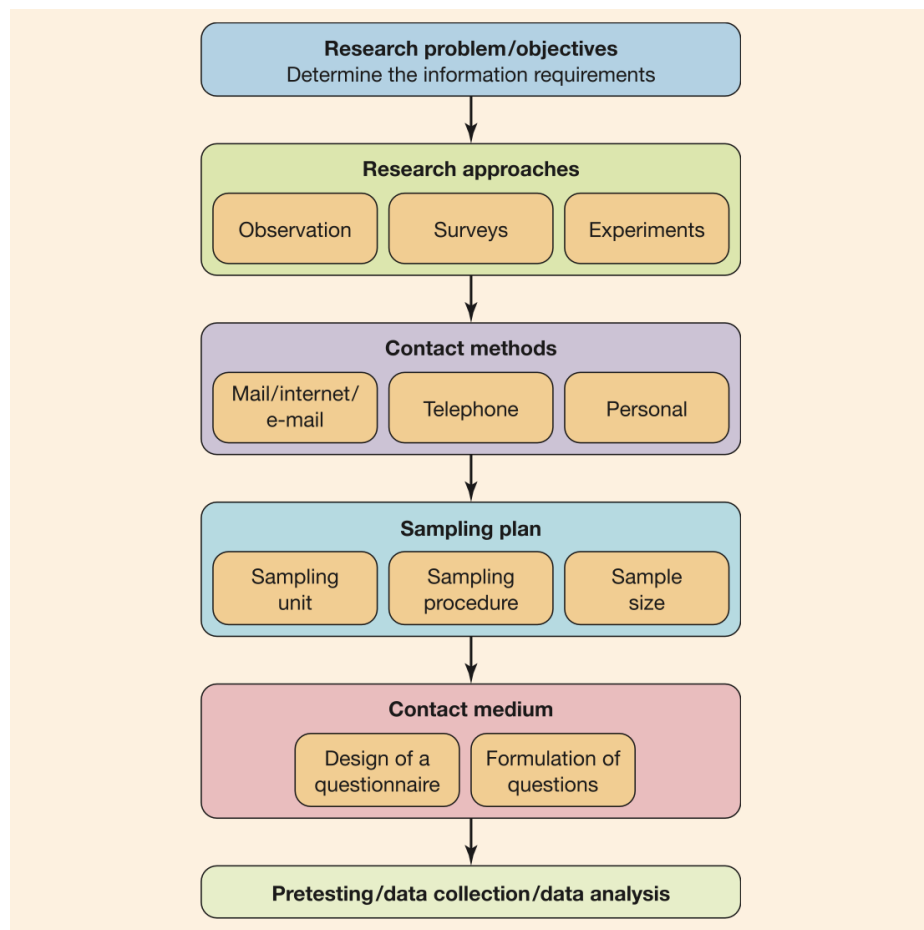


Figure 4. Research Design (Hollensen, 2014).

Exploratory research is suitable for situations where there is minimal knowledge about the problem. This type of research is unstructured and informal, allowing researchers to investigate various sources to gain a better understanding of the problem. It is informal in the sense that there are no official objectives, sample plan, or questionnaire. Exploratory research can be carried out simply by reading a magazine or observing a situation. Exploratory research is valuable as it is flexible and enables the researcher to look into any sources to better understand the problem. Exploratory research is typically undertaken when the researcher is unfamiliar with the problem and need new or recent knowledge.

In contrast, descriptive research is conducted to answer specific questions related to who, what, where, when, and how. This type of research is used to

describe customer behavior and can be used to project study findings to a larger population or predict sales.

The causal research design is appropriate when researchers have substantial prior knowledge about the problem and are seeking to identify causal relationships among variables (Burns et al., 2017).

3.2 Research Methods

Exploratory research provides a preliminary understanding of a research problem and guides the design of descriptive or causal research. There are several methods to conduct exploratory research, including secondary data analysis, experience surveys, and case analysis. Secondary data analysis involves searching for and interpreting existing information relevant to the research topic. This method is advantageous as it provides quick and efficient access to information on any topic of interest.

A case study is a research method that involves examining a specific group or organization in depth to gain insights into their experiences and behaviors in a real-life context. The benefit of the case study method is the development of meta-skills, such as critical analysis, judgment, decision-making, and action, which are highly valued in various fields. Additionally, this method enables quick evaluation of business problems while considering broader contexts, such as organizational, industry, and societal. By applying theoretical knowledge to practical situations within a case, one can better remember and utilize this knowledge. Case study analysis also facilitates the induction of theory from practice, enhancing problem-solving skills in real-world scenarios (Harvard Business Review, 2021).

Exploratory research is important as it can assist in gathering current information necessary to do either a descriptive or causal design. Compared to collecting primary data, exploratory research is inexpensive and can provide valuable information.

Descriptive research answers questions of who, what, where, when, and how through cross-sectional or longitudinal designs. Cross-sectional studies survey a sample of the population at one point in time, while longitudinal studies measure the same sample over time. This method is not employed in this research due to time constraints, as noted in the limitations section.

Data for research can come from various sources, such as companies, governments, social media, and publishers, in different forms such as text, photos, and videos. Hence, decisions must be made regarding which data to collect and analyze to identify patterns, relationships, and trends across different sources.

Data collection in research can be broadly categorized into quantitative and qualitative methods. Quantitative research involves structured questions with predetermined response options for a large number of respondents, while qualitative research collects and interprets unstructured data by observing what people say and do (Burns et al., 2017).

If research questions are not adequately answered by secondary research, primary data may need to be collected using quantitative or qualitative research techniques. Qualitative research aims to provide a holistic view of the research problem, as shown in Figure 5, which involves a number of variables and a small number of respondents. When deciding between the two methods, it is important to consider the balance between the scope and the depth of the analysis.

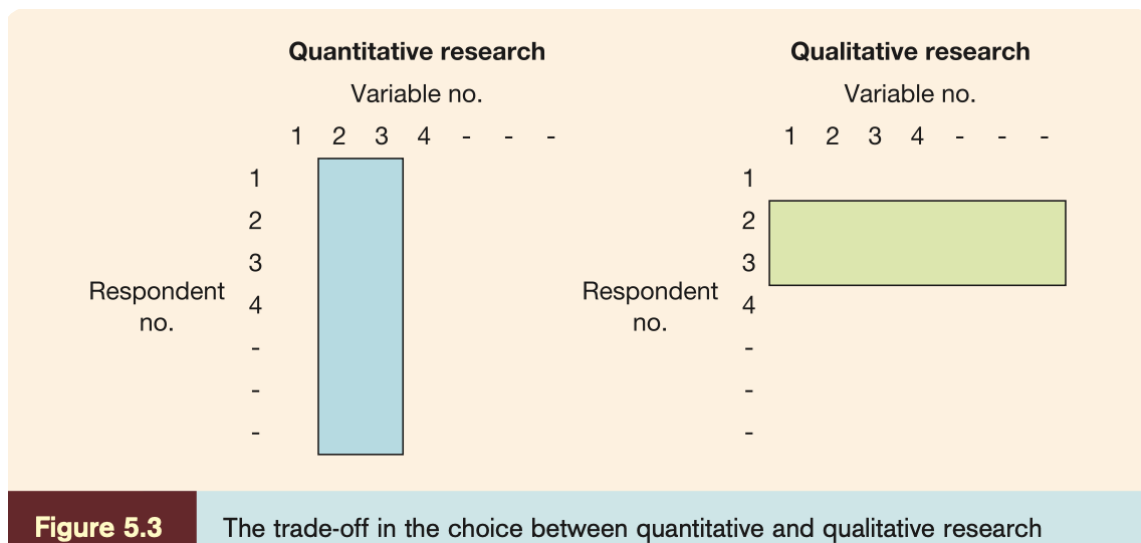


Figure 5. The choice between quantitative and qualitative research (Hollensen, 2014).

Quantitative and qualitative research methods can complement each other, and the combined use of these methods is known as triangulation. This can improve the accuracy and validity of the research by collecting both quantitative and qualitative data (Hollensen, 2014).

3.3 Data Collection

This paper will use a combination of exploratory and descriptive research to understand the research problem comprehensively. Exploratory research is crucial as it can provide insights, guide the design of research, and prevent product failures. By using exploratory research, this paper can gain background information, define terms and clarify problems and hypotheses. This approach is particularly useful when little is known about the problem and when current, relevant information is needed to offer fresh insights that lead to strategic knowledge. Exploratory research can also help to define the question and identify the components that need to be measured. Formulating hypotheses is another benefit of exploratory research, which ensures that the proper variables are measured.

Descriptive research aims to provide a clear picture of the population of interest. By employing a combination of exploratory and descriptive research methods, this paper aims to gather comprehensive data that will allow for a thorough analysis and understanding of the research problem.

To achieve this, this paper will focus on employing a case analysis through exploratory research by reviewing information on former situations that share similar characteristics to the current research problem. This method of studying past incidents can be valuable in developing strategies.

Official statistics are a valuable source of qualitative and quantitative information on topics such as demographics, economic development, education, and consumption patterns. Many international organizations offer statistics for free online, making it beneficial to use this information to collect data given the resources available for this research (Burns et al., 2017).

The question of this paper is to examine the underdeveloped Nordic market's food e-commerce and analyze strategies that can be useful. Therefore, it is necessary to examine other cases that may be adapted to the Nordic market.

3.4 Data Analysis

This paper will focus on the examination of the data collected from sources related to the case company in another market. The aim is to determine if the strategies implemented in that market can be applied to the Nordic market or Finland.

The data collected from the case company in another market will be analyzed to identify patterns, trends, and relationships that could be relevant to the Nordic market. This will involve a thorough examination of the data using both quantitative and qualitative methods. Quantitative analysis will involve the use of statistical methods to analyze numerical data. Descriptive statistics will be used to summarize the data.

3.5 Limitation

One limitation of this study is that it relies on data collected from the case company in another market. While this data can provide valuable insights into the strategies implemented in that market, it may not be directly applicable to the Nordic market or Finland. Therefore, caution should be exercised when drawing conclusions or making recommendations based on this data.

Another limitation is that the paper uses a combination of exploratory and descriptive research methods. While these methods can provide a comprehensive understanding of the research problem, they may not fully capture the complexity of the Nordic food e-commerce market. Future research could consider incorporating other research methods, such as causal research, to further investigate the relationships between different variables.

This paper also recognizes that descriptive research and cross-sectional studies, such as sample surveys, are limited in establishing causality and relying on a single point in time. On the other hand, longitudinal studies provide a more accurate representation of trends and changes by studying a population over an extended period. However, the resources and time needed to conduct a longitudinal study make it unfeasible for this research. As a result, this method will not be used, as it is primarily implemented by large companies such as Nielsen and IRI.

Additionally, the study relies on secondary data sources, such as official statistics or annual reports. While these sources can provide information, they may not capture all relevant aspects of the Nordic food e-commerce market. Therefore, further primary research could be conducted to supplement the secondary data.

4 Results

This section analyzes data collected from case studies to determine what kind of food e-commerce strategies can be implemented in the Nordics to improve it. The paper includes case studies of successful online food retailers from different markets, and examples of their business models and strategies. The goal is to identify various tactics and best practices that can be applied to the food e-retail business in the Nordics to enhance its profitability and efficiency. It will also explore the challenges and opportunities that the food e-commerce industry faces in the Nordics and how these can be addressed through effective strategies. Overall, this paper intends to provide valuable insights and recommendations for businesses and entrepreneurs who are interested in establishing or improving their food e-commerce business in the Nordics.

To describe the case companies demonstrated in this section, the paper uses Osterwalder's business model canvas. It depicts the process of utilizing the revenue model. After that, it demonstrates overall retail strategies and various tactics to form a strategic model.

Finally, the paper explores strategies that can be implemented in the food e-retail business in the Nordics. The paper aims to provide a comprehensive analysis of successful online food retailers from different markets, using the business model canvas to describe their revenue models and overall strategies.

4.1 Amazon

The first case study focuses on Amazon, a company with multiple business models. Although e-commerce giants like Amazon and Alibaba both started out as e-commerce companies, their business models have evolved to encompass a wider range of activities and have become more complex over time.

The information presented in the figure below was sourced from Amazon's annual report in 2022, as well as from secondary data and literature reviews. As

previously described in the literature review section, the purpose of using a business model canvas is to illustrate the process of utilizing the revenue model before demonstrating the strategies and tactics.

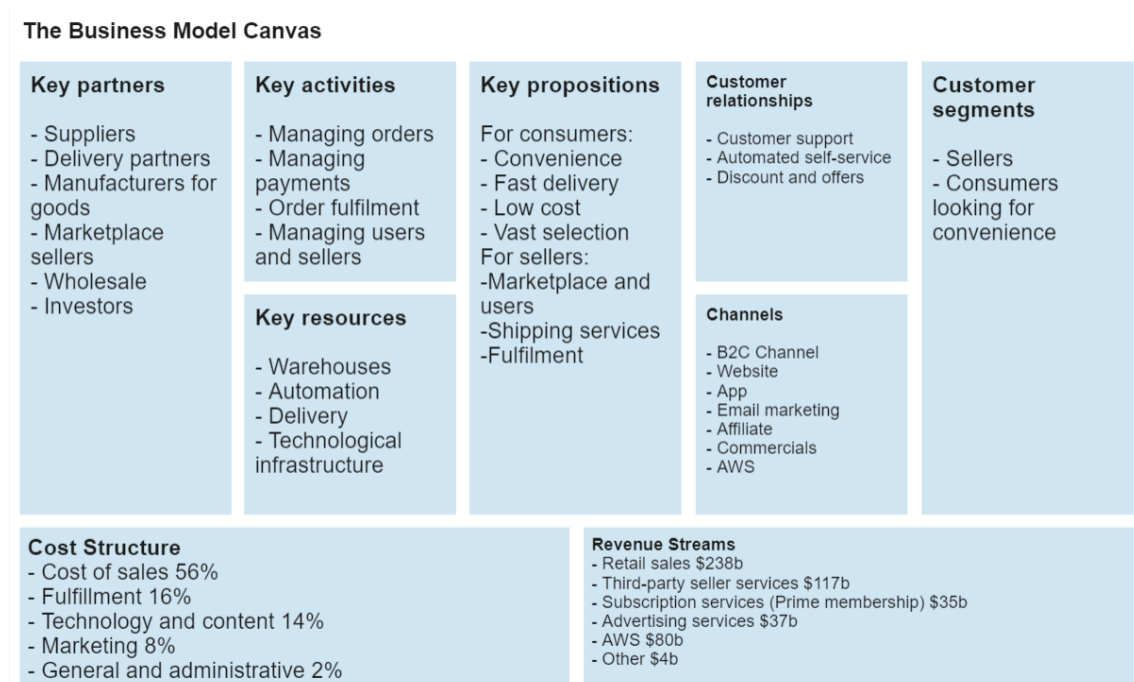


Figure 6. Amazon business model canvas as interpreted by the author

Key partners are highlighted in the first block of the business model canvas. In Amazon's case, the delivery partners are critical, and the company is in the process of internalizing and automating transportation as it becomes more cost-effective at scale. A diverse range of transport and logistics partners is crucial in delivering the value proposition of speedy delivery. Major brands that have a presence on Amazon can be suppliers, which may differ from third-party marketplace sellers.

The key activities are to manage orders, payments, and fulfilment as efficiently as possible so that the steps to reach the consumer are as short as possible. Amazon's reputation for implementing cost-reduction and efficiency-enhancing tactics is relevant to other retailers. The success of Amazon's retail business model is primarily attributable to its delivery and fulfilment network. Amazon possesses vast fulfilment facilities worldwide, categorized as fulfilment centres,

delivery stations, Prime Now hubs, Amazon Fresh which includes pickup options, and Amazon Go and Whole Foods Market which is offline retail for Amazon. This infrastructure is an asset that has contributed to Amazon's unique function and success.

Key propositions for consumers are fast delivery to get the goods directly to the consumer as quickly as possible. As noted by Amazon founder Jeff Bezos in an interview, offering a vast selection at low prices is crucial, along with providing speedy delivery directly to the consumer.

I very frequently get the question: "What's going to change in the next 10 years?" And that is a very interesting question; it's a very common one. I almost never get the question: "What's not going to change in the next 10 years?" And I submit to you that that second question is actually the more important of the two -- because you can build a business strategy around the things that are stable in time. ... [I]n our retail business, we know that customers want low prices, and I know that's going to be true 10 years from now. They want fast delivery; they want vast selection.

It's impossible to imagine a future 10 years from now where a customer comes up and says, "Jeff, I love Amazon; I just wish the prices were a little higher." "I love Amazon; I just wish you'd deliver a little more slowly." Impossible. And so the effort we put into those things, spinning those things up, we know the energy we put into it today will still be paying off dividends for our customers 10 years from now. When you have something that you know is true, even over the long term, you can afford to put a lot of energy into it.

Jeff Bezos, Founder and executive chairman of Amazon (Inc, 2017)

One of Amazon's key advantages is its fast delivery service, which has been achieved through insourcing and automation of transport. In the initial stages of development, many companies require a certain level of scale to effectively deliver ordered items quickly and cost-effectively. Amazon also initially relied on third-party providers to meet this challenge. The company offers a subscription service called Amazon Prime, which includes free shipping. Amazon Go is a new retail experience that streamlines the purchase process. It uses computer vision, deep learning, and sensors to automate many aspects of grocery

transactions. Customers can use the service by downloading the Amazon Go app and connecting it to their Amazon.com account. Cameras and sensors in the store then monitor the items selected by the customer and automatically charge their account upon exit, eliminating the need for checkout lines or interactions with cashiers. (Ives et al., 2019).

Starting as a bookseller, Amazon has since expanded into other verticals, providing consumers with a wide range of products and services. Amazon is a platform business model that generates revenue by taking a percentage of the sales transaction fee, among other revenue sources. The company also offers a range of pricing strategies, and its cost structure is driven by sourcing and purchase prices, as well as a lower cost structure for fulfilment and delivery infrastructure compared to competitors. Amazon has been accepting lower profit margins to reinvest in its business.

Key propositions for sellers are also important as third-party sellers are the second largest segment by revenue with over 117.7 billion USD in 2022. Third-party sellers sold 59 percent of paid units in the fourth quarter of 2022. Fulfilment by Amazon is a service that offers merchants the opportunity to store their items in Amazon fulfilment centres and delivery infrastructure to reach customers, including shipping, checkout and payment options, and management of returns. Amazon can be used as a sales channel by sellers (Statista, 2023).

Amazon's customer relationship strategy is based on trust and credibility, with its review system and early reviewer programs encouraging customer reviews, while its machine learning tools can detect fake reviews. Personalization is also used to recommend items to customers, leading to increased sales with algorithm. The company serves both B2C and B2B retail customers through various apps and websites, including advertising.

Details regarding Amazon's cost structure and revenue can be accessed through their annual reports.

Operating Expenses

Information about operating expenses is as follows (in millions):

	<u>Year Ended December 31,</u>	
	<u>2021</u>	<u>2022</u>
Operating expenses:		
<u>Cost of sales</u>	\$ 272,344	\$ 288,831
Fulfillment	75,111	84,299
Technology and content	56,052	73,213
Sales and marketing	32,551	42,238
General and administrative	8,823	11,891
Other operating expense (income), net	62	1,263
Total operating expenses	<u>\$ 444,943</u>	<u>\$ 501,735</u>
Year-over-year Percentage Growth (Decline):		
Cost of sales	17 %	6 %
Fulfillment	28	12
Technology and content	31	31
Sales and marketing	48	30
General and administrative	32	35
Other operating expense (income), net	(183)	1,936
Percent of Net Sales:		
Cost of sales	58.0 %	56.2 %
Fulfillment	16.0	16.4
Technology and content	11.9	14.2
Sales and marketing	6.9	8.2
General and administrative	1.9	2.3
Other operating expense (income), net	0.0	0.2

Figure 7. Expenses from Amazon 2022 annual report

The 2022 Amazon annual report contains an information displaying the company's expenses, which is represented in Figure 7. The majority of the company's cost structure is attributed to the cost of sales, accounting for 56% of total expenses. The second largest expense is fulfillment, indicating the critical role that fulfillment plays in Amazon's overall strategy. Technology and marketing expenses follow closely behind. These findings underscore the significant importance of efficient cost management in Amazon's business model. It is notable that Amazon's success in the e-commerce industry has been largely driven by its ability to offer fast and reliable delivery to customers. This is evidenced by the substantial investment in the fulfillment segment of its cost structure. In addition, the company's extensive use of technology and marketing initiatives, such as its personalized recommendation algorithm, have contributed to its continued growth.

The annual report of Amazon also provides a detailed explanation of the primary sources of revenue for the company. These sources of revenue comprise of various activities such as retail sales, third-party seller services, subscription services, and other services. By adopting a diverse revenue model, Amazon can leverage its broad set of capabilities to maximize revenue across various business segments. This approach allows Amazon to leverage its diverse set of capabilities to maximize revenue across various segments of the business. In conclusion, Amazon's revenue model provides a diversified approach to generate revenue from various sources that support its ongoing growth and development.

	Year Ended December 31,		
	2020	2021	2022
Net Sales:			
Online stores (1)	\$ 197,346	\$ 222,075	\$ 220,004
Physical stores (2)	16,227	17,075	18,963
Third-party seller services (3)	80,461	103,366	117,716
Subscription services (4)	25,207	31,768	35,218
Advertising services (5)	19,773	31,160	37,739
AWS	45,370	62,202	80,096
Other (6)	1,680	2,176	4,247
Consolidated	<u>\$ 386,064</u>	<u>\$ 469,822</u>	<u>\$ 513,983</u>

Figure 8. Sales from Amazon 2022 annual report

Retail sales are conducted through online and physical stores, with revenue recognized upon delivery to a third-party carrier or the customer in the case of Amazon delivery. Third-party seller services allow sellers to sell products in Amazon's stores and fulfil orders through Amazon. Commissions and related fees are recognized when the services are rendered, usually upon delivery to a third-party carrier or the customer in the case of Amazon delivery. Amazon Prime memberships and access to digital content, including video, music, and books, are part of the subscription services offered, with recognition of revenue occurring over the subscription period.

Amazon's approach to food retailing has been driven by a commitment to innovation and customer-centricity. In food categories, Amazon offers a range of food-related services to its customers. These include Amazon Prime Pantry,

which specializes in selling dry goods groceries and household items. Another service, Amazon Fresh, specializes in perishable food items and uses a refrigerated infrastructure to ensure freshness upon delivery. Amazon Prime Now offers a selection of essential items that can be delivered within two hours for free, or within one hour for an additional fee. Additionally, Amazon acquired Whole Foods Markets, a chain of physical stores that offer a range of food products. Amazon Go offers automated checkout in its convenient stores, streamlining the shopping experience for customers.

To further solidify its position as a market leader, Amazon has launched several initiatives that prioritize customer and revenue growth. One example of this is Instant Pickup, a free service launched in 2017 that allows Prime members to access a selection of daily essentials from self-service lockers located on or near college campuses. In 2018, Amazon and Whole Foods Market (WFM) introduced Prime Pick-Up, which enables members in select cities to order groceries online and pick them up within thirty minutes without leaving their cars.

To improve the speed of its supply chain, Amazon plans to open more hubs across the US and globally. Amazon acquired Zoox, an autonomous vehicle company, to integrate self-driving cars into their operations. By streamlining last-mile delivery and reducing associated costs, the incorporation of Zoox's self-driving technology is expected to automate Amazon's distribution network. Overall, Amazon's diverse set of strategies in the food retail industry prioritize enhancing the customer experience through better and more efficient processes.

Amazon's focus on customer-centricity is validated by its customer satisfaction ratings, as evidenced by a recent survey showing that 80 percent of Prime members prioritize fast, free shipping when shopping at Amazon. To meet and exceed these expectations, Amazon has implemented initiatives such as faster shipping and autonomous last-mile delivery through the acquisition of Zoox. This focus on customer satisfaction and efficient processes is consistent with

Amazon's long-term investment philosophy of prioritizing customers and growth to solidify its market leadership position. (Jindal et al., 2021).

In addition to its customer-centric approach, Amazon has invested heavily in automation and robotics to further streamline operations and reduce costs. The company recently debuted a new warehouse robot capable of sorting millions of individual unpackaged products, significantly cutting logistics costs. By leveraging technology, Amazon aims to improve the customer experience through faster and more efficient order fulfilment. (Financial Times, 2022b).

As previously mentioned in the literature, McKinsey Global Institute reported that AI has the potential to bring billions in benefits to the retail industry, with more than half of tasks in the food retail industry currently able to be automated with existing technology. This can lead to reduced costs, improved customer and employee experiences, and provide funds for growth in other areas. This indicates that Amazon's investment in automation is likely to continue, leading to further cost reductions and growth opportunities.

Another area where Amazon has leveraged technology is in big data analytics, AI, and machine learning to increase profitability through margin optimization. The company analyzes customer browsing and purchasing history to inform product recommendations and search results algorithms. Furthermore, Amazon invests heavily in machine learning, allowing for real-time price adjustments based on market demand, a critical component of its dynamic pricing strategy (Forbes, 2019).

One major advantage of dynamic pricing is its ability to position lower prices as promotional sales, creating a sense of urgency and significantly increasing sales volumes. This approach has two key benefits. Firstly, by creating a sense of urgency around the sale, businesses can significantly increase their sales volumes. Secondly, by positioning the lower price as a promotion, consumers do not associate the new, lower price with the product's true value. As a result,

businesses can later increase the price without the risk of alienating customers who have become accustomed to the lower price (Inc, 2022).

Dynamic pricing has gained popularity due to its numerous benefits for retailers, as it enhances profitability by adjusting prices to match supply and demand, achieving greater economic efficiencies, and boosting profits by 7 to 10 percent. The use of AI in dynamic pricing engines allows for precise analysis and demand forecasting, making it a valuable tool for retailers looking to optimize their pricing strategies (Financial Times, 2022a).

Amazon's success in data and data service has also given it a unique advantage in the highly competitive food retail industry. Its non-primary business offerings, such as Amazon Web Services (AWS), Amazon Prime, and Marketplace, provide a more profitable revenue base that allows the company to take risks in low-profit-margin industries (Livingstone and Knezevic, 2020).

Finally, Amazon's innovative use of technology to create a frictionless checkout experience through its Amazon Go stores can be regarded as disruptive to the retail industry. Despite attempts by other retailers such as Walmart and Kroger to speed up the checkout process, Amazon's fully automated "scan" approach was significantly more frictionless (Ives et al., 2019).

In conclusion, Amazon's success in the food retail industry can be attributed to a combination of customer-centricity, innovation, and the strategic implementation of technologies such as automation, robotics, big data analytics, and AI. By balancing growth, profitability, and cost management, Amazon has developed strategies that leverage its diverse capabilities to optimize revenue and achieve sustainable growth in the market.

4.2 Alibaba's grocery retail Freshippo

Freshippo is a food retail brand owned by Alibaba Group, a Chinese multinational company specializing in e-commerce and retail. This retail brand offers a high-tech and seamless shopping experience both online and offline. They utilize innovative technologies such as scannable QR codes and facial recognition for payments to offer consumers convenience and ease of access to product information.

While both Amazon and Alibaba have a significant online presence, their respective business models differ in many ways. This paper will use the business model canvas as a heuristic view to explain the differences.

The Business Model Canvas

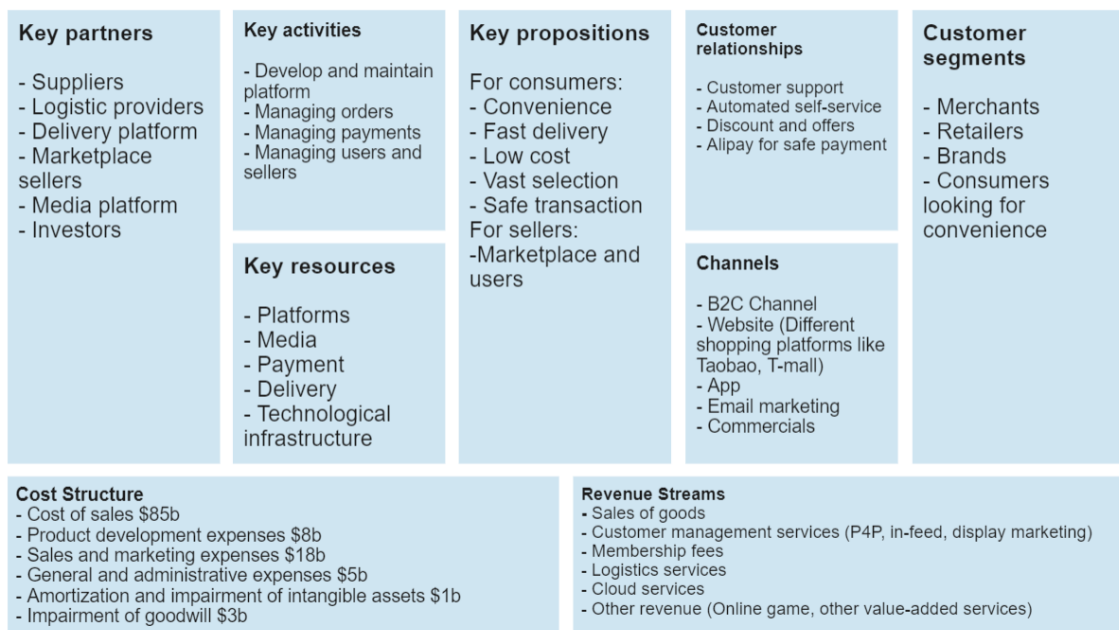


Figure 9. Alibaba business model canvas as interpreted by the author

Alibaba operates as an e-commerce marketplace, much like Amazon and other similar e-commerce giants. While there are similarities in terms of key partners, activities, and customer segments, this section will focus on the ways in which Alibaba differs from the previously mentioned case company. Unlike Amazon, Alibaba doesn't sell goods directly or store inventory in large warehouses.

Instead, it operates more as a middleman between buyers and sellers. Alibaba's key activities revolve around maintaining and developing its online marketplaces while ensuring efficient order and payment management to enhance the overall customer experience. As for customer segments, Alibaba caters to a diverse range of buyers and sellers, including individuals, smaller merchants, and larger brands and retailers.

Revenue (Continued)

Revenue by type is as follows:

	Year ended March 31,		
	2020	2021	2022
	<i>(in millions of RMB)</i>		
Customer management services (i)	297,592	363,381	379,999
Membership fees	22,846	29,450	35,739
Logistics services	33,942	55,653	71,279
Cloud services	40,016	60,120	74,123
Sales of goods	95,503	180,634	255,171
Other revenue (ii)	19,812	28,051	36,751
	509,711	717,289	853,062

Figure 19. Revenue from Alibaba 2022 annual report

In terms of revenue streams, Alibaba primarily earns its revenue from customer management services, such as performance-based advertising fees paid by retailers. The company's annual report provides detailed information on its financial performance, including revenue and expenses related to its various business segments.

One of Alibaba's retail brands is Freshippo, a grocery store that focuses on providing fresh products. Thus, delivery is a crucial aspect of the business, and the company guarantees the freshness of its products within a 3km radius of a store. Groceries are delivered to customers' doorsteps within 30 minutes, and delivery is free of charge with no minimum order requirement. Customers can place orders through the app, and payment can be made via Alipay, China's most popular payment method owned by Alibaba. Customers can also use 'pay by face' technology to make payments.

Alibaba's business model also includes Taobao, the largest shopping platform owned by Alibaba. There is no fee for transactions on Taobao, but sellers pay to rank higher on the internal search engine. T-mall, on the other hand, is for larger retailers, and annual user fees and sales commissions are charged to retailers. Alibaba also created Alipay, which addresses customer concerns over the security of online transactions.

To enhance its retail strategy, Alibaba is focusing on consumers and improving supply chain capabilities. The company is achieving this by using consumer apps and improving the direct sales model. The company also seeks to create more personalized experiences by leveraging app features and data collected. Its delivery network, Cainiao, is focusing on building instant delivery for a reliable shopping experience (Alizila, 2021).

As part of its New Retail strategy, Alibaba aims to seamlessly integrate online and offline experiences. Freshippo, the New Retail-powered supermarket by Alibaba, is a prime example of this strategy in action. With its online-offline (O2O) business model, customers can experience the popularity of Freshippo's delivery service while in-store. The store's modern and dynamic vibe, created by the transportation of groceries across rails on the ceilings of the stores, attracts a lot of customers.

Freshippo has combined a series of technology to create better online and in-store shopping, payment, and delivery experiences. The store uses unmanned checkout kiosks, mobile-scanned product details, and fast-running fulfilment conveyor belts. With blockchain technology, products can be traced through the supply chain, enabling customers to view information from breeding to transportation by scanning QR codes on some products.

Freshippo Mini stores are designed to be set up quickly to address the rising consumption demand of less-developed urban centers and rural areas in China without large investment of capital. Meanwhile, Freshippo Station fulfils fresh-produce orders for residents living in urban residential areas where Freshippo

supermarket stores are not yet available. The station's focus on fresh produce and a hyper-local delivery radius of 1.5km meets Chinese consumers' demands for frequent, fast, and fresh deliveries.

Alibaba's focus on using innovative technology to create a seamless shopping experience extends to Hema Supermarkets, Alibaba's digitized traditional grocery stores. Customers can view product information by scanning QR codes on their phones and arrange for direct delivery to their homes (Wired, 2021).

Freshippo's technology also benefits Alibaba's supply chain and business operations. With faster deliveries and more sources of data, Alibaba can improve its operations and respond to rising e-commerce sales, boosted by the coronavirus pandemic. Overall, Freshippo is an example of Alibaba's New Retail strategy in action, and its innovative use of technology has made a seamless shopping experience.

4.3 Honest Box - Unstaffed stores in Sweden

Unstaffed stores have emerged as a solution for retailers in sparsely populated areas in Sweden. Since 2015, Sweden has had its own unmanned app-powered grocery store, with Honest Box originating from the north of Helsingborg. For years, small grocery stores have been disappearing from the Swedish countryside, making it difficult for rural residents to access food. Ilijason, the founder of Honest Box, had to drive 20 minutes to grocery store to buy food for his son. Unstaffed stores like Honest Box are a practical solution for rural areas where access to basic amenities is limited. Additionally, they provide an innovative solution for urban areas with late night shoppers.

Customers can access the 24-hour store through an app and scan their purchases. After registering for the service, customers are charged each month for their purchases. The business's key activities include receiving deliveries at the shop, stocks the shelves, and the customers take care of the rest.

The biggest costs associated with running an unstaffed store include premises, locks, interior design, technology, and the purchase of goods. Additionally, insurance is a crucial aspect of the business. Unstaffed stores offer an effective way to meet the needs of customers in sparsely populated areas, and can prove to be a profitable business model with reduced costs. The business model is achieved by controlling operational costs such as rent and staffing, which is why the stores are relatively small in size. Providing an essential service to rural communities who often have to travel long distances to buy food, unstaffed stores offer customers the ability to complete their shopping in less than a minute without waiting in queues. This "quick in, quick out" experience is particularly appealing to some customers.

The "last mile" problem has long been a significant challenge for retailers due to its high cost, accounting for more than half of total supply chain expenses. In this model, customers come to the store to pick up their purchases themselves, which eliminates the need for expensive last-mile delivery services. Retailers can now provide customers with a more convenient shopping experience while also reducing overhead costs due to the elimination of the last mile problem. It can allocate resources towards other aspects of the business, such as interior design, technology, and the purchase of goods. This approach allows retailers to better control operational costs, leading to smaller store sizes that can be more profitable. As a result, unstaffed stores can prove to be a profitable business model with reduced costs, including those related to the last mile problem.

The Business Model Canvas

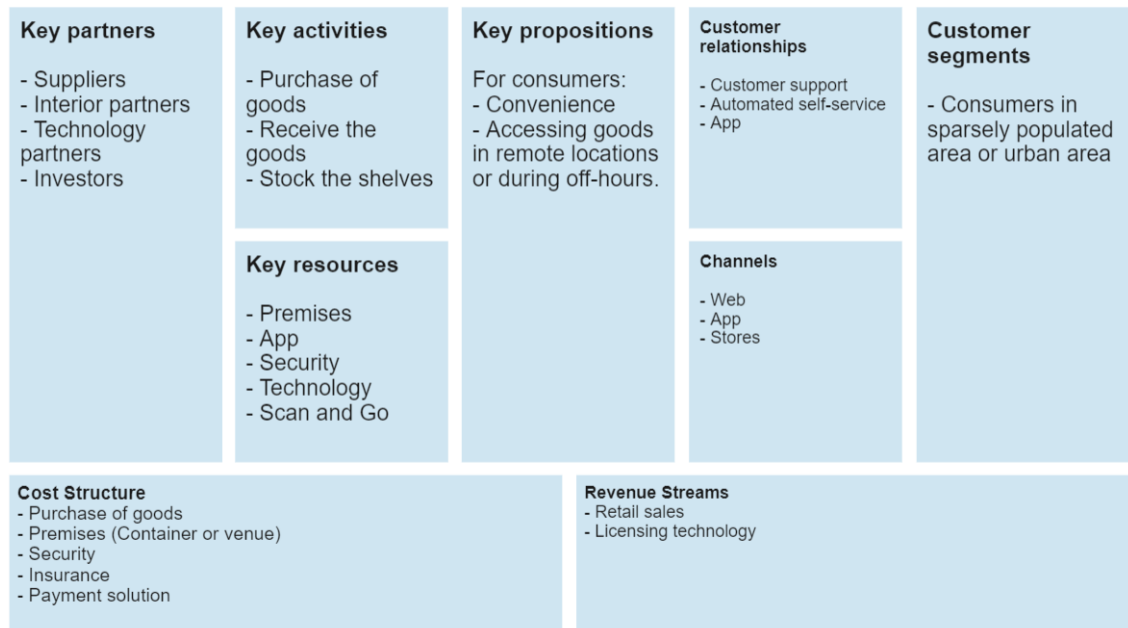


Figure 11. Honest Box business model canvas as interpreted by the author

The business model of unstaffed stores like Honest Box focuses on serving areas with fewer customers, such as rural Sweden, while also seeking to expand by licensing their technology to other retailers. This technology is similar to that of Amazon Go, enabling customers to shop without waiting in line or interacting with staff.

The Scan & Go technology solution that Honest Box provides has become cost effective for retailers. By allowing customers to self-scan their purchases using their own phones, the technology removes a significant portion of the cost and makes the checkout process more convenient for customers. Unlike traditional handheld scanners, which can cost several thousand Swedish kroner, the self-scanning technology can run on any smartphone with a camera, even low-budget models. Additionally, the technology has been developed to run entirely in a web page, making it a versatile solution that can be used in both manned and unmanned stores. By shifting the responsibility of scanning to the customers, retailers are able to reduce costs without passing them on to the customer, resulting in a more efficient and cost-effective checkout process for all involved.

Honest Box is not the only retailer to implement the unstaffed model. Lifvs has also adopted this approach, as low labor and rental costs enable stores to operate in low traffic areas and rural communities. This eliminates the need for residents to travel long distances to purchase groceries. The cost efficient nature of the unmanned store allows for affordable prices to be offered to customers, which may be slightly higher than in traditional supermarkets but ultimately worth the convenience and savings on transportation costs (Business Insider, 2021)

Coop, one of Sweden's largest grocery chains, launched its first unmanned store in 2021, offering customers a checkout-free shopping experience. By eliminating the need for checkout and sales staff, the company can provide a flexible and fast shopping experience for customers, especially those who cannot shop during standard opening hours.

The benefits of unstaffed stores include lower overhead costs, the collection of consumer data through online checkout, and more efficient retail management through localized product inventory and merchandising.

Retailers need to consider the challenges that may arise from the impact of technology readiness on customer satisfaction with unmanned stores. Investing in technology training and education is crucial to ensuring a positive shopping experience for customers after implementing unstaffed convenience stores. This is particularly important due to the potential for increased dissatisfaction among customers with low levels of technology readiness.

Coop Denmark has introduced a cashierless option in one of its convenience stores, which allows shoppers to access the store outside normal opening hours. With this service, Coop Denmark can increase its operating hours without incurring additional labor costs. The introduction of unstaffed stores is a significant development in the grocery retail industry, which has the potential to reduce overhead costs, improve efficiency, and provide customers with a more flexible shopping experience (Coop News, 2022).

Overall, unstaffed stores are a practical and innovative solution for less populated areas with limited access to groceries and urban areas with late night shoppers. By controlling operational costs such as rent and staffing, unstaffed stores can provide an essential service to communities that would otherwise have limited access to food and groceries. With the emergence of unstaffed stores and the development of cost effective technology solutions, retailers can provide customers with more convenient shopping experience while also reducing overhead costs, particularly in the last mile of delivery.

4.4 Strategies to implement in the Nordic food retail

According to EcommerceDB, groceries were one of the smallest categories in terms of e-commerce market volume in the Nordic region, as well as in other markets like the US (EcommerceDB, 2021). However, with very high internet penetration, experts see the potential for growth (Minkeviciute, 2019).

Of all the Nordic countries, Finland has the smallest e-commerce market value. Nonetheless, this small market size can offer valuable insights, as it serves as a testing ground for new products or services. Due to its smaller size, it is easier and less costly to launch and test new products or services, allowing businesses to evaluate the potential success of their offerings in a controlled environment before investing in larger markets (Statista, 2022a).

The paper will examine the online food retail market in Finland, which is dominated by two retail trade groups - the S Group and the K Group. The Finnish grocery retail industry is characterized by an oligopolistic market, with the S Group holding the largest market share of approximately 46%. The K Group, also known as Kesko, holds the second largest market share with approximately 36.6%. The third largest player in the Finnish grocery sector is Lidl, a German discount supermarket chain that entered the market in the early 2000s. By 2021, Lidl has managed to acquire almost one-tenth of the Finnish grocery retail sector (Statista, 2022b).

K Group is a notable retail group in Finland, and although it is second in the Finnish consumer grocery market after S Group, it has the largest online food store in the market. K-ruoka.fi is the market leader of the consumer online grocery service in Finland. After the pandemic, online grocery sales have remained consistently high. According to Kesko Capital Markets Day 2022, which is an event for investors, analysts, and media, online grocery is a profitable business for both B2C and B2B in 2022. Kespro, K Group's food service wholesale, has the biggest online store in Finland's food service industry, and 70% of its sales come from digital channels (Kesko, 2022).

In 2021, Kesko announced the plan to invest tens of millions of euros in automating the collection of online grocery orders. The objective of this investment is to improve customer experience and ensure more efficient processes while maintaining a strong market-leading position in Finnish online grocery by the first partially automated collection system. The project's initial investment totals approximately 10 million euros, with further investments in automation amounting to tens of millions of euros in the coming years.

The automated collection system is based on a Micro Fulfilment Centre (MFC) concept. According to Antti Rajala, Kesko's Director of eCom & Digital Services, the collection will take place in three areas, with most of the products being collected using automation, robots, or manual mass collection at the back of the store. The company aims to quadruple collection efficiency compared to manual collection at the front of the store (Kesko, 2021).

The new system will be located in Ruoholahti, the Helsinki metropolitan area, where online grocery sales volumes have reached a level that enables more extensive utilization of automation. Storage is built to accommodate 45 robots to help with product gathering in the future. When finished, the system will allow for fast and short-distance online grocery deliveries while still providing a wide selection of goods that customers value. Kesko has incorporated automation

into its retail strategies by the rapid installation of Finland's first automated in-store collecting system for online grocery orders (Kesko, 2022).

Kesko in Finland has adopted automation in its retail strategies similar to e-commerce giants such as Amazon and Alibaba. By implementing an automated in-store system using robotics, the company has reduced the steps required to reach consumers and decreased costs.

As investments in automation continue to grow, retailers operating in Nordic urban areas may also consider implementing autonomous vehicles to address the last-mile delivery problem, further reducing costs and streamlining the process.

In addition, using AI and machine learning-powered data analytics to improve algorithms and personalization can uncover potential margin pools. Studies have shown that this can increase sales volume and improve promotional efforts by enabling retailers to utilize pricing strategies like dynamic pricing and demand forecasting.

Retailers can also explore the use of blockchain technology, which customers can use through mobile apps. Utilizing more mobile apps allows for more customer data, which can help with big data analytics.

Fully automated scan technology can significantly reduce costs and provide a frictionless shopping experience. Given that the Nordic region has some of the highest retail densities in urban areas in the world, implementing fully automated scan technology can significantly enhance the convenience of the customer experience in these areas (Minkeviciute, 2019).

In major urban areas, retailers can implement tactics such as an automated system for collecting online grocery orders. However, the study conducted by Minkeviciute on the e-commerce grocery market in Scandinavia indicates that beyond urban areas, the Nordic region's population is sparse and

geographically spreaded. This presents a major challenge for retailers seeking to reach customers through direct-to-consumer strategies.

The Nordic region's less populated geographic area is a significant constraint for retail's last mile issue if they want to implement online strategies. This issue is exacerbated in the Nordic region, where the less populated geographic area limits the possibilities of expansion for retailers online. Distribution for online grocery infrastructure is limited to capital cities and surrounding areas. The geographical dispersion of the rural area's population makes it challenging for retailers to expand their operations while offering a pricing model that remains affordable for consumers. Reaching more people would require a highly advanced logistical system that would entail certain costs that are currently unsustainable based on the current volume of online grocery in the Nordic countries. Therefore, the length of the country and the share of complexity in terms of logistics and costs are significant barriers that limit the expansion of direct-to-consumer retail in the Nordic region.

The challenges of expanding online retailing beyond the capital region and a few significant cities in the Nordic region are high logistics costs and delivery complexities. However, there are viable options for retailers to achieve a direct-to-consumer model in scarcely populated areas by opening unstaffed stores. This business model offers a convenient shopping experience with minimal steps and intermediaries for customers who might not have access and can potentially serve more remote areas without logistical and cost challenges.

According to a study by Minkeviciute, experts note that online retailing would not be feasible for retailers to expand to other geographical areas outside big cities even in the future (Minkeviciute, 2019). For retailers operating in sparsely populated areas with limited customer bases, opening unstaffed stores could be a viable option. This business model could shorten the distribution process to consumers and help retailers reach a broader population that might not have access to online shopping. Unstaffed stores could be a way to address these

challenges and offer a convenient shopping experience to customers in rural areas without the logistical and cost challenges of online retailing.

Unstaffed stores could also be a cost-effective solution to the high cost of last mile delivery in less populated areas. By providing an app for customers to scan and pick up their own purchases, unstaffed stores eliminate the need for expensive last-mile delivery services, which are often not cost-effective for retailers. These stores can provide an essential service to rural communities that have limited access to food and groceries, unlike the urban area. The model of unstaffed stores focuses on serving areas with fewer customers while seeking to profit and expand by licensing their technology to other retailers.

Sweden's successful expansion of unmanned stores throughout the country serves as an optimistic sign of successful consumer adoption and diffusion of innovation. Given the similarities in consumer behavior and food consumption habits across the Nordic market, it's reasonable to expect a positive diffusion of innovation in other Nordic regions. However, the adoption of new tactics heavily relies on consumer acceptance, as businesses strive to make their products or services a part of people's daily lives.

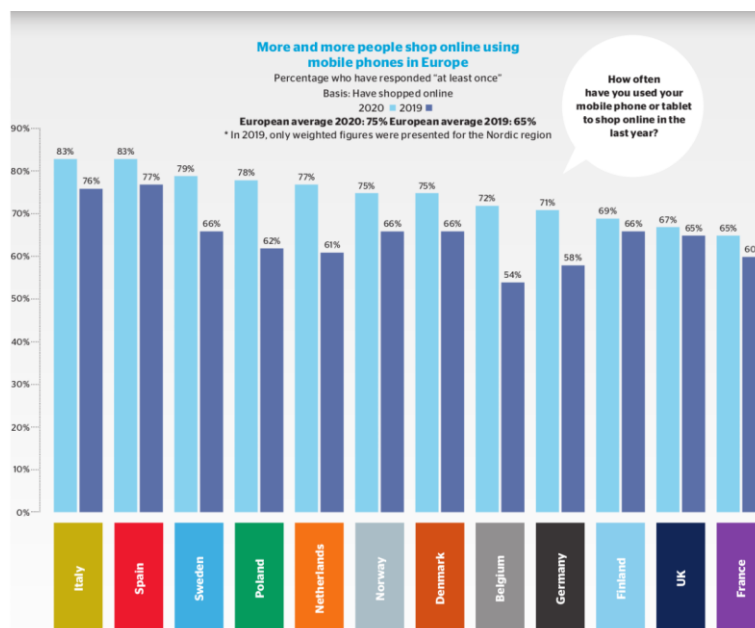


Figure 12. Online shopping using mobile in Europe (Directlink, 2021)

A survey by an e-commerce solution reveals that the Nordic region has shown a higher rate of mobile usage for online shopping compared to the rest of Europe, with an average of 75% and three out of four Nordic countries being above average. This suggests that consumer groups in the Nordic region could possibly have more innovators and early adopters than the late majority and laggards, indicating they are not too conservative and reluctant to change their shopping habits.

As previously mentioned, customers in Norway have also shown a preference for online shopping over traditional retail channels. However, the e-commerce grocery shopping in the Nordic market faces several challenges, including high store density, purchasing behavior, geographical constraints, and profitability concerns. The Nordic region's sparsely populated geography is a significant constraint for retail's "last mile" issue if they want to directly reach consumers. Unmanned stores in rural Sweden can offer an innovative solution for retailers to address the last mile problem and reduce the cost of last-mile deliveries, thereby enhancing profitability and customer satisfaction. To encourage consumers to adopt new buying habits, it is crucial that they are compatible with Nordic customer traits, such as price sensitivity (Minkeviciute, 2019).

5 Conclusion

To conclude, this paper has presented various e-commerce retail business models and explored strategies that the Nordic retail market can employ through different tactics. The conclusion drawn from this paper is that the tactics that can be adopted in the Nordic region are dependent on the size of the area due to the geographical constraints that exist in the region, which is stretched and sparsely populated.

One crucial aspect of retail is cost cutting while providing products directly to the consumer. However, the last mile delivery is an issue that needs to be

addressed as it takes up more than half of the supply chain costs, as mentioned in this paper.

As Minkeviciute points out, the online grocery market in the Nordic region reveals that customers are price sensitive, making it essential for retailers to solve and reduce the costly last mile problem to maintain reasonable prices for the customers. However, due to the region's spread-out geography makes it challenging for retailers to solve the last mile issues in smaller towns and less populated areas.

This paper's case studies highlight some successful strategies and tactics that can be implemented for online retail businesses in the populated areas, such as the automated collection system for online grocery orders that Kesko has implemented in Helsinki. There are several strategies that have not yet been implemented in the Nordics. For instance, as investments in automation continue to grow, retailers operating in Nordic urban areas could consider using autonomous vehicles to solve the last-mile delivery problem. Additionally, using AI and machine learning-powered data analytics to improve algorithms and personalization can reveal potential margin pools. Retailers can also explore the use of blockchain technology and fully automated scan technology to enhance their operations.

However, for scarcely populated areas, the case study of an unstaffed store could be a viable option for smaller consumer groups. By opening unstaffed stores, retailers can offer innovative solutions to serve customers in these areas and control operational costs such as delivery, rent, and staffing.

It is important to note that the study's limitation is based on secondary data sources, which consist of official statistics or annual reports. Such sources may not fully encompass all relevant aspects of the Nordic food e-commerce market. Consequently, further supplementary research could be carried out to augment the findings.

The outbreak of the pandemic triggered a significant global surge in the grocery sector, including in the Nordic region. This growth has led to accelerated development and enhancements of online businesses, which might have otherwise taken longer. While it is unlikely that the rate of growth will be sustained post-pandemic, the adoption of technology and changes in consumer behavior have been accelerated. Despite the challenges that the online grocery retail sector still faces, the strategies proposed in this paper can help retailers move closer to the consumer directly. By implementing such strategies, retailers can overcome operational challenges and provide an innovative solution to serve customers in geographically challenging areas, thereby improving the overall efficiency of the retailing of groceries.

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