

**Abdirahman Isaaq Taakow**

**ADAPTING LOCAL ELECTRONIC COMMERCE**

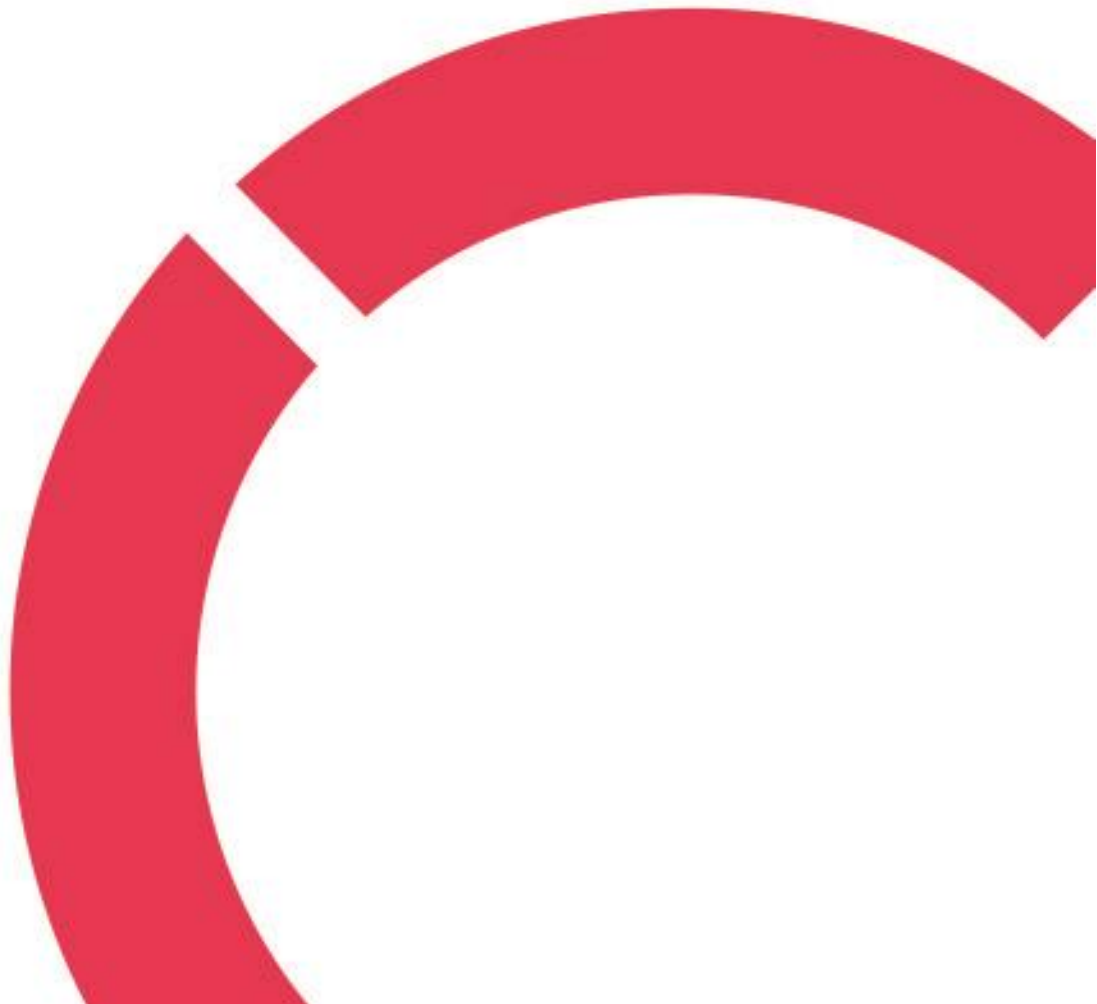
**purchasing local retail after COVID-19**

**Thesis**

**CENTRIA UNIVERSITY OF APPLIED SCIENCES**

**International Business**

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## ABSTRACT

<b>Centria University of Applied Sciences</b>	<b>Date</b> November 2022	<b>Author</b> Taakow Abdirahman Isaaq
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<b>Name of thesis</b> ADAPTING LOCAL ELECTRONIC COMMERCE purchasing local retail after COVID-19		
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<b>Instructor</b> Kenneth Johansson		
<p>This thesis examined how local people think of buying through national e-commerce instead of buying from international companies. And what kind of idea the locals believe shopping from national retailers instead of purchasing international market. Most of the Finnish people know how to purchase electronic shopping inside of the country, but the foreigners are not well adapted, they just think international companies when they hear about e-commerce.</p> <p>The theoretical framework of this thesis explained the existing e-commerce market and the history of e-commerce and how the locals adapted to the current technological trends and the future tools of electronics. The aim of this thesis was to research how locals use local e-commerce retail. Secondly, the thesis was aimed to look into the E-commerce after the Covid-19 pandemic in general views.</p> <p>The empirical part was used as a primary source, and the theory part or literature was based on by books in the libraries, journals, internet sources that are reliable and newsworthy. The commissioner is IGLOBAL Solution Puhelinhuolto in Pietarsaari that provides e-commerce service and is one of the local retailers.</p>		
<b>Key words</b> Current E-commerce, Finland, Online shopping		

## **CONCEPT DEFINITIONS**

<b>ER</b>	E-retail
<b>B2B</b>	Business to Business
<b>B2C</b>	Business to Customer
<b>C2C</b>	Customer to Customer
<b>CRM</b>	Customer relationship Management
<b>C2B</b>	Customer to Business

**ABSTRACT**  
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# 1 INTRODUCTION

Nowadays, people are increasingly using online shopping both for international, national, regional, and local e-commerce requests. Due to the current advent of the on-going covid pandemic disease spread, the world has witnessed the boom and expansion on the use of electronic commerce.

This thesis studies how local people prefer buying products online from local shops instead of buying online retailers outside of the country. The locals are already familiar with the retail in the country, but new residents are not used as updated about local online retail.

The aim of this thesis is to examine how local people are adapting electronic commerce (e-commerce) options from local retail stores, and secondly, to look into E-commerce does after Covid-19 pandemic in general views. Because nowadays there are some changes for e-commerce operation, it could be increasing for using online shopping due to the pandemic situation and most people understanding electronic commerce and adapting new generation of new technology day after day.

The theory part will explain history of e-commerce, current e-commerce, and future trends of e-commerce generally both national and international and how strong and what differences there are with previous and current situation specially after Covid-19 crisis. The important topics were variance of e-commerce and its definition, for example Business to Business (B2B), Business to Consumer (B2C) Consumer to Consumer (C2C).

The commissioner of this thesis is the owner of the one local retailer Iglobal Solution Puhelinhuolto in Pietarsaari that provides electronic commerce and use both offline operation and as well online. So, it means the shop witnesses the different operations and its experience on local customer demands.

The primary data collection method used in this study, is a quantitative study using a questionnaire. The structure of the questionnaire designed to study the general view of the resident and believes towards their preference in purchasing from local shops that offer e-commerce and national e-commerce instead of the international retailers and how they experienced e-commerce before crises and after Covid19 and the different trend in the technology that applies to electronic commerce.

## 2 COMMISSIONER

Kenneth Johansson established Iglobal Solution in Pietarsaari in 2012 with the goal of offering IT help and computer repairs to individuals and businesses. In 2014, the company expanded its operations and began selling previous rental PCs to its clients (Johansson, 2020).

The main business area of Iglobal Solution in 2017 was smartphone maintenance and repair. The online business iglobalshop.fi was founded in 2018 in response to the ever-increasing demand for used phones, and so the sale of used smartphones began. The company's core business sector is still the sale and servicing of second-hand smartphones. (Johansson, 2020.)

Apple, Samsung, OnePlus, Huawei, and Google are among the most well-known companies. The selection includes new products, such as phone accessories, in addition to used phones according to the owner of the company. The vision of the company is to cover the demand of the locals by serving both online and offline operation. (Johansson,2020.)

In general, the company marketing operations are Business to Business (B2B) and Business to Consumer (B2C) but more likely Business to consumer. The owner of the company said that their main customers are locals while the company is growing still in all the regions of the country, and the mission of the company is to enhance the online marketing. (Johansson,2020.)

### 3 E-COMMERCE

Electronic commerce (e-commerce) continues to be a relatively young, emergent, and constantly evolving area of company management and information technology today. Ever since after the so-called "dot com/Internet revolution e-commerce has received and still receives a lot of media attention (Narendra, 2014).

According to the definition of commerce, it embraces the idea of trade, or the large-scale exchange of goods between different countries. E-commerce can be understood to comprise the electronic medium for this transaction through association. Therefore, a general definition of electronic commerce is the large-scale exchange of goods (physical or intangible) between various nations using an electronic medium, specifically the Internet. This has the implication that, on a macro-environmental level, e-commerce encompasses a whole socio-economic, telecommunications, and commercial infrastructure. (Narendra, 2014.)

The principles of e-commerce are provided by the interaction of all these components. The definition of business, on the other hand, is a commercial company that is a going concern. E-business, roughly speaking, refers to any aspects of an organization's management and operations that are electronic or digital in nature. These comprise both direct business operations that have an impact on the enhancement of efficiency and integration of business processes and activities, such as marketing, sales, and human resource management, as well as indirect activities like business process re-engineering and change management. (Narendra, 2014.)

E-commerce usually referred to as e-business, in the exchange of product is and services via electronic communication. Even though the public only become aware of e-commerce in the last decade or so, it has been around for over 30 years. Business to Business (B2B) and Business to Consumer (B2C) are the two main categories of e-commerce. Companies use electronic networks to make deals with their customers distributors, and other partners in B2B. Companies sell products and services to consumers under a Business-to Consumer (B2C). Even though B2C is more well known to the public, B2B is the revenue leader in ecommerce. (Tian and Stewart agaut,2021,1.)

E-commerce is a business strategy that allows consumers and businesses to purchase products and services over the Internet. E-commerce can be done on computers, tablets, smartphones, and other smart



devices, and it operates in four key market categories. E-commerce transactions can be used to buy almost any commodity or service imaginable, including books, music, airplane tickets, and financial services like stock investing and online banking. As a result, it is regarded as a highly disruptive technology (Bloomenthal, 2021.)

### **3.1 The history of E-Commerce**

Everyone has shopped for something online at some point, so we've participated in e-commerce. As a result, it comes as no surprise that e-commerce is widespread. However, few people are aware that e-commerce has a long history that predates the internet (Bloomenthal, 2021).

Ecommerce dates to the 1960s, when businesses adopted an electronic technology known as the Electronic Data Interchange to make document transfers easier. The first transaction, however, did not take place until 1994. This entailed the selling of a CD between friends via NetMarke, an online retail platform. Since then, the industry has gone through a lot of changes, resulting in a lot of evolution. As Alibaba, Amazon, eBay, and Etsy became big stars, traditional brick-and-mortar stores were pushed to embrace new technologies to stay afloat. Consumers can readily access a digital marketplace for products and services created by these companies. (Bloomenthal, 2021.)

People are finding it easier to shop online thanks to advances in technology. People can interact with businesses via smartphones and other mobile devices, as well as download apps to buy products and service. The event of free shipping, which lowers customer expenses, has also contributed to the e-commerce industry's growing popularity (Bloomenthal, 2021). In figure 1 there is a short time-line of a bout history of e-commerce.

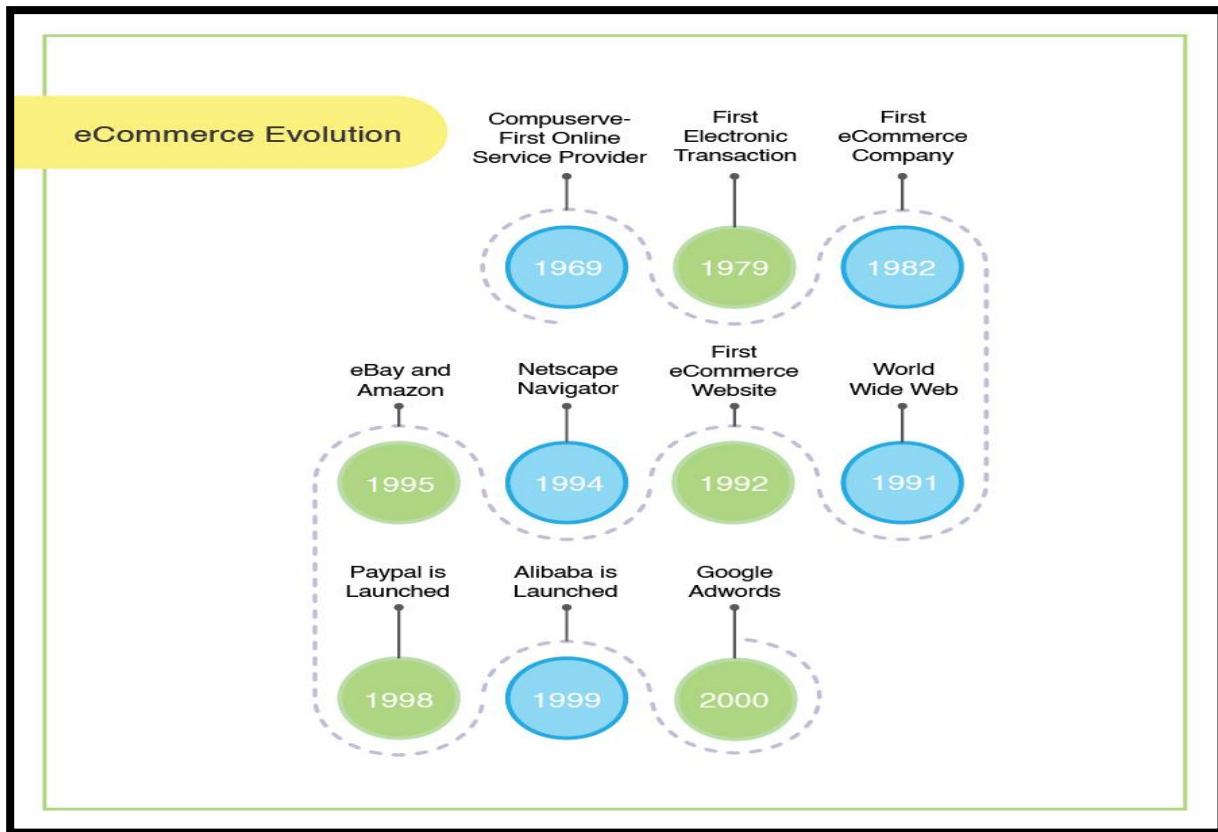


FIGURE 1. Short Timeline of e-commerce (Adapted, Aarohi, 2019).

According to Aarohi Pathak (2019) the first CompuServe online was provided in 1969 and the first electronic transaction in 1979, the first e-commerce in 1982. In 1991 the Worldwide Website started and, in 1992 the first eCommerce started, after that in 1994 Netscape Navigator, and earlier in 1995 eBay and Amazon, in 1998 even PayPal was launched. Alibaba was launched in 1999, after that Google AdWords in 2000. All those enhancing technologies have taken part in developing e-commerce. Figure 1 below explains what from 2000 to 2034.

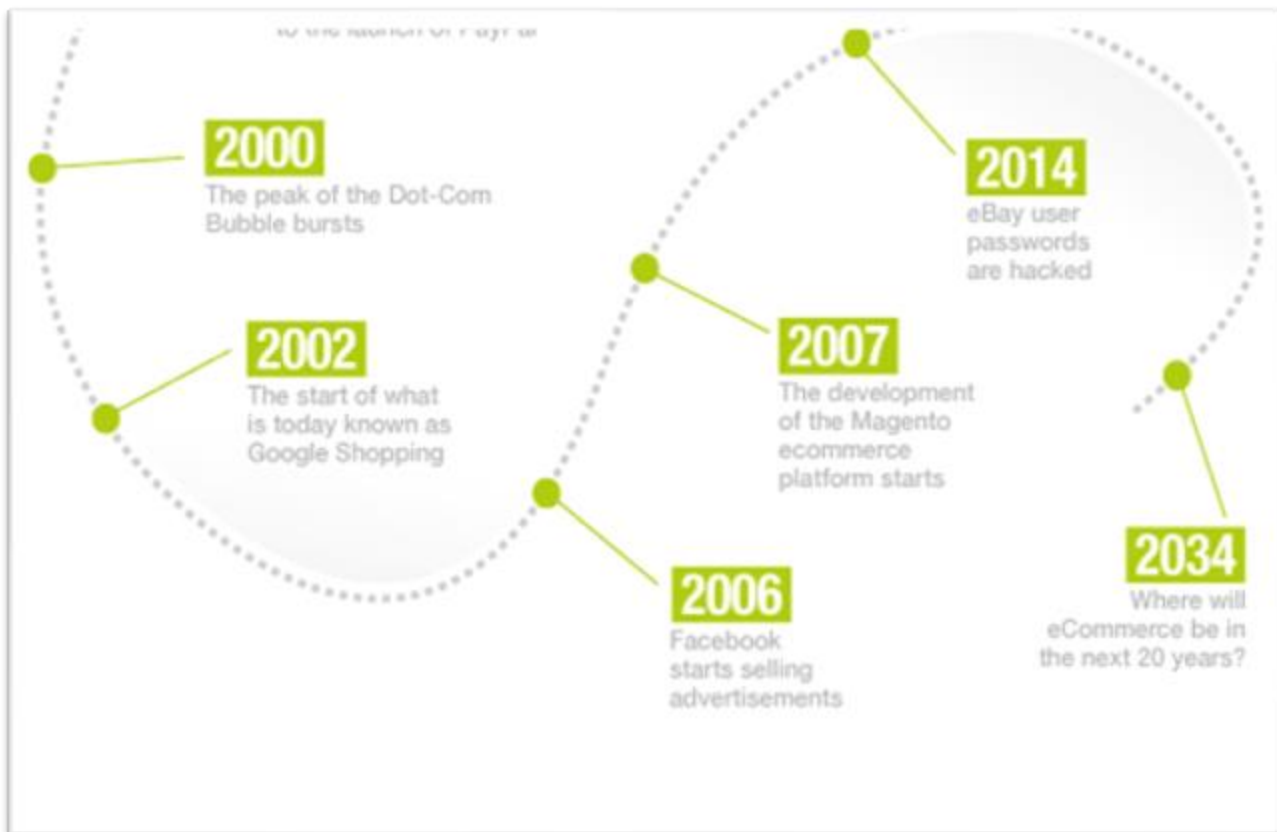


FIGURE 2. Timeline of e-commerce (Adapted, Yoma, 2022)

According to the timeline of e-commerce (2022) in figure 2 the peak of the Dot-com Bubble bursts started in 2000, and in 2002 started what is known today as google shopping. In 2006 Facebook started selling and advertising, after that in 2007 for the Magento eCommerce platform was developed. In 2014 eBay user passwords were hacked, and from 2022 to 2034 in 12 years there were some exchanges about eCommerce no-one knows. All these trends and changes in e-commerce played a big role in developing e-commerce.

### **3.2 Finland's e-commerce and retail contribution**

Finland is amongst the top ten countries that uses ecommerce regionally and internationally. According to Nets, ecommerce in Finland is expected to be worth 11.8 billion euros in 2020. Consumers in Finland, on the other hand, spent 4.5 billion euro on digital retail purchases in the domestic and international markets in 2019, up 12 percent from previous year, according to the Finnish commerce foundation. (Nets ecommerce reported 2020.)

The statistics made by the Finnish ecommerce foundation indicated that online grocery shopping grew up during Covid-19. Since the beginning of 2020, just before Finland and the rest of the world started dealing with the Covid-19, the number of people who routinely purchased groceries online has more than doubled. According to the organization, e-commerce currently makes up around 3% of the nation's total grocery trade, with an expected increase to 5% over the next four years. According to the organisation, families with children are especially interested in shopping groceries online, largely to avoid wasting time and effort traveling back and forth between physical stores. On the other hand, being away from other people during the pandemic was the top reason for seniors over the age of 65 who ordered food online. (Pitkänen 15,12,2021.)

### **3.3 Finland's e-commerce before and after Covid-19**

Online food shopping was not widely used by consumers prior to COVID-19. However, the epidemic pushed shoppers to purchase their food online, which led to a 40% increase in industry-wide sales. With more people cooking at home and ordering their goods online, there has been a dramatic shift in consumer behaviour. Large corporations, like Amazon Fresh, entered this market because of this change in behaviour, and websites and apps for quick grocery delivery online also became popular. Currently, grocery retailers offer online delivery as an alternative, and new companies are breaking into the industry. (Dalek, 2020.)

E-commerce is now at the forefront of retail as a result of COVID-19. Prior to the pandemic, the global rate of growth for online sales was a consistent 4.5 percent each year. In general, businesses who were able to adapt to digital platforms prospered while conventional merchants with poor online strategies

declined, with numerous well-known ones declaring bankruptcy. However, Covid-19 e-commerce has risen dramatically, which has also led to an increase in the digital financial services offered to consumers and small companies. (Montag, December 2020.)

### **3.4 Covid-19 and e-commerce**

The pandemic of COVID-19 has hastened digital transitions. Some economic and social activities are becoming increasingly dependent on digital solutions. They've proven essential for telemedicine, telework, and online education, not to mention keeping our social links alive in times of physical separation. We've also seen an increase in e-commerce in underdeveloped countries, which has long-term ramifications. Existing digital differences, on the other hand, are likely to result in even bigger inequities unless they are appropriately addressed. (UNCTAD, 2020.)

The analysis by which reveals a key global policy challenge: more efforts are needed to help eliminate gaps in e-trade readiness that currently exist among countries. Governments, businesses, consumers, and foreign development partners all have a stake in ensuring that e-commerce plays a positive and significant role in national and international rescue efforts. That aim should be prioritized in terms of resources. (UNCTAD, 2020.)

The eCommerce industries will benefit from Covid 19 in the long run. People are now preserving social distance and finding comfort in internet buying. They are far less likely to prefer going to traditional stores and the purchase from the comfort of their own homes. Because of the shift in consumer preferences, eCommerce enterprises have reaped huge benefits, and digital marketers are thriving and generating significant money. (Naviwala, 2021.)

### **3.5 The impact of Covid-19 on e-commerce**

COVID-19 was a global emergency that impacted millions of people. The global economy suffered a significant decline due to a lack of purchasing power, but one business, namely the E-commerce industry, was thriving. The governments set tight limitations. The Covid-19 epidemic altered people's lives. For needs and commodities, consumers were consciously turning to internet shopping. E-commerce, or internet purchasing, was born out of self-disconnection and isolation (Naviwala 2021.)

Some shops were completely shut down when Covid-19 erupted. People were afraid to spend and worried about their financial situation, which reflected the fear of the Covid-19. The E-commerce business was expanding and booming to new heights at the time of the epidemic, acquiring more than \$26 trillion. The United States and the United Kingdom were the leading countries in the e-commerce market, with respective shares of 17 and 24 percent. (Naviwala 2021.)

During the covid-19, the e-commerce for Amazon alone increased its profits by approximately 200 percent. Many e-commerce businesses have benefited from the success, including the IT, Food, other products. Now people have gone back from remote to in-office. Because the effects of corona are unlikely to dissipate anytime soon, if ever, businesses and brands are shifting to online transactions. Although there are fewer limitations than before, consumer behaviour has significantly altered. There is now a sense of confidence and dependence on online networks that will not fade away very soon. (Naviwala 2021.)

Many small firms have been compelled to rethink their decades-old established business practices in the wake of the COVID outbreak or suffer permanent closure. New and established technologies being shoved to the forefront of every business toolset, and forward-thinking companies are grappling with the talent issues that these new digital business skillsets raise. (International Trade Administration, 2020.)

## 4 TECHNOLOGICAL REVOLUTION THROUGH E-COMMERCE

Computers, telecommunications technologies, and the Internet have all changed the way businesses operate around the world. Traditional commerce activities are being transformed into electronic commerce, and traditional business is being transformed into electronic business, thanks to technological advancements. Although the total volume of business conducted through e-commerce is not big in most nations, it is increasing rapidly. (Kaul, 2019.)

E-commerce faced numerous obstacles in the past, but with the rapid advancement of technology, it has improved. Technology has advanced in recent years, assisting both buyers and sellers in carrying out transactions smoothly. Through online technology, buyers can now access goods and services regardless of the distance between them and the supplier. Even sellers can now collect money without moving an inch from their current location. E-commerce has improved because of technological advancements. Web design advancements are assisting e-commerce enterprises in reaching a larger audience. Payment including both services and goods has become more efficient and quicker as technology has advanced. The introduction of new payment systems such as PayPal, Apple Pay, and Google Pay has made it incredibly easy for buyers and sellers to transact over long distances. A buyer can now pay money to Africa from anywhere in the world in a fraction of a second without changing his location. This has aided E-commerce in successfully performing its operations. Trust issues were also a big issue in E-commercial commerce's operations. This has now been solved thanks to the invention of blockchain technology, which ensures that one's money is safe and secure. E-commerce enterprises have advanced thanks to this technology. As a result, the gap between buyers and sellers has narrowed. A buyer can communicate directly with the vendor online using chatbots. (Her, 2022.)

It could directly discuss commodities and even haggle over prices. The customer can also request a snapshot of the product, which the vendor will give to him. This transaction takes place entirely online, with neither the buyer nor the vendor going from one location to another. This improved technology has aided E-commerce in conducting business quickly and saving money on transportation for buyers and sellers to meet. Some complex chat bots will show you the product's history as well as other recent buyers' opinions on the product. This has aided shoppers in making decisions about which product to purchase by allowing them to examine suggestions from prior customers. Managing E-commerce has historically been a difficult task. Excess stock, bad fund management, and dissatisfied consumers were

all possibilities when management was done manually. Since the introduction of the inventory management system, it has become more easier to manage and conduct E-commerce, it saves time and eliminates the possibility of human error. As a result, many managers are aware of the number of items on hand, the number of goods sold, the number of goods that require restocking, the cash flow, and customer satisfaction. Fast shipping is now possible thanks to technological advancements. A well-known website, such as Amazon, has made it feasible to deliver one's purchases to the nearest warehouse. Technology has enabled customers to order products, provide their location, and have the goods sent to them. This has made E-commerce trading quite simple. Technology has made shipping items from other countries relatively simple. Your goods are ordered, shipped by air, and delivered to the nearest warehouse. They will subsequently be carried to your home via road. Since technology has made the globe a global village, it can be claim that technology has made the distribution of items in E-commerce quite simple. Customers used to have a difficult time finding certain things in the past. Artificial intelligence has made it possible for many shoppers to track down the actual product in just a few clicks. There are many products on the market, making it difficult for a customer to track down the product. (Her, 2022.)

Many people have various ideas about how they would like their products to appear. When the thoughts of many people come together, they create a great product that will sell in the consumer's best interest. Audi, for example, employed it in the development of their automobile. They allow the customer to modify the reality of his car, and then a car is built based on his specifications. Finally, Audi was able to sell so many cars because they paid attention to their customers' preferences and tastes. We can infer that technology has played a significant influence in making E-commerce a more efficient business environment. Despite the distance, technology has made it incredibly easy for buyers and sellers to connect. It can be also observed how technology has transformed the world into a global village, as you can buy items from anywhere in the world and have them delivered to you in a matter of minutes. Technology has also made E-commerce management appear simple by creating an inventory management system that ensures that all sales, stock, and cash flow are in order. Customers can now voice their opinions on products and indirectly participate in production thanks to technological advancements. (Her, 2022.)



## 4.1 Trends of e-commerce

Customers may now buy a variety of products from various shops in a short period of time thanks to the assistance of IA. Customers can finish their shopping in a very rapid time thanks to this type of technology. Some consumers require certain characteristics that only the IA can identify and locate. Another form of technological innovation utilized to improve E-commerce augmented and virtual reality. This allows customers to discuss how they want their product to appear. This has helped companies improve their products in a variety of industries. (Agenda, 2022.)

It's not an option to keep up with e-commerce developments; it's a requirement. Keeping up with industry trends is especially vital for e-commerce business owners who want to stay competitive and spot new chances. As the year ends, there are important e-commerce trends to keep an eye on in 2022. E-commerce will account for 20.4 percent of worldwide retail sales by the end of 2022, up from only 10% five years ago, according to a new industry research. To put it another way, the e-commerce market is growing increasingly congested. (Glynn, 2022)

There are different important trends in e-commerce. For e-commerce, augmented reality (AR) has been a game changer. This type of technology allows shoppers to see the product they're looking for up closely, which aids in their purchasing decision. In certain areas, such as fashion and home decor, AR transforms the purchasing experience by allowing customers to get a better feel for the item without having to see it in person. According to Gartner, 100 million people were shopped using augmented reality by 2020, so it will be interesting to see how it plays out next year. This prediction is shared by Michael Prusich, Director of Business Development at digital Agency. Secondly there is a voice volume, not only are smart speakers becoming more popular, but consumers are now relying on voice assistants to do daily activities. According to Loop Ventures, by 2025, 75% of US households will own a smart speaker. More people will use voice search to shop online, order food, and plan their life as more houses embrace smart speakers. In terms of keywords and content, the rise of voice search presents an opportunity for ecommerce businesses. (Dived 2020.)

With the AI, customers can have automated, individualized purchasing experiences thanks to artificial intelligence (AI) and machine learning. AI is always collecting information on how customers shop, when they make purchases, and what they want from a product or service. It's a piece of technology

that can't be recreated in a physical location. The intricacy of AI and the potential to make it more human is becoming increasingly crucial, according to Ron Smith, Editor in Chief of *The Digital Outdoor* 2020. People want to know that companies care about them, and AI will be programmed to reflect this. On social media, there is inverse phenomenon, when AIs learn from humans' more negative comments, but it's highly likely that consumers will seek the impact. Companies can soon teach bots to give comfort and products based on customers' moods if they can learn how to build phrases to communicate emotion. (Dived 2020.)

The last trends are on-site personalization uses, B2C and B2B buyers alike are looking for individualized, personalized shopping experiences on the internet. A buyer can receive individualized product suggestions and detailed customer assistance from the data acquired by AI. Personalized experiences on-site or in marketing efforts have been demonstrated to increase sales, with one study revealing that shops with advanced personalization capabilities saw a 25% increase in revenue. For reference, this accounted for 19% of selected firms, whereas merchants who were developing basic personalization skills had a revenue gain of 10% or over; shops in this category account for 40% of operating parties. In 2020, Kaleigh Moore, a freelance writer and ecommerce expert, saw AI-powered personalization becoming more important. As companies collect and use more data, they will be able to provide shoppers with highly personalized experiences. (Dived 2020.)

## **4.2 Advantages of e-commerce**

Through a faster buying process for customers, e-commerce has sped up the entire purchasing process. They can purchase products while sitting at home, negating the need to travel to actual stores. It performs exchanges more quickly and saves a great deal of time. Reduces operating costs The entire cost of operations for an organization has decreased as a result. Businesses no longer need to set up physical stores thanks to e-commerce. There are significant expenses associated with running an outlet, including rent, utilities, other fees, and employee salaries. E-commerce eliminates a plethora of fees and conducts all corporate operations online. Customized buying experiences are made possible by e-commerce, which gives customers more power. Customers are free to browse a huge selection of products based on their preferences and needs. Online stores display products to customers based on their location and benefit. (Ram, 2022.)

Service is available 24 hours a day, 7 days a week: the online shopping office is open constantly. One of the key advantages of online commerce is that customers can access the web shop at any time. There is no set official opening and closing time here, unlike real outlets. With the use of global interfaces, online businesses can connect with customers in remote locations without experiencing any geographic cutoffs. People can submit their orders through any channel and have them delivered to their local region. It provides comprehensive information so that users may compare various products in an efficient manner and choose the best one. Online purchasing has simplified the process of retargeting customers for businesses. While customers shop online, the electronic business gathers a wealth of information about them. Customers can occasionally be contacted by giving them tailored messages, communications, vouchers, and time-limited offers. (Ram, 2022.)

Shopping online is a flexible approach to make purchases. In an internet market, there are no time constraints. You can scroll down and order your preferred product whenever you have time. Large savings, choosing to shop online allows you to save time, energy, and petrol. Simply move your fingers instead of moving your body. Comparison, when buying online, you can quickly compare the costs of various things from various websites. Going to numerous stores to compare prices when doing offline shopping will be a demanding task. Online retailers are swamped with a huge choice of products, unlike conventional stores that only provide a small selection. They provide a wide range of options. (Srivastava 2022.)

### **4.3 Disadvantages of e-commerce**

Absence of personal touch could be a disadvantage of different types of service and product in e-commerce, if customers choose to purchase online, they are denied the opportunity to touch and feel the things. When they properly examine the goods before making a purchase at physical stores, they are occasionally more satisfied (Ram, 2022).

No warranty on product quality not liable for the effectiveness, legality, safety, or any other feature of any products., Customers cannot obtain a warranty regarding the nature of goods that are available online. They could be duped by businesses and receive subpar goods. Security issues, while conducting online transactions, customers could lose their fundamental credentials. Online, there are numerous programmers that might steal customers' information and cause them great harm. (Ram, 2022.)

Long Delivery Period with short delivery times over short distances another major drawback of online buying is that customers must wait a longer period for their purchases to be delivered. Customers receive their goods immediately thanks to disconnected shopping. When performing online shopping, customers cannot try the product on out before purchasing. They lack an office for setting prices and are unable to obtain as much information about the product's usage and components as they could in the actual store where the sales representative deals with customers directly. (Ram, 2022.)

Because you cannot personally see the product before purchasing it, online buying does not completely satisfy customers. The possibility of receiving the erroneous product is very high. Returning the product is difficult because the procedure is not as straightforward if you are not happy with it. Some websites don't even have a refund or exchange policy. Demand, when placing an online order, the item will take some time to arrive. As a result, you must wait a few days before getting the product. For those who are skilled at negotiating, offline markets are a fantastic option. Prices are fixed in internet shops, and you cannot negotiate them. (Srivastava 2022.)

## 5 EMPIRICAL RESEARCH DATA

This thesis examined how local people think of buying through national e-commerce instead of buying from international companies. And what kind of idea the locals believe shopping from national retailers instead of purchasing international market. Most of the Finnish people know how to purchase electronic shopping inside of the country, but the foreigners are not well adapted, they just think international companies when they hear about e-commerce. The theoretical framework of this thesis explained the existing e-commerce market and the history of e-commerce and how the locals adapted to the current technological trends and the future tools of electronics. The commissioner is IGLOBAL Solution Puhelinhuolto in Pietarsaari that provides e-commerce service and is one of the local retailers.

### 5.1 Quantitative methods

Numerous research goals can be served by quantitative research. Experimental, correlational, and descriptive research are all examples of quantitative research methods. For formally testing hypotheses and making predictions for the future, correlational and experimental research methods are frequently used. Results of bigger, more generalized populations may be used in correlational and experimental research methodologies (Morrow, 2021).

The collection of measurable data and the application of statistical, mathematical, or computer methods, the quantitative research is the systematic analysis of phenomena. Using sampling techniques and the distribution of online questionnaires, polls, and surveys, for instance, quantitative research gathers data from current and future clients which can be represented numerically as the results. (Questionpro, 2022.)

This method of data collecting is frequently used for quantitative data collection. A survey includes a variety of question forms that are focused on the study topic, including both closed-ended and open-ended questions. Physical administration of a survey is an option, as well as the use of online data collection tools by using Google online form (Formplus, 2021).

## 5.2 Validity and reliability

Although they are closely related, the ideas of validity and reliability express various measurements' characteristics. A measuring instrument can be accurate without also being valid, but if it is valid, it is also likely to be accurate. However, reliability by itself does not guarantee validity. A test may not exactly reflect the desired behavior or quality, even if it is dependable. The validity and reliability of the measuring device that researchers plan to utilize must thus be tested. These two requirements must be met by the measurement device. If not, the researchers' ability to understand the research findings will suffer. (Anastasi & Urbina, 1997.)

If the measuring tool measures the behavior, it is said to be valid, or characteristic if it seeks to quantify, and measures how effectively the measuring device carries out its purpose. The relevant and suitable interpretation of the data obtained from the measuring device because of the analysis determines validity. Validity was defined by Whiston (2012) as obtaining data that is suitable for the intended application of the measuring devices. In this situation, validity tests—which verify whether the scale's expressions produce appropriate measurements considering the research's goal—come into play. (Anastasi and Urbina, 1997).

Testing the accuracy of the measurement device is more challenging, but more significant than determining its reliability. The measuring device needs to measure what it says it is measuring for the research to produce useful results. The validity of the results of the analyses is ensured using an approved measurement instrument (Oluwatayo, 2012).

The stability of the measuring device being used, as well as its steadiness over time, alternatively said, reliability is the capacity to measure equipment that, when used at different periods, produce findings that are comparable. Naturally, it is unlikely that the same results will be obtained repeatedly due to variations in the application of the measuring instrument, as well as modifications in the population and the sample. However, reliability can be determined by a significant positive correlation between the measurement tool's results. The measurement device's accuracy must be considered for the study's findings to be valid. Therefore, researchers should make sure the measuring device they utilize is trustworthy. (Whiston, 2012.)

The questionnaire used for this thesis was written in straightforward English, and the assertions were constructed as simply as feasible. The supervisor read and controlled and the opponent provided input prior to the questionnaire being distributed. Regardless of language proficiency, the questionnaires are basic statements that are required to be understandable for everyone.

## 6 RESULTS AND ANALYSIS

The questionnaires were created and distributed in google form and the respondents were generally 43 people, while some of the respondents did not answer some chapters, and it will be explained which ones are answered by all respondents, and which ones they forgot to answer. But the aim of this research as mentioned at the beginning of the thesis is to examine, how use locals e-commerce retail locals. Secondly, was aimed to look into the E-commerce after the Covid-19 pandemic in general views. The questionnaire was built in a Google online form and consisted of 11 questions. Data was collected from the 30<sup>th</sup> of August to the 20<sup>th</sup> of September 2022 and variety of channels were used to provide the questionnaires like Emails, What's up, and Facebook. In general respondents were 43 and some chapters (figures) were responded by fewer than 43, some of respondents were 42 and 41 people so, it will be mentioned and explain on every figure how many people responded and what kind of market they are shopping.

1. What is your gender?

43 responses

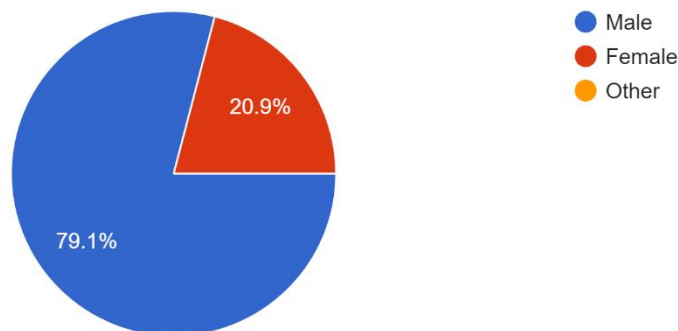


FIGURE 3. Gender

As can be seen in figure 3 the respondents were 43, of which 34 (79.1%) were male, while 9 (20.9%) were female and there are no others, which means the number of men is higher than women.



2. How old are you?

42 responses

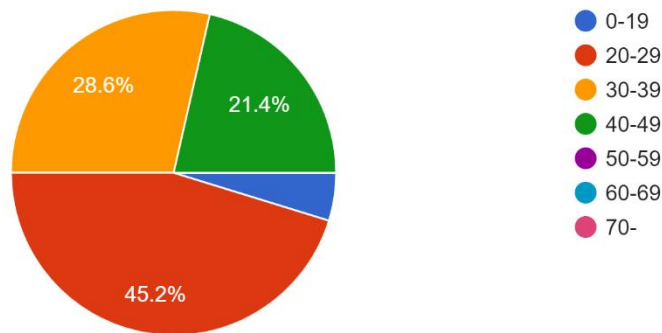


FIGURE 4. Age

As can be seen in figure 4 the respondents were 42- and one-person's answer was missing as mentioned above some participants to fill in some contents(figures) which means 19 (45.2%) between 20-29 years old and 12 (28.6%) between 30-39 years old, and the third group of 9 respondents means 21.4% were between 40-49 years old. The last smallest group answered were 2 persons which means 4.8% and between 0-19 years old. The largest group who answered were from 20-29 years old.

3. How many times in a year do you shop online?

41 responses

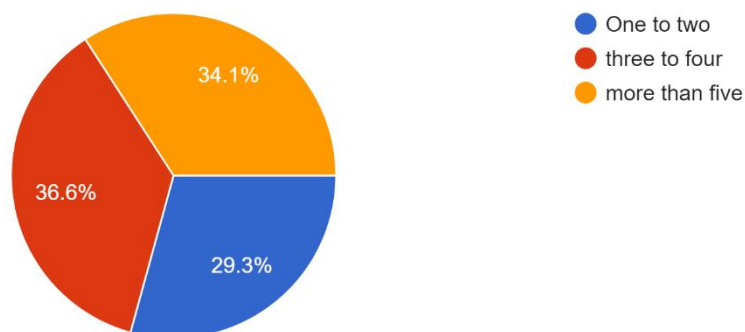


FIGURE 5. How many times in a year do you shop online?

As can be seen in figure 5 the next questions were about frequency of online shopping all respondents were 41 in this part, two persons did not respond. In 15 respondents (36.6%) reported they are shopping three to four times in a year and the second group 14 (34.1 %) are shopping more than five times in a year and the third group 12 (29.3%) are just shopping one to two times in a year.

#### 4. do you find online shopping difficult?

42 responses

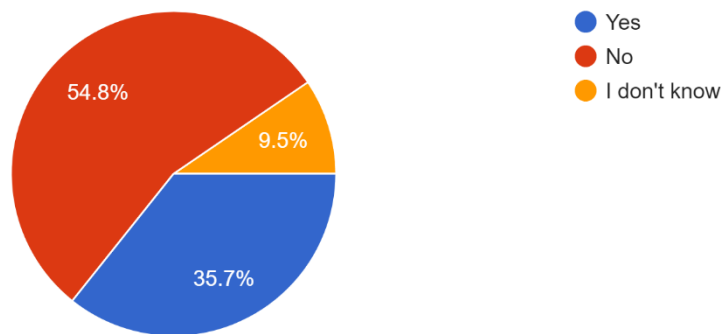


FIGURE 6. Do you find online shopping difficult?

The next question was about shopping challenges as can be seen in figure 6 the respondents were 42 and one person did not answer 23 (54.8%) are answered “No” it means they don’t feel difficulties towards online shopping, and they are the largest group. The second group were 15 (35.7%) and they responded “Yes” that means they feel difficulties when they are shopping through online commerce. The last and smallest group were 4 (9.5%) who answered “I” don’t know they don’t have an idea about online operations. It seems most of them are familiar with online shopping.

5. do you use online shopping from local retailers?

42 responses

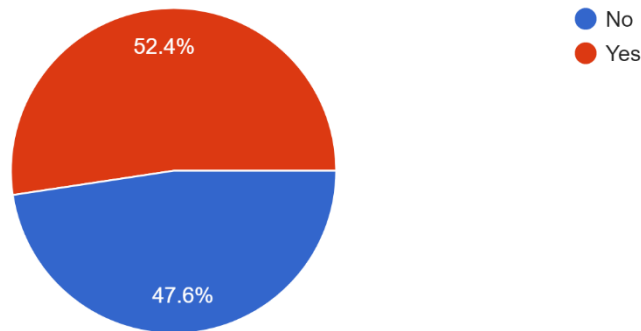


FIGURE 7. Do you use online shopping from local retailers?

The next question was about local online retailers, as can be seen figure 7 the respondents were 42 and one person did not answer this question. In 22 (52.4%) responded “Yes” which means they are familiar with local retail and very interested. In the second group, 20 (47.6%) answered “No” they are not so updated about local retails. It seems most of the local people are trusting and shopping from the local retails.

6. Which market do you think is more secure, the national market (Finland), or international market (abroad)?

41 responses

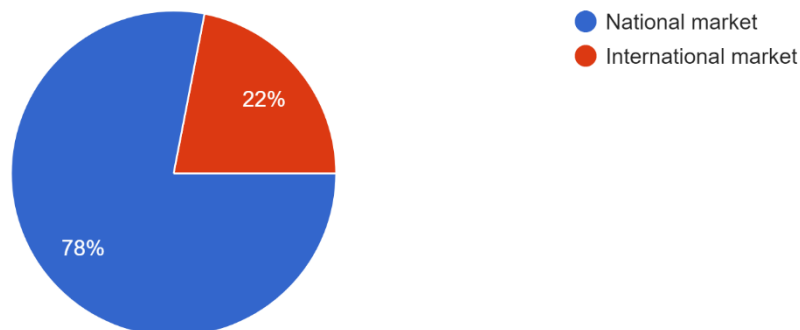


FIGURE 8. Which market do you think is more secure, the national market (Finland), or international market (abroad)?

The next question was about which market is more secure national and international market, as can be seen figure ,8 the all the respondents in this part were 41- and two-people's answers missing so, 32 (87%) chose the National market which means they prefer shopping inside of the Finland online operation markets. The second groups were 9 (22%) and selected international market (Abroad) it seems there is a big difference between the groups, and the National market is more trusted than the international market (outside of the Finland).

7. which one do you trust more, traditional business ( physical store) or electronic business (e-commerce)?

42 responses

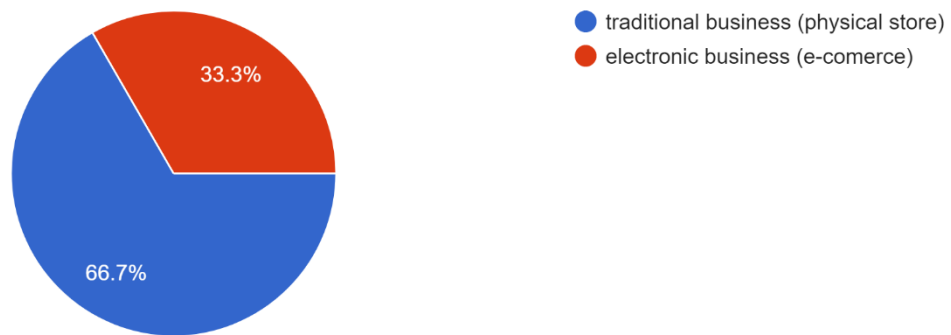


FIGURE 9. which one do you trust more, traditional business (physical store) or electronic business (e-commerce)?

The next question was which market do you trust more traditional business and electronic business as can be seen in figure 9 the respondents were 42 in total and one person's response was missing so, 28 (66.7%) preferred Traditional Business (physical store). The second groups were 14 (33.3) and selected electronic business (e-commerce). It seems most respondents are confident and interested in shopping the traditional way.

8. Do you think the use of e-commerce increased in general since Covid-19 started?

42 responses

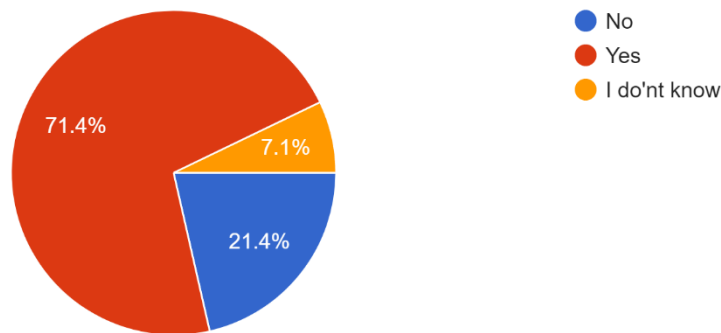


FIGURE 10. Do you think the use of e-commerce increased in general since Covid-19 started?

The next question was do you think the use of e-commerce increased in general since Covid-19 started as can be seen in figure 10 the respondents were 42 in total and one person's response was missing so, 30 (71.4%) said "Yes" and indicated when Covid-19 started e-commerce increased and even they are the largest group. The second group responded "No" are 9 (21.4) which means they feel there are not any changes in e-commerce. The last group answered 3 (7.1%) and said I don't know means they are not sure about that. It means using e-commerce has increased nowadays, due to the Covid-19, or understanding the way of using technology for the people.

9. do you use more e-commerce since Covid-19 started?

41 responses

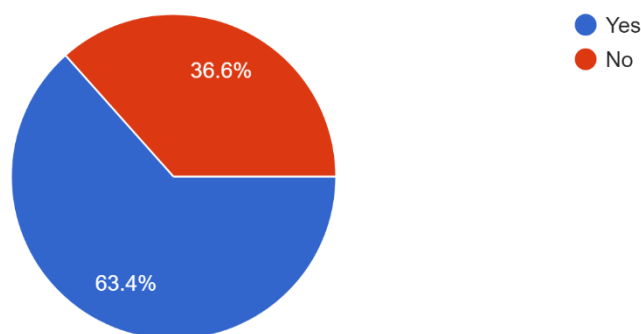


FIGURE 11. Do you use more e-commerce since Covid-19 started?

The next question was using more e-commerce since Covid-19 started as can be seen in figure 11 the respondents were 41 in total, and two person's answer was missing in 26 (63.4%) said "Yes", even though they are the largest group which means they use more e-commerce since Covid-19 has started. In the second group there were 15 (36.6%) who answered "No" which means they don't use more e-commerce since Covid-19 started. The largest group were indicated that they are using more e-commerce since Covid-19 has started.

10. How has Covid-19 changed trends in technology in general?

42 responses

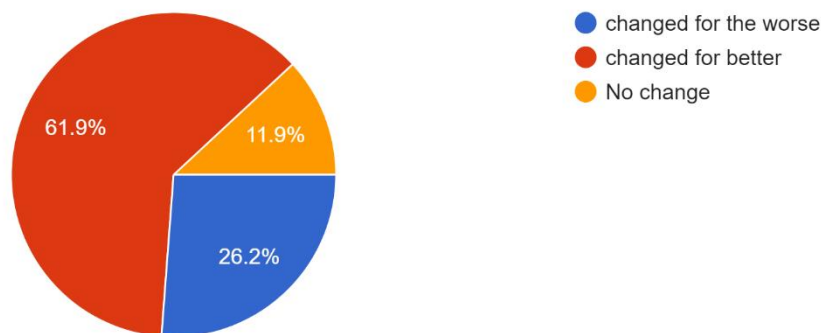


FIGURE 12. How has Covid-19 changed trends in technology in general?

The next question was how Covid-19 has changed trends in technology as can be seen in figure 12 the respondents were 42 in total, and one person's answer is missing so, 26 (61.9%) said "Yes" Changed for better means Covid-19 changed trends of e-commerce. In the second group, 11 (26.2%) said "No" changed for the worse they believe Covid-19 has changed in a bad direction in the e-commerce. The last group was 5 (11.9%) who answered said no change, they believe there is not any change. Most of the respondents agreed that Covid-19 has played a major role to increase e-commerce.

### 11. Do you think electronic operation businesses are taking part of the growth of the GDP?

42 responses

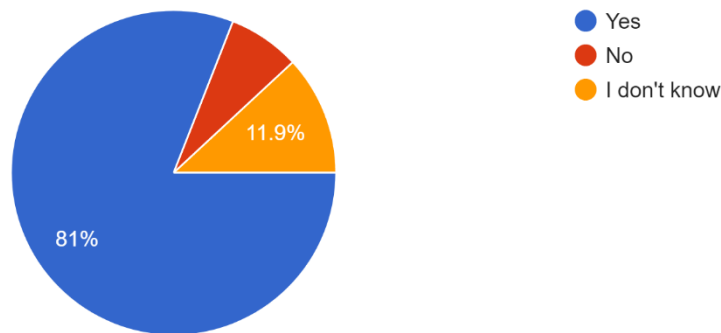


FIGURE 13. Do you think electronic operation businesses are taking part in the growth of the GDP?

The next question was electronic operations are taking part in the growth of the GDP as can be seen in figure 13 the respondents were 42 in total and one person's respond was missing so, 34 (81%) said "Yes", they indicated electronic businesses are taking part in the growth of GDP and even they are the highest group. The second group 5 (11.9%) selected I don't know; they don't have any idea about that. The last group was 3 (7.1%) and said "No", they believe e-commerce does not take part in the growth of GDP. Most of the participants (respondents) agreed that e-commerce enhanced to grow up the GDP of the country.

Therefore, technology has a lot of support in sales. Additionally, from the viewpoint of the consumer, effective expenditure is achieved through the prudent use of e-commerce. Anyway, purchasing e-commerce is so huge, both national and international, while most customers are preferring national e-commerce. All the respondents' results show and indicate that they feel confident when they shop in national e-commerce and physical stores in specially.

## 7 CONCLUSION AND RECOMMENDATION

To sum up, the initial objective of this thesis was to examine how local people are using/Adapting e-commerce options from local retail stores, Secondly, the thesis was aimed to look into the E-commerce after the Covid-19 pandemic in general views. The research unit also sought to understand the online buying experience of customers. Customers' interest in online purchasing has been indicated in responses to questions regarding their experiences. E-commerce now serves as a necessary component of daily living.

The most important technologies for online business were examined in the theoretical section using data from numerous trustworthy sources. There was different information about e-commerce that gave the author a deeper understanding of the unique problem of the variability of modern technologies, in other words, technology is a presumption and a development factor for e-commerce. Technology offers solutions to issues affecting distributors of commodities, consumers, and buyers. It aids vendors in cutting expenses and boosting earnings.

Customers can use technology to learn more about products, compare items with those from different suppliers, share information among themselves, and evaluate products to weed out those from unreliable sources and low quality. Because people may now trade internationally, online purchasing is also the foundation of product diversification. Therefore, technology has a lot of support in sales. Additionally, from the viewpoint of the consumer, effective expenditure is achieved through the prudent use of e-commerce. Anyway, purchasing e-commerce is a massive, both national and international, while most of the customers are preferring national e-commerce.

Customer satisfaction is a pillar of the business and therefore the owner of the business must always be careful what kind of service is offered to the customers for example if is goods quality, good service, easy purchase processes, guarantee for goods if needed to return the good (return policy). So, the research findings showed that the use of e-commerce is increasing day to day and the users are different, most of them prefer to use local retails (National market) if it is physical or online shopping, and they pointed out the more trusting traditional way. I recommend the commissioner should use both the traditional way (physical store) and the online system (e-commerce) and should pay attention to customer satisfaction because the more you satisfy your customers the more your business will grow. Most of



the respondents indicated that they started using e-commerce mostly when the Covid-19 started, which means using e-commerce nowadays is massive and the commissioner must concentrate on e-commerce service. It helps future generations to shop easily.

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## APPANDIX

## QUESTIONNAIRES

1. What is your gender?
  - Male
  - Female
  - Other
  
2. How old are you?
  - 0-19
  - 20-29
  - 30-39
  - 40-49
  - 50-59
  - 60-69
  - 70-
  
3. How many times in a year do you shop online?
  - One to Two
  - Three to Four
  - More than Five
  
4. Do you find online shopping difficult?
  - Yes
  - No
  - I don't know
  
5. Do you use online shopping from local retailers?
  - No
  - Yes
  
6. Which market do you think is more secure, the national market (Finland), or international market (abroad)?
  - National
  - International market
  
7. which one do you trust more, traditional business (physical store) or electronic business (e-commerce)?
  - Traditional Business (physical business)
  - Electronic (e-commerce)
  
8. Do you think the use of e-commerce increased in general since Covid-19 started?
  - No
  - Yes
  - I don't know
  
9. Do you use more e-commerce since Covid-19 started?
  - Yes

- No
10. How has Covid-19 changed trends in technology in general?
- Change for worse
  - Change for better
  - No change
11. Do you think electronic operation businesses are taking part in the growth of the GDP?
- Yes
  - No
  - I don't know