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Bachelor Thesis

Covid-19: How does it affect international e-commerce firms?

A qualitative case study about how the Covid-19 situation affects e-commerce firms and how they respond to it



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Abstract

The purpose of this thesis is to investigate how Covid-19 affects international e-commerce firms. Covid-19 has been the source of changes in the international business environment across world from the beginning of year 2020. The effects on e-commerce firms are nearly unknown, therefore this research is unique. The aim of this study is to gain more knowledge on how international e-commerce firms are responding to the pandemic. By following a qualitative research method, the study will explore and conduct a deeper understanding on the e-commerce firms experience through a data collection. The literature review has been established, theories are mostly related to digital business environment and international value chain activities. The literature review has been summed up into a conceptual framework which illustrates the connections between the theories and Covid-19. Furthermore, the conceptual framework has been used to analyze the findings from the empirical data which was conducted in a multi-case study. The analysis chapter discusses similarities differences between the cases and connection to theory. Lastly, the conclusion chapter of this thesis concludes the findings and analysis, and it contains theoretical implications, recommendations, limitations and suggestions for future research.

Key words

E-commerce, Covid-19, Digital business environment, Digitalization, Value chain, Virtual value chain, International activities, Customer intimacy



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1 Introduction

This introduction chapter will present the chosen research area. We will begin by introducing the topic through a background review, explaining what the current situation is and current information. Followed by the background, a problem discussion will be presented outlining the theoretical problematization. Moreover, the research question that this thesis aims to answer will be presented, and lastly, for this chapter, an outline will be identified.

1.1 Background

The coronavirus outbreak, which now is more referred to as Covid-19 as a shortened version of “coronavirus disease of 2019”, first appeared in the region of Wuhan, China. The virus spreads incredibly quick between people and in just a few months, tens of thousands of people worldwide have become infected (MphOnline, 2020). Furthermore, as the Covid-19 outbreak spreads, companies across the world are also getting affected by it. Some of the world's biggest companies had negative effects such as manufacturing being disrupted, stores being empty without consumers, and flagging demand for their wares (Eavis, 2020). Some companies may also struggle because of their investors being more reluctant to lend them money after the outbreak (Eavis, 2020). Some of the most hard-hit sectors include airlines, leisure, and hospitality. Bars and restaurants are also being heavily affected (Fraser, 2020). This pandemic has become the biggest threat to the global economy and financial markets as China, North America and Europe have been the most hard-hit markets and the Organization for Economic Co-operation and Development (OECD) have downgraded its 2020 real GDP growth projections for almost all economies (see appendix A) (Nee Lee, 2020). Furthermore, some countries are starting to put their citizens on various forms of lockdown to slow the spread of the virus. These include national quarantines, school and work closures (Kaplan, Frias and McFall-Johnsen, 2020).

According to Ben May (2020), who is the head of global macro research at Oxford Economics, other than the number of cases of Covid-19 there is another key issue which is the level of distribution to economies from containment measures. Widespread lockdowns, such as in China, UK, and Italy have been targeted as some of the virus hotspots and if enough measures are not taken, it can cause even more panic and make the global economy weaken even more. The Covid-19 outbreak has caused fear for the way it is impacting the global economy and how it has impacted markets worldwide, causing plunging stock prices and bond yields (Nee Lee, 2020). Furthermore, the situation has made large banks and institutions to decrease their forecasts for the global economy and a new report from OECD shows that the 2020 growth forecasts have downgraded in almost all economies. Earlier this year, the percentage for the global economic growth was 2.9%, today that number has lowered to 2.4% (Nee Lee, 2020). The manufacturing sector is also one of the most hard-hit sectors by the



virus outbreak, especially the Chinese manufacturing industry. Such a slowdown could lead to other countries with close economic links to china to be negatively affected. Chinese factories are taking longer than expected to resume their operations and the further spreading of Covid-19 in other countries across the globe, indicates that the global manufacturing activity will remain subdued for longer than expected (Nee Lee, 2020).

According to a report by the United Nations Conference on Trade and Development (2020), China's situation has been crucial to the global economy. China does not only hold an important role in the global economy because of its manufacturing industry and exporter of consumer products, but they are also the main supplier of intermediate inputs (energy, raw materials and semi-finished goods) for manufacturing companies abroad. In the global trade in manufacturing, around 20% of intermediate products originates from China as of today. Many companies are today worried that the measures put to contain Covid-19, such as restrictions to economic activities and movement of people, are hindering the supply of critical parts from Chinese producers, which therefore would lead to affecting their output (UNCTAD, 2020). As the Covid-19 outbreak can affect the productivity capacity and exports of any given country, European automobile manufacturers may face a critical shortage of components needed for their operations and Japanese companies could find difficulties in obtaining necessary parts for digital cameras and etc. Many firms right now are forced to respond to multiple fronts at once, both the protection of their workers 'safety, as well as protecting their operational viability as many of them are experiencing difficulties with their supply chains (Alicke et. Alt, 2020). According to an article by McKinsey & Company (2020), there are some immediate actions that firms should consider in response to Covid-19. Some of these actions include optimizing production and distribution capacity, and to asses realistic final-customer demand. Some firms may experience inventory shortages as a result of the travel restrictions and lockdowns and therefore it is important to prepare for these possible implications (McKinsey, 2020).

Since the Covid-19 pandemic, many e-commerce firms have started to experience some short-term changes. For example, Americans are adapting to e-commerce faster as sales online for groceries have increased in double the amount in the middle of march compared to earlier in the month. This due to physical stores closing because of the virus and is pushing consumers to go online for their necessities (Holman, 2020). According to statistics from Adobe Analytics (2020) e-commerce has overall increased with 25%. However, as with most external impacts, companies as well as e-commerce firms, should adapt to changes that emerge from the external influence, by modifying their marketing, and change their operations and business models to gain better customer satisfaction (Denger, 2020). For newer and modern firms, integrity is an important aspect of business operations and it is also important to ensure that a planned response to the external impact is executed. According to Denger (2020), some methods for adapting a business to the current Covid-19 situation include, communicating with the consumers and explain how the crisis affects one's business, meeting customers commitments and to ensure operational continuity, which will be



challenging but is now more important than ever. Furthermore, many online sellers have started to develop new product offers and sale strategies due to the Covid-19 pandemic, however, this could potentially result in them taking unwittingly tax responsibilities that they may have not encountered before (Demery, 2020).

Some online retailers are profiting short-term from selling supplies like toilet paper, face masks and water bottles which have shown to increase in sales since Covid-19. However, when looking at the long-term impact, a lot of retailers have been concerned that the outbreak will negatively impact their revenue in 2020 (Crets, 2020). Due to the Covid-19 situation, many online and offline retailers are expecting delivery delays for online orders because of supply chain issues and inventory shortages. Furthermore, many U.S retail container ports are impacted by factory shutdowns and travel restrictions in China, which affects the production (Crets, 2020). The CEO of Urban Outfitters, Dick Hayne (2020), said that the Covid-19 outbreak creates uncertainty in distributions and could possibly create demand uncertainty. Ken Fleming (2020), explains that during a pandemic, it is important for firms to optimize the e-commerce fulfillment experience. It is important to bring value to the customers and many e-commerce firms strive to meet their needs by offering quick and affordable shipping. For e-commerce, customer service is very important, especially during an unprecedented time like this it is important for them to remain consistent in by bringing value to the customer service and to stay flexible and mitigate potential impacts of Covid-19 (Flemming, 2020). Some ways that e-commerce firms can optimize their customer intimacy in their value chains in a pandemic, is, for example by being more responsive to their customers on social media, phone or live chats. Package delivery tracking is also one way to optimize the information intermediaries of the value chain by offering package delivery tracking with notifications and alerts for the customers to keep them informed about their delivery. Other ways of optimizing value could be by, broader shipping choices, offer free or discounted shipping and pre-arranged return shipping labels (Flemming, 2020).

Furthermore, some assumptions among digital marketing experts are that when individuals are social distancing and staying at home, e-commerce sales will boost. Early findings are, however, suggesting that the reality is more complicated than that (Sterling, 2020). According to preliminary data from Quantum Metric (2020), e-commerce that is associated with specific physical stores, are experiencing an average revenue weekly growth rate increase of 52% and an 8.8% increase in conversion rates, compared to last year (Sterling, 2020). So far, the evidence is showing that foot traffic in shopping malls is going down. This could potentially put pressure on e-commerce, and many argue that consumers will shift more towards online purchases such as Amazon. However, since the possibility of distribution and manufacturing issues is increasing, product shortages and potential declining consumer demand due to people being quarantined and not wanting to risk exposure to the virus, could furthermore, cut e-commerce growth. Especially if the economy falters and goes into recession (Sterling, 2020). These findings and assumptions are, furthermore, suggesting that the outlook at the moment, is very uncertain among retailers. At the current moment, the outcome of Covid-19



is hard to predict when it comes to society, people's health, economically and for firms. However, by looking at previous pandemics in history, the effects can be compared. One pandemic where the effects of e-commerce can be compared is the SARS outbreak (MphOnline, 2020).

1.2 Problem discussion

As the topic of the Covid-19 outbreak is still current, there is currently a lack of studies about it and its relation to e-commerce firms. What is so far known about this subject is that it does affect most types of companies somehow and it is affecting global and national economies. Frost and Sullivan made a report named "The Coronavirus Outbreak and Its Impact on The Global Economy" (Frost and Sullivan, 2020) states that "The coronavirus isn't only a global health crisis, but an economic one as well" (Frost and Sullivan, 2020). Many businesses across the world have been struggling due to China coping with the pandemic. The impacts of the Chinese lockdown have affected many outside of China as well, due to them being one of the most important economies and contributing greatly to the global economy (Singh, 2020).

The Covid-19 situation is bound to have many consequences for consumers, but many retailers have mixed opinions of the severity of Covid-19 and its impacts. One study by Digital Commerce 360 (Radial and Zoovu 2020), including a survey of 304 retailer shows that when asked what impact they believe the Covid-19 will have on their e-commerce business, 32% believed that it would go down somewhat while 30% answered that they think it would go up somewhat (Radial and Zoovu, 2020). The study, furthermore, states that online retailers are still continuing to adapt to the continuous changing environment that the Covid-19 outbreak causes. Digital Commerce 360 has a Top 100 list of (North American) retailers based on their global e-commerce sales and as of March 23, 62 of the retailers from the list have closed physical stores due to the pandemic. Most of them now have Covid-19 -related messages on their site and these are some of the changes they currently have to adapt to. The study furthermore states that online sales have increased with 52% compared to the same period last year. Offline retailers are now becoming more dependent on their digital commerce strategies and digital tools in order to keep their business going (Radial and Zoovu, 2020).

The virus has affected every part of the globe. Major economic powers such as USA, Spain, Italy, Germany, and many more countries have been hard hit by Covid-19 and the world is on a standstill position for an unknown period (Abdin, 2020). All types of production, such as technical, mechanical and technological, have reduced into an insignificant level which may lead into a deep global financial crisis in the near future. Even if Covid-19 is a huge health problem, some businessmen and entrepreneurs must continue with business, because consumption of essentials cannot be stopped during a time like this. The crisis can deepen even further if the supply of essential products is stopped. Therefore, when doing business in times of a pandemic, some strategic planning must be considered (Abdin, 2020). This includes taking precautions of employee's safety and using alternative modes of



communications like digital channels. It is important for companies to adapt to every digital tool available for them and to ensure that the business functions properly during the crisis. E-businesses and e-commerce are having great opportunities during this time, as consumers don't have to go outside and expose themselves to the virus. Digital tools are a great option as they can be used for receiving orders, materials procurement, receive shipments, operationalize production, distribution and after sale service (Abdin, 2020).

The Covid-19 situation is constantly changing, and new challenges emerge. Many people's daily lives have now changed as some countries are on lockdown and people are generally staying inside more (Hasanat et al., 2020). As less people are going into physical stores to shop, they turn more to e-commerce shops which is positive for their sales but can cause challenges with shipping delays (Radial and Zoovu, 2020). Companies such as Amazon, FedEx and UPS have been experiencing delays due to spikes in online shipping related to the Covid-19 situation (Porter, 2020). This shows that retailers and carriers are dealing with high increase of online orders and according to Radial and Zoovu (2020), 57% of consumers alter their day-to-day activities to be as contactless as possible. Particularly the online orders of household goods and consumables have risen. Because of Covid-19 online order fulfillment slows as companies have more orders from consumers and the time to fulfill orders have risen. The time is measured by the length of time taken from when a consumer hits buy to when the order is picked up by the carrier for delivery and it has generally gone up from 15.1 hours to 21.2 hours (Radial and Zoovu, 2020).

A report by Nuno Fernandes (2020), states that there has been evidence from different markets where the functioning of global distribution channels and manufacturing has been disrupted by the current pandemic. The report exemplifies car companies, which are shutting down operations due to the lack of parts. The disruption is increasing the cost of business for manufacturing companies. Furthermore, the report uses a survey by the U.S Institute which states that 75% of companies have reported disruptions in their manufacturing and distribution channels and there have been shortages of raw materials and final products. This is due to the lack of air and ocean freight options to move products across the world. The report shows that the stock market collapsed in March 2020 and several of the largest companies have seen share prices fall by more than 80% in just a few days. Many stock indices around the world have now registered their biggest one-day falls on record. Furthermore, the study reports some of the most hard-hit industries including oil, gas, and coal firms, travel and leisure, aerospace, mining, banks, and media are all examples of sectors that have fallen by more than 30% (Fernandes, 2020).

The disruptions that firms face due to Covid-19 could furthermore have an impact on the firm's value chains. Changes in value chain can affect the economy and the value brought to the end-customer (Roosendaal, Huiberts, Geurts and Van der Vet, 2003). There have previously been changes in the value chain due to digitalization and digital environments which allows the value chain activities to be more virtual and in the time of a pandemic these



could have more of a potential and be flexible (Roosendaal et al., 2003). Furthermore, business models embrace the concept of value chains and it is important to understand the business model of the operating firm, especially when new products or services are developed under a state of a significant change (Picard, 2000). When environments of firms or industries change, supporting factors of a business model also change in order to suit the environment. When this happens, there is the risk of business models being less successful than they may be once were, and could potentially be abandoned (Picard, 2000).

Furthermore, the Covid-19 outbreak could be compared to the SARS crisis that happened in 2002 and 2003, which was quite early days for e-commerce as it started taking off in the 90's (Liu, Gayle, Smith and Rocklöv, 2020). However, companies like Alibaba and JD.com grew significantly during this time as they were established in the early years of e-commerce, during late 1990s and early 2000s to be precise (Kaewakta, 2020). During the SARS outbreak, thousands of people were infected which also led to schools, factories and shops being closed in China (Liu et al., 2020). During the outbreak of SARS, Alibaba eventually evolved into a B2B platform that connected U.S. buyers with Chinese Suppliers. JD.com launched an online e-commerce site and they were a chain of small electronics (Zheng, 2020). Due to the SARS outbreak, JD.com had to close almost all of their physical stores and their online retail presence grew instead. Furthermore, during the SARS outbreak, an employee at Alibaba caught the virus which led to 500+ of the employees being forced to quarantine at home while also working from home (Cai, 2018). While many countries gave warnings to businessmen outside of China for traveling to China, they instead took an interest in Alibaba's online business. Other Chinese suppliers started to invest more in online marketing on Alibaba's platform and that year in 2002, their business grew 50% and was seeing daily revenues of 10 million RMB. These examples could be compared to the current events to some extent and show an example of how pandemics can affect e-commerce (Zheng, 2020).

1.3 Research question

Main question: How are international e-commerce firms affected by the Covid-19 outbreak?

Subquestion 1: Which parts of their value chains are being impacted by Covid-19?

Subquestion 2: How are they dealing with the Covid-19 situation?

1.4 Purpose

The purpose of this study is to investigate and explore how e-commerce firms are being affected by the Covid-19 pandemic, how their value chains are being affected and how they are dealing with it. This thesis will be conducted in an exploratory nature as new information about this subject constantly emerges. Furthermore, this report aims to be used as a helping guide for e-commerce firms that are still dealing with the pandemic, or possibly similar future



pandemics. Lastly, the research found in this report could possibly contribute to literature that will emerge from the Covid-19 pandemic.

1.5 Delimitations

This study limits itself to only focus on the effects of Covid-19 on e-commerce firms that sell products internationally. It will not explore the effects of Covid-19 on traditional or offline firms, since the empirical data would then have to focus on only national enterprises.

1.6 Outline

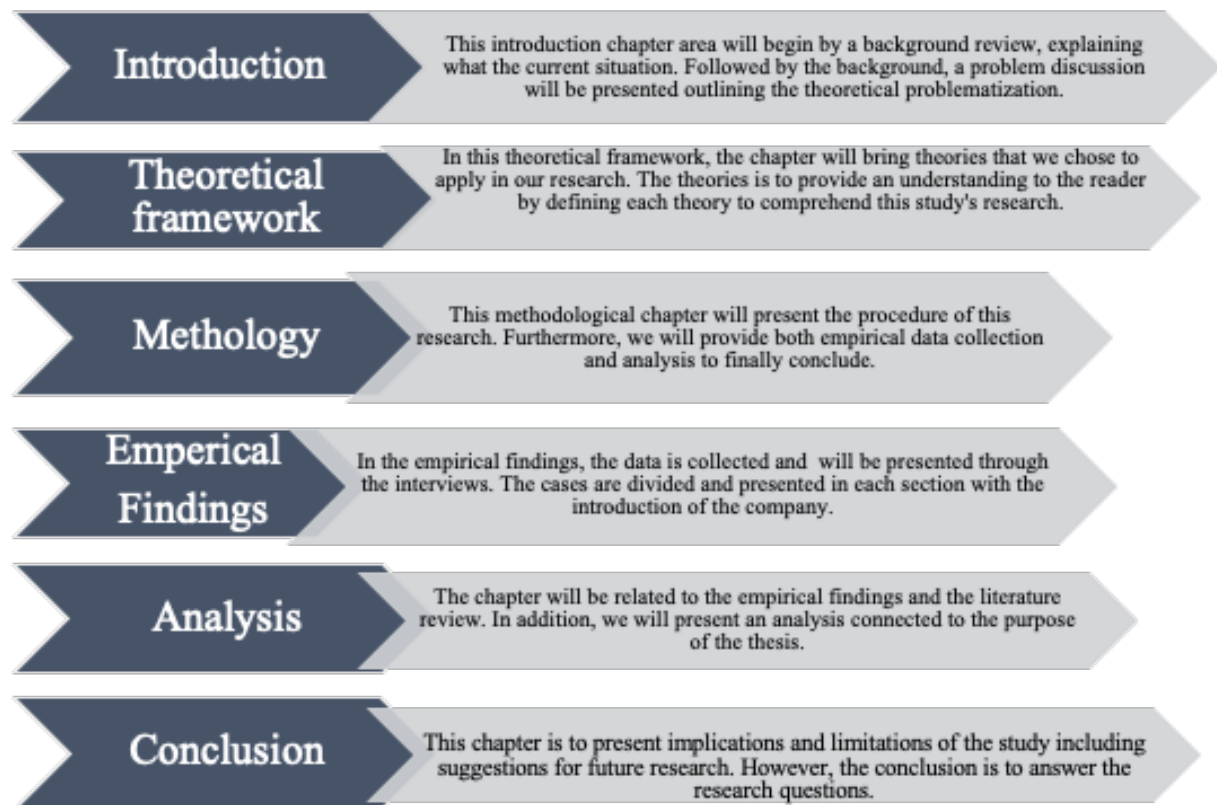


Figure 1: (Designed by the authors, 2020)



2 Theoretical framework

In this theoretical framework, the chapter will bring theories that we chose to apply in our research. The purpose of the theories is to provide an understanding to the reader by defining each theory to comprehend this study's research.

2.1.The digital environment

2.1.1 Digitalization & Acceleration of business processes

Buer, Fragapane, and Strandhagen (2018), point out that data-driven and continuous technology development has created new business opportunities. In addition, they argue that digitalization is the prime core element improving the processes of products in several industries as a key to success, meaning that digitalization is a key factor to create effective plans and control in production and networks. In contrast, the study states that data-driven improvements have raised the competitiveness of the business environment. The advanced data program such as the optimization process enables to change of a particular set of parameters to get to an optimal near solution without violating restrictions (Rothlauf, 2011). The more the digitalization increase, the more solutions quality also improve. Markovitch and Willmott (2014), also claim digitalization is accelerating the business process by increasing customers' expectations. Schmidt, Zimmermann, Möhring, Nurcan, Keller, and Bär (2016), mentioned that to succeed, companies strive to accelerate their digitization process in their business operations and delivery performance. According to Kayikci (2018), the digitalization of business includes how a firm digitizes their activities in part or full of their electronic environment. Additionally, digitalization has enabled companies to conduct their business operations such as marketing, sales, communication, administration tasks, purchasing method, and logistics in an easier and quicker way (Barnir, Gallagher and Auger, 2003). Typically, newer firms have a more established digitization process than older firms do (Barnir et al., 2003).

2.1.2 Defining the business model in a digitalized world

The business model for digital business needs to be explicit and offer appropriate information and knowledge in order to support the managers of digital businesses successfully (Keen and Williams, 2013). Traditionally, investments are usually needed for establishing a business and was considered to be a strategic barrier to entry. However, with the internet and newer mobile technologies, new ways of doing business have been offered, such as e-commerce. Usually, with e-commerce, the barriers to entry are not as high, and some argue that since the internet has reduced barriers to entry, this allows new entrants to have come into many industries (Porter, 2001). Despite the increase of e-commerce and its importance of a business model to an organization's success, consensus regarding its definition and meaning has been lacking (Kallio et al., 2006). Researchers in the e-commerce area have depicted business models from different perspectives and Al-Debei et al. (2008), developed a business model suitable for e-commerce by analyzing previous literature of definitions of the business model in the



information systems. Generally, there has been a confusion in the world of business, that it has experienced from traditional to digital ways of doing business (Al-Debei and Avison, 2017). In the world of traditional business, business strategy, and business processes are more merged due to the stable environment, low level of competition, and certainty (Keen and Williams, 2013). The traditional business process is also relatively simple and static and there are only limited ways of doing business. When it comes to digital business, a gap between business strategy and business processes has emerged and connecting these two together has become more challenging due to the dynamic IT-based business processes and there are now multiple ways of doing business (Sawy and Pereira, 2012).

Furthermore, the aim of the business model is to help managers of digital businesses to experience more control in the company, as well as compete better with the appropriate and necessary information that the model provides (Sawy and Pereira, 2012). The level of information that the model provides, should furthermore, extend to the managers knowledge of how to adapt their business to their business model including strategy and processes to deal with uncertainties and changing environments. By no means is the business model completely independent, as it correlates with business process and the strategy, and by that it creates a unique strategic operational mix (Al-Debei and Avison, 2017).

2.1.3 The digital business model.

For the business model to be successful in the digital era that is today, the business strategy, business model and business processes should all be combined with each one (Sawy and Pereira, 2012). Furthermore, the package should be analyzed continually to ensure that it is consistent with the external environment (Keen and Williams, 2013). Furthermore, Al-Debei et al. (2008), conducted a methodology to derive a definition for the business model with these definitions: “1. The definition should be comprehensive and general, 2. It is not sufficient to define the business model only in terms of its components, 3. The business model is defined as a single organization, and 4. The definition should synthesize the different points of view presented in earlier research” (Al-Debei et al. 2008., p.7).

Furthermore, the business can also be used for future planned businesses and not only be designed and developed for established ones (Keen and Williams, 2013). Al-Debei et al. (2008), presents the final definition of the business model as ”The business model is an abstract representation of an organization, be it conceptual, textual, and/or graphical, of course, all core interrelated architectural, co-operational and financial arrangements designed and developed by an organization presently and in the future, as well as all core products and/or services the organization offers or will offer, based on these arrangements that are needed to achieve its strategic goals and objectives.” (Al-Debei et al. 2008., p.8).

The final definition as presented above has these following characteristics (Al-Debei et al., 2008, p.9):



1. The connected components of the model have been combined as they show the value architecture, value network, and value finance business model which means that it is *comprehensive and general* (Al-Debei and Avison, 2017).
2. The business model cannot be explained in only one single way. The representation of the model is a flexible process and could be demonstrated in various ways such as oral, in text or graphically which means that it demonstrates *the flexibility of the business model representation*. (Al-Debei and Avison, 2017).
3. The next characteristic is achieved by the information the business model delivers. The business model defines an intermediate level of information that is important for digital business managers. This model illustrated the concept as an intermediate layer between the strategy and the process which means *it identifies the location of the business model within the digital business organization*. (Al-Debei and Avison, 2017).
4. Last characteristic is achieved through accentuating which arrangements are needed in order to provide the value proposition that is desired for achieving the organization's strategic goals and objectives. This means that *it represents the importance and the reason behind designing and developing the business model*. (Al-Debei and Avison, 2017).

2.1.4 Business adaptation to external change

The business environment today can be turbulent, and businesses need to respond to emerging threats and opportunities in an appropriate way (Yuki and Lepsinger, 2006). The leader of an organization has a lot of responsibility for the effectiveness of the firm, by making the right decisions that will encourage innovation and adaptation. Adaptations of organizations revolve around changes that are made to cope with external threats and taking opportunities and exploit them (Yuki and Lepsinger, 2006). Opportunities can be explored from different aspects such as, new technologies, changing markets, and shifting needs and expectations of customers (Dervitsiotis, 2007). Because of these external factors, that can be both threats and opportunities, firms need to develop the ability to adapt to these external changes for them not have a negative effect from them (Sikich, 2008). At times, the business environment can be quite uncertain, and uncertainty is greater when the times are going through a rapid technological change (Mascarenhas, 1982). Furthermore, uncertainty can include political and economic change and uncertainty. If a firm were to experience this, it would be important for them to embrace innovation in order to develop an appropriate response to the changes that they may be facing (Mascarenhas, 1982).

According to Yuki and Lepsinger (2006), certain values are necessary for large organizations to have in times of change. These values include flexibility, continuous improvement, initiative, and striving for excellence. Instead of viewing change and adaptation as something negative, it is better to embrace it as something that is a continuous process for improvement for the company (Dervitsiotis, 2007). Furthermore, in order for companies to adapt to change in a good matter, it can be important to monitor the environment, which involves collecting and analyzing data about the external environment and to identify the possible threats and opportunities that come with it (Kettinger, Teng, and Guha, 1997). External monitoring can be



effective, especially if people from all levels of the company are involved in the process and the information that is collected is used to improve strategic decisions. Then, there is strategic planning, which is the process of determining where the company is and where the company wants to be in the future and how to get there (Wefers and Daub, 2007). The process of strategic planning in cases of adaptation involves, identifying tactics and deciding which resources and actions are needed to implement the strategies through the adaptation process (Dervitsiotis, 2007). Furthermore, a company should envision the external change and what outcomes they want to come out from it. It is about putting opportunities and threats in context and make decisions about how the company should respond (Kettinger et al., 1997). Then it is important to build support for the change by viewing the change as necessary and feasible. Lastly is implementing the change into the company and in this stage, it is important for the leader of the organization to consider behaviors and feelings of the people in the company and still encouraging innovative thinking (Yuki and Lepsinger, 2006).

2.2 What is E-commerce?

Grandon and Pearson (2004), states that some studies were made on the strategic value of e-commerce, where they focus on the management group of 59 American and European e-commerce companies. The study focused on e-commerce firms and their value creation. The result showed that 59 firms representing 80 %, of e-commerce businesses had four factors in common such as efficiency, complementarity, lock-in, and newness, therefore, online websites are increasing sales and reforming the world of e-commerce (Schafer, Konstan and Riedl, 1999). E-commerce is used to share business information, managing business networks, and business transactions. Electronic data interchange practice started in Berlin airlift 1993 where it began as the computer to computer exchange of standardized electronic transaction documents (Zwass, 1996). Electronic commerce has shifted the definition of a company due to its business ability to deliver products, organize, and keep network relationships instead of manufacturing a product and deliver a service (Wigand, 2006). These sets of technologies and database management are the major drivers of e-commerce. The development of technology and other forms of communication has contributed to a modification in organizational structures and business activities by influencing competitive opportunities of companies (Wigand, 2006). The widespread utilization of computers and the internet has created a paper-free trade for citizens and economic activities through online connections. Information technology is an important part of an e-commerce firm's performance. Therefore, it increases the capacity to coordinate business transactions from buyers and sellers within the company or among other companies (Wigand, 2006).

2.3 Value chain

The purpose of the value chain is to design, produce, and deliver products or services to meet their customers' demands and needs (Farid and Hanantasena, 2000). The value chain includes different activities that must be performed to bring a product or service starting phases, through the intermediary phases that include activities from production to delivery to the final



customers, and then there is final disposal after the use of the product (Kaplinsky, 2020). In the most basic form, the value chain model starts from design, to production, which involves inward logistics, transforming inputs and packaging, along with other activities that lead up to marketing (Roosendaal et al., 2003). The most basic premise of a traditional business focuses on physical value-chain activities (Porter, 1985). The value chain reveals all of the relevant and strategic activities of a business which consists of five core activities which are: inbound logistics, operations, outbound logistics, marketing and sales, and services, as well as four supporting activities, firm infrastructure, human resources management, technology development, and procurement (Porter, 1985).

In reality, the value chain can be more complex than that and involves more activities. The concept of value chains was first introduced in the 1960s and the 1970s and has since been widely used, particularly as a result of the value chain analysis by Michael Porter (1985, 1990). Previously the value chain has only been a descriptive construct at most and providing a heuristic framework for the data-generation. However, in the recent decade, the developments of the value chain framework have provided a more analytical structure (Roosendaal et al., 2003). The traditional value chain developed by Porter (1985), treats information as a supporting element in the value chain, while virtual value chains treat information as a source of value itself which will be further explained in the next section. Varieties of information both in and out of companies have become the new source of creating value for customers, in the contest of e-commerce (Liu and Wu, 2010).

2.3.1 The virtual value chain

By performing virtual value chain activities, e-commerce firms can gain several advantages (Zott and Amit, 2017). The activities of a virtual value chain are information-based, and it is more important to perform them electronically rather than conducting the functions physically (Pagani, 2013). Here, the “information” becomes the way that firms’ transactions are exchanged (Jianli 2013). Virtual value chain begins with the content provider, as in what is offered, then to infrastructure for the distribution and transactional support (what enables the transactions to occur), and then to the context provider, as in, how is it offered? And then to customer interaction (Jianli 2013). The information systems of a virtual value chain acts as a central nervous system within the firm that efficiently integrates raw material, manufacturing, distribution, marketing and sales along the traditional value chain (Liu and Wu, 2010). To achieve more effectiveness and efficiency, firms should try to combine each activity of the traditional value chain to the virtual ones (Roosendaal et al., 2003).

The value that can be created through e-commerce is partly dependent upon the extent to which different value chain activities of a firm are interconnected with suppliers, manufacturers, and consumers, which allows information to flow through the value chain (Zott and Amit, 2017). One example is, by placing an order with a digital payment option, customers can quickly customize their orders, and information is then directly routed to the manufacturers and suppliers in real-time (Greis and Kasarda, 1997). Real-time transactions



create competitive intensity and put a heavy demand for firms to manage customer's information for future use. These firms can track customer's information and become aware of their preferences and therefore, make targeted efforts in meeting their demand before their competitors (Pagani, 2013).

In e-commerce, information is a strategic role and not viewed as a by-product of the strategic activities in the physical value chain (Zott and Amit, 2017). This means that strategic activities in the virtual value chain are performed around information (Bhatt and Emdad, 2001). Rayport and Sviokla (1995), explains the concept of the “virtual” value chain, which consists of “gathering, organizing, selecting, synthesizing, and distributing of information”. Even if e-commerce transactions are mostly performed through information, there are still some parts that require physical activities, such as assembling final products and services (Bhatt and Emdad, 2001). Furthermore, several back-end activities are performed physically since they need tangible material, tools, and technologies and sometimes they are physically handled. This means that the success of an e-commerce value chain depends on how the physical and virtual value chain activities are integrated (Rayport and Sviokla, 1995).

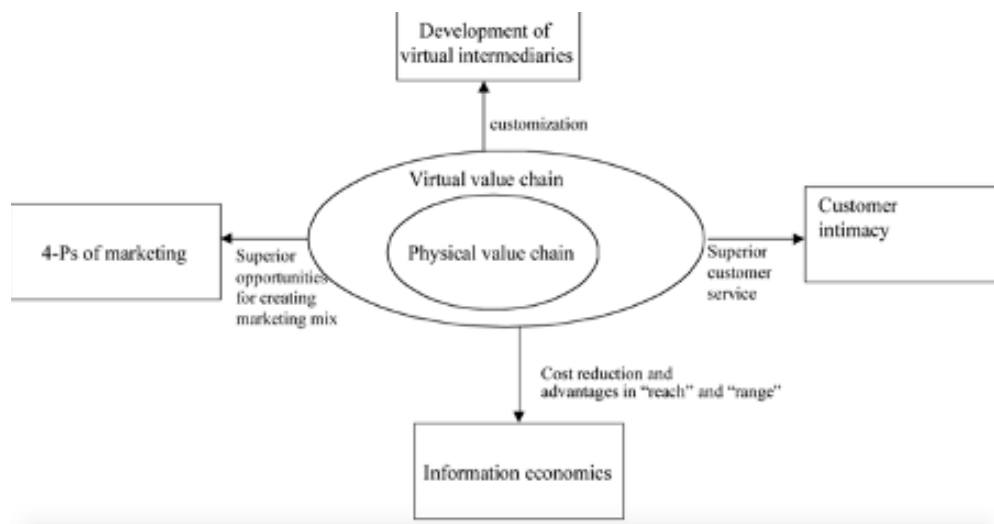


Figure 2: (Transformation of value-added services through the virtual value chain (Bhatt and Emdad, 2001))

Information economics

Information economics dictates the value of information and is therefore separate from several ways from the economics of physical products (Birchler and Butler, 1999). Information is shared within communities of stakeholders, like suppliers, customers, and firms, and may not be decreased since it doesn't follow the traditional rules of economics regarding supply and demand (Slater, 1998). Electronic networks that are used for e-commerce, has the advantage of “reach and range” when collecting, organizing, and analyzing activities that surround the virtual value chain (Rayport and Sviokla, 1995). Since the information is stored and manipulated digitally with computers, it allows electronic networks to offer advantages that come with mixing, matching, bundling, and unbundling information



contents from multiple sources. Furthermore, a virtual value chain is easier to redirect and manipulate in the context of changing environments (Bhatt and Emdad, 2001).

4-Ps of marketing

Businesses have traditionally made strategic marketing decisions based on the four Ps: product, place, price, and promotion, and the virtual value chain can have an impact on the traditional four Ps of marketing (Singh, 2012). When it comes to products, the virtual value chain can bring multiple options to customers to customize products and services, for example by ordering through a credit card and download the necessary information (Morris, 2009). The firms may also acquire information from their suppliers electronically and therefore be automatically transferred to the customer's computers (Constantinides, 2010). Another way a virtual value chain can enhance the product offering is by providing additional information about the products and quick customization of products. The place can be enhanced by the virtual value chain by offering the advantages of “just-in-time access” to different value chain activities (Constantinides, 2010). Customers can directly download digital products/services and directly check the location of their orders. When it comes to price, the virtual value chain offers different options on products and services to a customer and extra value can be added by the customer since they have the option of billing at different price options (Rayport and Sviokla, 1995). It also makes it easier for customers to compare prices of a similar offering by different companies. Lastly is promotion, and the virtual value chain can offer multiple venues to promote products and services. Virtually, promotion can be enhanced through audio, video, and graphics which also makes it easier to catch the customer's eyes (Bhatt and Emdad, 2001).

Customer intimacy

In a virtual setting, customers are usually more willing to provide personal information than in physical settings, if the information is not misused it can enhance customer values (Turban et al., 2000). This allows e-commerce firms to use the personal information collected to build long term relationships with its customers by, for example, emailing them about products and offerings of their choice. A virtual value chain activity that goes through customers and suppliers can be enhanced through feedback, interests, and concerns from customers (Rayport and Sviokla, 1995). The process of doing this also raises the quality of the offering from the company, and at a lower price than if it would have been conducted in a traditional way, such as costly traditional marketing surveys (Wiersema and Treacy, 1993).

Information intermediaries

Bhatt and Emdad (2001, p.83), explains that a “virtual value chain can play a major role in disintegrating many physically based intermediaries while bringing forth new kinds of information intermediaries”. The intermediaries can have an important role when it comes to “mixing and matching” the needs of different customers, customizing products, and connecting to them to meet the customer's long-term demands (Lee and Cho, 2005). This means that the first connection in the virtual value chain becomes the interaction with the site



of an information intermediary, for the customer. By dealing with this information, customers can do a "one-stop shopping" of different products (Womak, 2002). An information intermediary can collect products/services from different companies and then sell them to customers by bundling or unbundling these products/services (Rayport and Sviokla, 1995).

2.3.2 International value chain

The international value chain concept emphasizes the fact that there usually is a longer distance between the local producer of goods and services and the global consumer (Blair, 2005). Participation in international value chains can lead to increased job creation and economic growth (Humphrey and Schmitz, 2009). Trade and production have become increasingly organized over the past two decades and this is now referred to as global or international value chains (Gereffi and Fernandez-Stark, 2011). The development of information and transportation technologies and its advantages have allowed firms to expand their production into tasks performed at other locations to take advantage of different factor costs (Ignatenki et al., 2019). This kind of production fragmentation means that goods and services cross borders many times throughout the chain and passing through several countries more than once (Swoboda, Foscht and Cliquet, 2008). International value chains provide more competitively priced inputs, higher variety, and the economies for scale, in developed countries (Baldwin and Lopez-Gonzalez, 2013). However, for emerging economies, the international value chains are seen as a fast track to industrialization (Ignatenki et al., 2019). International production allows emerging economies to join already existing supply chains instead of building it themselves, which removes the need for them to gain comparative advantage in a broad range of production stages domestically (Gereffi and Fernandez-Stark, 2011).

Furthermore, International oriented firms must consider eventual internationalization of the value chain functions (Swoboda et al., 2008). They must make decisions about whether the responsibility for the single value chain function should be moved to the market they are exporting to, or if it should be handled from the head office in the home country (Gereffi and Fernandez-Stark, 2011). In principle, the value chain functions should be executed in the place where there is the highest competence and usually the most cost-effective country, to increase efficiency (Swoboda et al., 2008). With international value chains, a distinction arises between the downstream activities and upstream activities. The location of the downstream activities that are more related to the buyer, begins to be tied to where the buyer is located, for example, if a Swedish company is going to sell in Asia, then usually the company must provide services in Asia as well such as, salespeople stationed in Australia (Hollensen, 2016). Usually with international firms, it is common to centralize the upstream activities in the home market or third country. This means that the research and development and production activities are performed in the chosen place (home market or third country) and the downstream functions (marketing and sales and service) are decentralized and spread out in the export markets (Ghemawat, 2007). However, when it comes to e-commerce firms, usually the case is different as the sale is online and the products can more easily be shipped



from one place, to a customer in another country (Liu and Wu, 2010). If the countries that the company is exporting to are culturally close to the home market, it is usually more relevant to control the entire value chain from the head office in the home market (Ghemawat, 2007). This distinction between downstream and upstream functions creates some interesting implications, such as the downstream activities creating a competitive advantage. Having downstream activities (marketing, sales, and service) in the export markets, creates a competitive advantage that is mainly specific to the export market. The company's reputation, brand name, and service network have grown large in that country. Competitive advantage in the upstream activities usually grows out of the entire system of countries that the firm competes, rather than from its positions in a single country (Hollensen, 2016). To summarize, an international firm can locate different parts of its value chain in different countries and therefore operate their value chain from several places. Or, the value chain activities can be coordinated, meaning they are still identical or linked with each other no matter the country they are performed in (Porter, 1986).

2.4 Conceptual framework

The theoretical framework has presented how Covid-19 can have an external impact on international e-commerce firms in a digital business environment. It illustrates the process of Covid-19 affecting the value chain activities, including virtual and international value chain, and then how it affects the e-commerce firms internally and lastly, what actions and responses the e-commerce firms have. This, depending on their digital business environment, which includes their digital business models. The model is illustrated in this way, to show if the firm's business models/business environments are built in a way to either protect the firms, or if Covid-19 can break through their business models and therefore have a larger impact on the firms.

Furthermore, the model represents the core models presented in the theoretical framework, including all of the concepts under "The digital business environment" and the different value chains such as the virtual value chain and international value chain. By using this model as an analytical tool, a conclusion of how e-commerce firms are being affected, can be taken, and how they are responding to the effects of Covid-19.

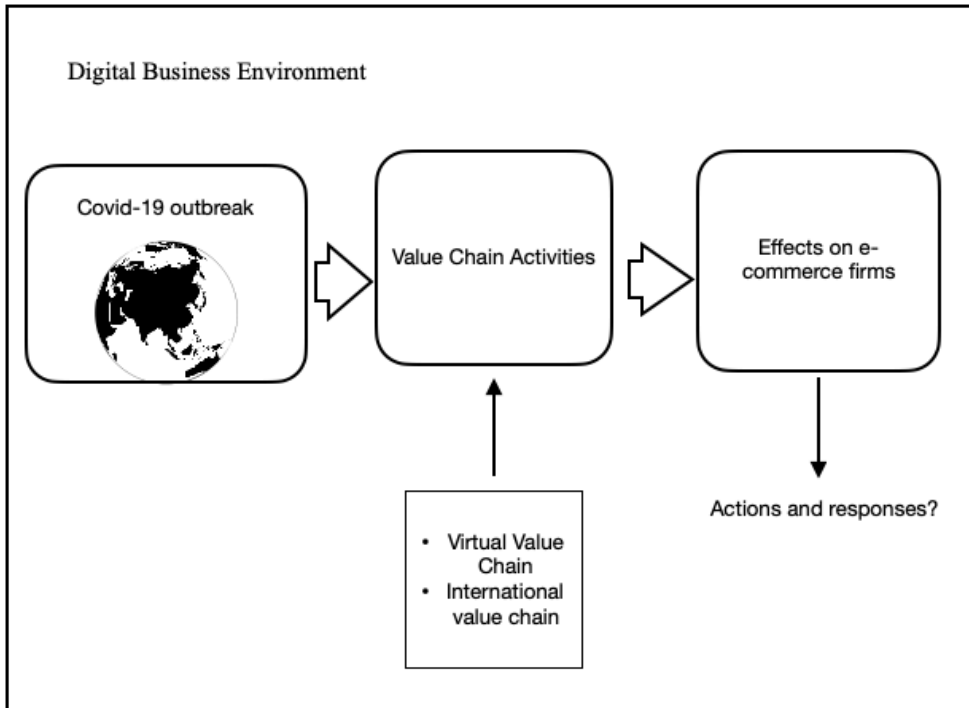


Figure 3: (Designed by the authors, 2020)



3 Methodology

This methodological chapter will present the procedure of this research. We will distribute an outline of the methods and approaches that we will conduct in this study. We emphasize the reason why we chose certain methods. Furthermore, we will provide both empirical data collection and analysis to finally conclude.

3.1 Research approach

Inductivism is a research approach that relies on the empirical verification of a general conclusion that is derivable from a finite number of observations (Adams, Khan and Raeside, 2014). When researching using the inductive approach, the "world" is observed and then generalized. The observation is usually done in a pattern that specifies a variable of interest and is then used to formulate a general theory of nature and behavior (Adams et al., 2014). Since the aim of this thesis is not to make new theories, instead it is to rather gain knowledge about external effects and different responses, this approach is not suitable. Deductive is another research approach that operates from "the general to the specific", meaning that a general set of hypotheses relating to a given phenomenon is narrowed down to specific sets of hypotheses that can be tested (Adams et al., 2014). This approach requires the application of relevant data, to make up for the original arguments in theory (Adams et al., 2014), thus this approach is neither suitable for this report since there is not enough previous research in the subject of the report to conduct a deductive research approach.

Dubois A. and Gadde L.E (2014), states that the abductive approach is based on diversified resources during a research process where the team conducts an interaction of theory and method. This process does not depend on either deductive or inductive approach however it includes both alternatives. The abductive logic is used to be flexible going back and forth between the theoretical framework, empirical data, and analysis to match the three elements. Piekari and Welch (2011), states the flexibility develops interaction between the empirical reality and the conceptual findings in the analysis since this process is based on reasoning. This means that the abductive approach is the most suitable for this report as the thesis will combine empirical findings with some existing theory. The abductive approach makes it possible to develop a theoretical framework in order to describe and explain the new phenomenon and use the flexibility of the approach as a key to developing this study. This approach will furthermore help the researchers to provide intensive arguments and observations to produce results in this study process. The main objective the authors decided to conduct this approach, is to compare the empirical data and the theory to discover new results.



3.2 Research method

A research method is a way of conducting and implementing research and researchers will handle multiple problems and apply them to research methods to gain the best guess answers to their questions (Adams et al., 2014). Mainly, there are two domains of research that are most frequently observed in the literature, which are quantitative research and qualitative research (Adams et al., 2014). Qualitative research refers to the usage of several methodological approaches based on diverse theoretical principles (Adams et al., 2014). It implements methods of data collection and aims towards the exploration of experiences and describes variation in situations (Kumar, 2014). Furthermore, it is a way of learning about social reality and can be used to study a wide array of topics (Leavy, 2014). Quantitative research, however, is based on methodological principles of positivism and Neo-positivism and needs to fill the standards of a strict research design which is developed before the research (Adams et al., 2014). The quantitative method is applied for quantitative measurements, and therefore, statistical analysis is used (Adams et al., 2014).

A qualitative research method is more suitable for this thesis since the purpose is to explore and define how external impacts can affect e-commerce firms and this method is often used to explore, describe, or explain a social phenomenon, which is what this thesis aims for. Qualitative research allows the authors to conduct an in-depth analysis and understanding with different perspectives from the respondents (Leavy, 2014). In a qualitative study the primary data is mostly collected through interviews with different respondents who are relevant to the subject (Kvale and Brinkmann, 2008). However, there is always the possibility of the choice of methodology to create complications with generalizing the findings. The primary data collection could not be extensive enough to connect the results to all firms active in the chosen field (Bryman and Bell, 2016), and therefore, the qualitative approach is the most suitable for this thesis.

3.3 Research design

The research design strictly guides researchers to gather empirical data during the case study process. It provides a structure of the case study method at a more detailed level. Therefore, it can be considered as a strategy to map actual research. This includes different methods and procedures to ensure that the thesis framework collects data and analysis with answers to the study project (Maxwell, 2013). This stage is also to inform the choices, strategies, and literature methods to the reader. Research design is a tool that will be applied to make sure that researchers are asking the right questions referred to their exploratory study to respond to the data collection (Hakim, 2000). Moreover, this design helps the authors to conduct and develop data collection techniques, data analysis, or report potential issues in the process which effectively enable the qualitative researchers to conduct interviews and manage the data (Sharan, 1998). An exploratory purpose in research, is best for the reach design which eventually strengthens the answers to the research question due to the flexibility to move from the empirical data and the theory. The research procedure of this qualitative research includes the research questions, the research purpose, an ethical section, and design for overall findings



that outline the thesis methods and techniques applied during the study (Boeije, 2010). The design helps the authors to plan a structure during the process with the flexibility of the abductive approach, which will certainly provide several instruments to be used in the project of qualitative research.

3.3.1 Purpose in research - research strategy

The purpose of research can be divided into three, descriptive, explanatory, and exploratory (Sauders, Lewis and Thornhill, 200). Exploratory research aims to describe social systems, relationships between events, and providing background information about the issue in question in the thesis and stimulating explanations (Adams, Khan and Raeside, 2014). An exploratory study will focus more on assessing a phenomenon from a new light and is useful for understanding the nature of the phenomenon that one is not sure of. Furthermore, it is flexible and has the ability to adapt to change during the research progress (Sanders et al., 2009). Descriptive research aims towards simply describing phenomena and it is not so concerned with understanding behavior. Explanatory research describes phenomena in a deeper way and attempts to explain the behavior behind it (Adams et al., 2014).

This thesis takes an abductive approach which makes the purpose of an exploratory nature the most suitable as the phenomenon and the understanding of it, is not clear. Furthermore, since the thesis takes an abductive approach and includes empirical data and theory which has been assessed along with the progression of the study, it needs to be flexible and adaptable which an exploratory purpose in research would allow.

3.3.2 Research strategy - Multi-case study research design

A case study is an in-depth exploration from one or multiple perspectives. Case studies explore the complexity and uniqueness of a particular subject in a “real-life” context. Furthermore, it is research-based and different methods can be used and it provides a wider range of evidence in the results (Leavy, 2014). Using more than one case in a multi-case study, compared to a single-case study, will most likely provide a better analysis as it is better to have more data (yin, 2018). There are several ways to conduct a case study, some choose to focus on a geographical location or other aspects such as an organization, a person, even or a location (Bryman and Bell 2014). A qualitative case study focuses on the singular and the purpose is to gain an in-depth view of the quality and complexity of the subject. The case study can be conducted over several years, which would allow the study to explore processes of change and give an explanation to why and things happen, however, it can be conducted in a few days, weeks, or months as well. Flexibility is important for case studies in many contexts as there can occur changes in policy or unforeseen events that could happen, which would require moderation of the case study design (Leavy, 2014). Furthermore, the case can be written up in different lengths and forms to meet different audiences and criteria. Interviews are a commonly used method for conducting a case study and it enables participants to engage in the research process (Leavy, 2014). A multiple-case study approach, which has been used for this thesis, allows the authors gain a deeper understanding of how e-



commerce firms are affected by global pandemics. Due to the possibility of firms reacting and being affected differently would make a single-case study not as sufficient to the purpose. Furthermore, a multi-case study helped the analysis by having more data. The chosen cases are depended upon the beliefs of the authors that they add enough useful information to answer the research questions.

3.3.3 Presentation of cases

1. Company X

Company X was founded in 2002 in Kalmar, Sweden. The firm is an e-commerce shop within the design and interior decoration and is available in more than 70 countries. The firm offers thousands of products from around 200 well-known interior decoration brands, such as Marimekko, Georg Jensen, and Skultuna. Some of the products that the firm offers include glass, porcelain, storage, and lights. Company X currently has around 50 employees in its head office. (Company X, 2020).

2. Nordiska Fönster

Nordiska Fönster is an online firm that was founded in Ängelholm, Sweden 2010 as a retailer for various brands. Later on, the company decided to design its products with high quality in order to meet the customer's needs. Today, the company is known as innovative E-commerce in a conservative market. Nordiska Fönster has a partnership with the Bygghemma group since March 2019 due to its high standard products. The main products are windows and they are 100% recyclable. The firm also sells windows, doors, outdoor spaces, and skylights. They send these products from the production and directly to the end customer. Their major customers are house owners, landlords, architects, sheet metal builders, or craftsmen. The firm operates in Ängelholm and delivers its products mainly to Nordic countries. (Nordiska Fönster, 2020).

3. Hem.com

Hem.com also known as hem design studio Sweden, was founded by Petrus Palmér. It is an e-commerce shop for professional designers within Europe and the United States. The firm sells furniture over the whole world although the main market is in the US and to some extent in Europe. They have customers from New Zealand till Alaska. They have a total of 45 employees divided into Sweden, England, and the USA. (Hem.com, 2020).

4. Outnorth

Outnorth is a Scandinavian leading online shop with outdoor equipment. The outdoor equipment and product segments are for men, women even children activities such as clothes and shoes. The company name launched in 2012 when both companies Outnet and GetOut merged and became Outnorth. The firm delivers the best of Scandinavia products to its customers worldwide. However, they mainly deliver to Belgium, Denmark, Norway, and Sweden. Outnorth's CEO is Lars Nykvist and operates in Kalmar, Sweden. Lately, the



finances and marketing department moved from Kalmar back in 2018 to Växjö, Sweden. (Outnorth, 2020).

5. RoyalDesign

RoyalDesign is one of the largest e-commerce shops with 50.000 high-end brands for home décor, office, furniture, tableware, kitchenware even more. The major brands are classic and timeless from Swarovski, Orrefors, Gubi, Ferm living, and thousands more. RoyalDesign was founded in 1999 and started to sell Scandinavia and Europe's leading brands with the highest quality at the right prices. The e-commerce firm now operates in Kalmar, Nybro, Stockholm, and Gothenburg with e-commerce Rum21 since 2014. The headquarter is in Stockholm and Kalmar, Sweden, where Royal Design's CEO is Magnus Pettersson. (RoyalDesign, 2020).

3.4 Data collection

There are several approaches to gathering data (Adams et al., 2014) and the data collection is the main factor in a research study, and it can take a long time to collect the data needed for a study. The type of data collection may vary depending on the research questions and the focus of the study. Surveys or interviews are usually the main approaches of primary data collection (Bryman and Bell, 2014).

3.4.1 Primary data collection

Primary data is the type of data that the researchers collect themselves and collecting this type as data can be expensive, time-consuming, and difficult. Primary data can, for instance, be collected by observations, experimentation, surveys, and interviews. Observation is considered to be a data collection method in its own right, however, no matter which data collection method one chooses to follow, observations should always be an important element (Adams et al., 2014). For a qualitative study, like this thesis, interviews are the primary data collection, which helps the study to gain an in-depth understanding of the subject. Face-to-face or telephone interviews are most frequently used in business and management research and allow mass information to be collected. The sample sizes of qualitative studies with interviews tend to be quite small compared to quantitative studies with surveys (Adams et al., 2014). In this qualitative study, interviews via Zoom and phone calls have been conducted due to the current situation with Covid-19, which can further be seen in the table down below.



Name of the firm	Industry	Interviewees role in the firm	Date	Type of Interview	Duration
Company X	Design & Furniture	E-commerce manager	April 30th 2020	Telephone	45 minutes
Outnorth	Outdoor equipment & clothes	CEO	May 6th 2020	Telephone	40 minutes
hem.com	Design & Furniture	COO	May 6th 2020	Zoom	35 minutes
Nordiska Fönster	Window & outdoor spaces	Head of marketing & sales	May 7th 2020	Telephone	30 minutes
RoyalDesign	Design & Furniture	E-commerce manager	May 12th 2020	Telephone	45 minutes

Table 1: (Designed by the authors, 2020)

3.4.2 Secondary data collection

Secondary data will solely be used in the analysis part; however, the authors will mostly rely on the primary data. Secondary data consists of data collected previously by other researchers and there it can be conducted from books, libraries, online data sources, earlier research, journals, and mass media. Often, secondary data is easier to use than primary data and it tends to be comprehensive, reliable, and valid, however, it tends to not be enough to answer the particular questions of the research study (Adams et al., 2014). Collecting secondary data and adopting someone else's research to a study is less time-consuming than primary data and there can be some problems with secondary data to consider. Some of the disadvantages are; data compatibility: the information might not match what is required for the research, data coverage: the information might not cover all the subjects in the research, depth limitation, gaps, and consistency of time series (Adams et al., 2014). It is important to plan the data collection and develop a strategy by identifying the type of data needed for the study. Furthermore, there are several advantages of using secondary data such as large representative samples, it supports documentation and explanation of methodology and it is good for examining and looking for trends (Adams et al., 2014). Combining the use of both secondary and primary data will provide the study with the best outcome and it will strengthen and enrich the research. Furthermore, it can reduce the risks of the conclusion to be a reflection of only one perspective (Silverman, 2016). This study also includes online data and scientific articles and journals due to the lack of previous research within the e-commerce and pandemics field.

3.5 Purposive sampling

The purposive sampling method is done by collecting extensive detailed information, where researchers choose their respondents based on criteria that will provide the prime responsibility to the study based on the research questions for the discovery (Creswell and Poth, 2006). During a research study, collecting data is crucial to contribute more



understanding of the theoretical framework (Bernard, 2002). Purposive sampling is also known as judgment sampling (Lewis and Shepard, 2006). The researchers determine the information required and individuals who will provide the information through experience and competence (Bernard, 2002). This technique is often represented by the key informant technique, where either one or more people are recruited to work as guides to a culture (Garcia, 2006). The recruited people include observant or other members of the community of interest who are aware of the culture and willing to contribute their knowledge or competence (Campbell, 1955). Purposive sampling guides researchers and directs them on how to collect skilled individuals who want to contribute their knowledge or experience by using a purposive sampling method (Seidler, 1974).

There are several studies that have used this technique of purposive samplings such as population sampling, analysis, and key results and data gathering methods (Dolores and Tongco, 2005). In planning a sampling method, the research question determines the objectives and methodology. The purposive sampling is divided into three categories including studies of specific skill, knowledge, and practice in order to find knowledgeable and reliable informants. It is crucial for the authors to be prepared and set out criteria or qualifications that can provide great informants. It is therefore essential to use purposive sampling with a list of specific qualifications. The qualifications include professional individuals who share their experience and the information to use theoretical concepts or near as possible in order to communicate about a specific subject or area (Lewis and Shepard, 2006). The purposive sampling with the list of qualifications is more efficient to the researchers and helped them to find the appropriate informant. However, this method is applied in data collection such as survey technique does ask respondents to use questionnaires to decide the quality of acculturated people (Dolores and Tongco, 2005).

3.5.1 Criteria for interviews

The criteria for participants in this thesis are based upon the purposive sampling and some main criteria's that the authors believe are important in order to conduct a basis to answer the research questions. There are two aspects of the criteria's which are on a firm level and participant level.

The criteria for the firm are:

- The firm operate internationally
- The firm must solely operate as an e-commerce

In order for the representative to be able to provide the authors with valuable and relevant information the criteria for the representative level is:

- The representative must be in a "decision-making position" and have knowledge about their e-commerce operations.



3.5.2 Semi-structured interviews

The qualitative research method of interview and observation is considered a strategy or architectural design, that enables the researchers to produce problem findings or problem-solving (Buckley and Chiang, 1976). However, the choice and methodology of the interview are based on the features of the research question. Semi-structured interviews enable researchers to collect data during qualitative research. Therefore, it is a framework where practices and standards can either be recorded, challenged, and achieved (Jamshed, 2014). Each research interview needs a structure, as qualitative method interviews are often semi-structured, lightly, or in-depth structured (Bryman and Burgess, 1994). Firstly, an unstructured interview is often conducted in a study of long-term areas where interviewers are suggested to let the respondents be free during the dialogue and give respondents time to express their emotions and reactions just with minimal hold (Corbin and Morse, 2003). This interview method has been used in several studies where pioneers of ethnography improved this process with informants by gathering data and taking notes with study participants through observation and recording. However, an unstructured interview is more of a conversation than an interrogation or controlled interaction. This uncontrolled or indirect interviews enable the interviewer to go deeper and collect in-depth details or unplanned questions (Jamshed, 2014).

Jamshed (2014), On the contrary, argues that semi-structured interviews can be conducted on a deeper level in which respondents can also answer to open-ended questions for a broader answer. This kind of interviewing method is conducted by healthcare professionals for instance in their extensive research with one individual or a group. This is an interactive exchange that is often conducted once for all in a half to one-hour time. This questioning process requires an interview guide and topic in order to let the interviewer explore and investigate more in-depth. The meeting is an informal setting to discuss a specific topic determined by the researcher. The interview can either be in person or online. Davies and Dwyer (2007), argue that this method is the backbone of qualitative methods. Interviews, questionnaires, and responders' observations provide insightful materials to the study. While the researchers are conducting semi-structured interviews, they take notes or record the conversation. In this thesis, none of the interviews have been conducted "in person", but rather through phone calls and online platforms like Zoom. To see how the authors have conducted each interview, including the date and duration, see table 1.

3.5.3 Open-Ended Questions

The open-ended question from the semi-structured process is suitable for this research and will contribute significant information to the study (Clifford, Cope, Gillespie, and French, 2016). Conducting semi-structured interviews in this study is the best approach to use even to collect data for this thesis. The authors of qualitative studies find it useful to reveal the respondent's experiences. Therefore, the researchers are suggested following a line of a questionnaire to produce the most insightful pieces of information related to the research question of the study and explore the findings from the answers. However, the authors of the thesis have to plan the interview format before collecting the data (Doody and Noonan, 2013),



and the interview guide that has been used in this thesis can be seen in Appendix B. This process is the most common method to gather data in qualitative research. As researchers, it's a duty to find an appropriate technique and understanding to conduct the interviews to develop successful interviews.

3.6 Operationalization

Concepts	Interview Question	Reasoning
Digital Business Environment	1-5	To gain information about what their firms environment looks like and possibly how that can affect a situation like Covid-19. How is Covid-19 affect their firm, what changes has it caused and how are they currently handling their digital operations. Connected to Digitalization, Digital business model & "What is an e-commerce firm".
Value Chain Activities	6-10	To gain information about how a global pandemic can affect value chain activities of an international e-commerce firm. Which activities does it affect, customer intimacy, production, etc. Connection to Value Chain and Virtual Value Chain.
International Activities	12-19	To gain information about how their international activities have been affected, such as international transportation, shipping to international customers and their connection to international suppliers and customers. Connected to International Value Chain
Actions and responses	20-26	To gain information about how they are responding to the situation, if they are responding and how are they dealing with it. Connected to Business adaptation to External Change

Table 2: (Designed by the authors, 2020)

3.7 Method of Data Analysis

The qualitative method is crucial for researchers who want to explore a particular area or a complex experience. Since there is a range of different perspectives on qualitative methods applied in several studies. Smith and Firth (2011) suggested this method of data analysis as the most effective and popular as well for healthcare researchers. Which is called a framework approach which was developed in the 1980s as a framework approach to analyze qualitative data. Moreover, this process provides patterns identification to the researchers in their data collection when researchers are conducting a structured topic guides interview.



However, in order to conduct qualitative data analysis, there are systematic principles that can be applied to the framework (Ritchie and Lewis, 2003). Ritchie and Lewis (2003), claim that the framework approach helps the researchers to explore data at a much deeper level by enhancing the analytical process and the credibility of the findings. Maggs (2001), argues that some qualitative research is not transparent in terms of their analyzing process therefore as researchers this framework approach is essential to explore a new study. For instance, methods to conduct qualitative data analysis are in three different stages: First, Sociolinguistic methods to explore the use or meaning of language in discourse or interaction analysis and, second, a method that focuses on developing theory through exemplified theory. Thirdly, a method that translates the participant's point of view as content or thematic analysis (Maggs, 2001).

As researchers, the framework approach is suitable to explore a new study by being flexible between the data and theory in order to develop a data coding system. Applying this framework approach to this study, it interconnects the data and the theory until a coherent account appears during the process (Ritchie and Lewis, 2003). Therefore, the framework approach is suitable description data of the study which will direct researchers to produce and develop a conceptual framework from the findings also the data collection. This qualitative data analysis has let the researcher's findings not be based on the number of facts. The researchers explore and identify the real meanings of situations even experiences from an overall point of view (Hewitt-Taylor, 2001). Using this method as constant comparative analysis in qualitative research have enabled the researchers to generate a diversified source during this study process which will also answer the research questions. As mentioned earlier in the research approach, this method is an essential engine to conduct both an exploring process and effective transparent data analysis findings of qualitative research.

3.8 Quality of research Validity & Reliability

The quality of the research includes the two most important indicators known as Reliability and Validity. Both indicators are common in either qualitative research or quantitative research. The quality of research is to measure if the findings and conclusions represent the phenomenon that the researchers examined (Boeije, 2010). Using two indicators is essential to track down the data in order to find out how the results of a study are realized and to judge the relevance of quality (Patton, 1999). This process can be referred to as objectivity due to its meaning word in a qualitative study, the term quality of research is more appropriate to avoid confusion. Kirk and Miller (1986) argue this method is connected to the controllability of the research process which leads to the findings. Therefore, the researcher's findings have to always include transparency and review since all studies are shaped grounded in already known theoretical concepts. The quality of this study will be evaluated in both reliability and validity. The findings should neither depend on the timing of the study or the choice of instrument, however, only reliable methods and repeated observation will lead to comparable outcomes (Bryman, 2008).



3.8.1 Reliability

Reliability is a concept mostly used to evaluate internal consistency and stability over a period (Boeije, 2010). Eisner (1991), argues that a qualitative study objective is to provide a more understanding perspective of any situation. The reliability concept of the study is to evaluate quality in quantitative research as a purpose of explaining (Stenbacka, 2001). Quality of research concept in qualitative research reliability has the purpose of generating understanding. The evaluation purpose and differences in qualitative and quantitative research are irrelevant in this qualitative research. According to Stenbacka (2001), he suggests researchers to no rely on solely the reliability concept, since it might mislead researchers in a qualitative method due to its concerns on measurement.

3.8.2 Validity

Validity is defined by various terms in the qualitative study and it is about being specific on what to evaluate. Therefore, researches have to use the right measures. Bryman (2008), states that validity measurement is to examine whether the measure being produced in a certain concept does reflect on what is supposed to evaluate or examined. To strengthen the validity method, the researcher's questions will be presented in the interview guides. Using the validity technique gives researchers confidence to explain or describe the quality of data (Cutcliffe and McKenna, 2002).

In order to ensure a good qualitative study, researchers have to establish quality research through a conceptualization of reliability and validity to consider the study trustworthy. However, researchers in the qualitative method should be aware that reliability is a result of validity in a study. Therefore, in this study, both techniques of validity and reliability indicators are included (Golafshani, 2003).

3.9 Research Ethics

Some key principles of research ethics include minimization of harm, respect for individual autonomy, and preservation of privacy (Leavy, 2014). Minimizing harm deals with carrying out any research relating to the potential of harm involved. This key principle mainly related to the field of medicine where research often deals with medicine, however, harm can also arise in other types of investigations, including where a qualitative research method is used. It is important for the researchers not to pose any harm upon the interviewees by; pain, physical or psychological, mental damage, damage to reputation, status or relations, and damage to a project (Leavy, 2014). Respecting people's autonomy deals with respecting people's capacity and right to make decisions about their own life. Furthermore, the interviewees' privacy should be respected. It makes a difference for the researcher whether what is being studied is a private or public setting. However, it can be hard to disclose what is private and how private it is, and decisions about what information to keep and what to erase must be made



(Leavy, 2014). It is important that the study follows a code of ethics to ensure that the study will not bring any harm (Saunders et al., 2016). By asking for consent before the interview and informing the interviewee what the interview is about, the purpose, as well as risks and benefits, and offering them anonymity, the risk of harm can be lowered (Brinkmann and Kvale, 2015). Furthermore, the researchers must avoid plagiarism, and this is passing previously made research by someone else, as your own. References must be made throughout the text and any quotes and illustrations must be referred back to their source (Adams et al., 2014).

The authors of this thesis have ensured that the participants in the interviews are informed about consent, the purpose of the study, confidentiality, consequences, and the role of the researchers. Before the interviews have been held, emails have been sent out to the participants with all of the information above, including what is going to be discussed and where the material is going to be published. The interview questions were sent to the participants who asked for it to be sent to them before the interview. Before the interview, anonymity was offered, in case the participant finds the questions sensitive for the firm and the authors have made sure that that information can't be identifiable.

3.10 Authors contributions

The authors of this thesis take responsibility that the results of the primary data have not been altered, also that the study follows the ethical criteria and that it is reliable. The authors have tried to make sure that both authors are present during the interviews for the quality of data, however, it has not been possible for all interviews. Helin conducted three of the interviews by herself, Melissa conducted one of the interviews herself and for one interview, both of the authors were present. The authors have stayed in contact during the process to ensure that everything, including the primary data, has been interpreted the same. The work was distributed between the authors, where Helin wrote the introduction chapter, Melissa wrote most of the Methodology chapter. The Theory chapter was divided between the two, however, most of the theory that Melissa wrote ended up being removed. The data for the Empirical chapter was shared between the two authors and then was equally divided between the two. In the Analysis, Helin wrote the parts about "The digital business environment" and "Actions and responses", while Melissa wrote the parts of "Value Chain" and "International Activities".



4 Empirical Findings

This chapter will present each case findings from the chosen companies. The data will be presented case by case and give an overview of what every firm said concerning the concepts and how the Covid-19 situation has affected them. The cases will begin with presenting some general information about the firm, then the Digital Business Environment, Value chains, International activities and Action and response.

4.1 Case introduction

The respondents in this study go to align with the criteria presented in the methodology. The companies are international and operation as e-commerce firms. The respondents are all in a “decision-making position” and have knowledge about their e-commerce operations and can, therefore, provide us with the information needed for our empirical findings. Due to the current situation with Covid-19 and restrictions of the companies, the interviews were all held as webcam or telephone interviews.

4.2 Company X

The company was founded in 2002 and is active in the design and interior industry and the interviewee is the head of commerce. The respondent asked to be anonymous and therefore, the name of the person and the company will not be named. Company X has customers in over 70 countries and has suppliers and manufacturers in countries in Europe and Asia.

Digital Business Environment

Respondent X stated that currently they have made few changes in their business environment due to Covid-19. The respondent explains:

“We have implemented visitor restrictions which means that we have no meetings held internally or externally, no business trips and no visitors to the firm which puts high demands on us to handle everything digitally”

They have had to change the way they hold meetings by making the meetings virtual and using computers, large TVs and cameras to communicate. At the same time, the firm has had good digital equipment since before Covid-19. Before Covid-19, company X had more physical meetings with employees and the suppliers, now all those meetings are held on digital channels.

“Life has been pushed towards digital alternatives since Covid-19 and it has affected society. There is also a demand aspect to it, that lockdowns and so on have caused the demands to move to the internet even more.”



The Covid-19 situation has turned customers' demands of products more towards e-commerce shops rather than physical stores, due to the lockdowns. At the moment, company X is experiencing high demands on its products from consumers and they are currently profiting from the Covid-19 situation. However, respondent X also shared his uncertainties with how Covid-19 could potentially be affecting them negatively in the future. Right now, consumers are not experiencing any larger financial difficulties, but this could change in the near future if the lockdowns are still happening, and the demands could lower for the firm.

Covid-19 effects on Value Chain

“2% of the production of our Italian suppliers is on hold right now, so to be honest, there are not many problems at the moment, but we can see that it can cause a bigger problem during the autumn and winter season”

The problems that can occur are due to the fact that the products that are being planned to be set up for sale in autumn and winter, are supposed to be produced now, but some of the production has been stopped, which means that customers might not be able to shop for specific products during those seasons. The firm is facing low customer demands on their expensive furniture which is creating uncertainty in the upcoming months and respondent X states that he is worried that Covid-19 could cause a recession in the future. In addition, respondent X mentions that the company has longer delivery times and delays for customers, but that the customers for the most part, understand the situation. The delays are, however, not due to the company themselves, but there have been certain problems with the forwarding agents and their restrictions. Company X share information about the situation with their customers and have a page on their website dedicated to Covid-19. They now offer cheaper home delivery options for customers in Scandinavia and offer express delivery. Respondent X, furthermore, explains that they have in general not been affected that much at the moment, and this due to their value chains being mainly virtual. Customers are more comfortable with online shopping during these times, which has mainly impacted their sales in a positive way.

Covid-19 effects on international activities

Company X has seen some negative effects when it comes to its international distribution channels. Respondent X explains:

“There are some countries that have certain restrictions where larger parcels can't be sent, and therefore, our forwarding agents cannot receive packages from us that are larger than 40x14 cm, which forces us to find other delivery alternatives”

Respondent X furthermore exemplifies the U.K lockdown, and how it has also shifted their consumer demands toward e-retailers. Right now, company X has some issues with production in Italy where there is a production disruption. They still don't know when production will further continue and when they will be able to receive the products. Company



X has a sales and service office in South-Korea and they still have a good connection with them, however, there are currently some difficulties in sending packages there. Furthermore, company X has currently problems with shipping products to China. Company X uses DHL for deliveries across the world, but due to the current situation they have stopped deliveries to China, which then affects their Chinese customers and sales. If they do send parcels to China, they are returned to Company X. This has lowered their activities with Chinese customers, and they have had to inform them about the situation and tell them that their products will be sent to them once it is possible again.

Action and response

Due to Covid-19, the deliveries from Company X to their customers have been the most affected. Their response to this is to inform their customers about the situation and offer cheaper and express shipping. Company X has also had to employ more people for their warehouse due to the increased sales. Company X generally has more to do now and everyone working there is quite busy. Their response to the uncertainties with the production is to steer their sales towards products they already have in stock. Respondent X says that all parts of the firm have been affected in some ways, and people in higher positions need to think and act more strategically towards the situation. New opportunities that company X has seen is that, if they have products in their inventory that the supplier has run out of, they can instead sell those products to their competitors without lowering the prices. Other than that, company X follows the advice and recommendation from WHO (World Health Organization) by having people work from home more, people that are feeling sick or are living with someone in the risk group can also work from home. Company X advice their employees to not eat lunch outside of the firm, during working hours and they have increased intensive cleaning in their offices. Lastly, when asked about if they wanted to add something that might be interesting for the authors to know, the respondent stated:

“Corona is something that will affect the trade long-term, however, we are a company that is used to large changes within the firm”

4.3 Outnorth

Outnorth is a leading Scandinavian e-commerce shop for outdoor clothing and equipment. Outnorth was first founded in 1926 as a small boutique in Kalmar, and in 2005 it developed into e-commerce. Today most of their revenue is from the e-commerce shop. Today, Outnorth has customers mainly in Scandinavia and Germany. Harald Ennen is the interviewee for Outnorth and is the CEO of the company.

Digital Business Environment

Ennen from Outnorth stated that their online sales have been growing more due to Covid-19. Outnorth is mainly an e-commerce shop, where 95% of its revenue is online, while only 5% of their revenue is from their physical boutiques. Ennen states:



“Some countries have much stricter restrictions than Sweden, which has caused the online commerce to really boom at the moment, even in Sweden. But we can see that the countries that have it stricter, is where online commerce is growing even more, due to natural causes from this situation”

Furthermore, due to the Covid-19 effects, vacation plans are being canceled and more families are instead planning trips in Scandinavia, which makes people look for equipment and clothes to fit the Scandinavian weather. This makes it also positive for their revenue as it is their product area and the demands for sports gear have also increased. Not only do they have a digital advantage compared to physical stores during these times, but since they specialize in outdoor and sports, and that is on-demand at the moment, their revenue is increasing even more. He explains:

“The areas that have increased even more now, according to our analysis is the “taking care of the home, the family and self-care”. This includes working out and cooking”

Ennen also explains that the advantage they currently hold against some other e-commerce shops is that they only have a small part of their sales that go to physical retailers, while other larger e-commerce firms have larger sales that go through physical stores. And now that many physical stores are closed or having fewer customers, Outnorth is not really noticing any negative effects from that either. Some changes in their business environment that they are experiencing are that employees are working from home more and they have to rely more on digital equipment. They have had to cancel some meetings or make them virtual and they can no longer travel to other countries for meetings. Other than that, Ennen says that they have not experienced any great changes or difficulties in the way that they work. Their business model is more or less the same. Ennen says that they have not really changed the business model due to the Covid-19 situation, but rather adjust and refined it. The way that they have adjusted their existing business model is by implementing new delivery methods for their customers, such as home deliveries. They are now making sure to understand what the customers need in this current situation and adjusting to their needs. Furthermore, they are adjusting their assortment as they are seeing some higher demands in some products. For the most part, they are still running their business as usual and have not been affected too negatively by Covid-19.

Covid-19 effects on the value chain

Outnorth has not had any larger complications with their value chains due to Covid-19. Ennen describes that as a result of the increased sales they are experiencing, they need to focus on their assortments and what they can offer the customers at the moment. Outnorth now tries to purchase products from its suppliers, in order to respond to the customer's demands.



“The challenge is now more to find and access even more products in the sentiments that we have seen an increase in customer demands”

Outnorth now works more together with their suppliers to gather more of their existing assortments and to find complimentary assortments. Outnorth has now a more intensified contact with its suppliers and manufacturers and they communicate continuously to keep track of the products, and so that the supplier’s priorities Outnorth and manufactures their products so that they can receive them as quickly as possible.

Ennen explains that, even if the company is still running, as usual, they have seen some suppliers having difficulties during these times. A lot of suppliers have lost customers, as many of their customers are physical stores, which have now closed. However, this makes it possible for the suppliers to prioritize customers who are e-commerce, such as Outnorth. Furthermore, Outnorth has some production in China and the Chinese factories were closed down for a while. However, they are now up and running again which is positive, but now there are many companies waiting for their products from China, which will take a while to receive. Outnorth is still keeping their “customer promise” which is the promise that the customers will receive their orders in time. They are making efforts to fulfill customers' experience in Covid-19 times, and they have made sure to employ more staff in order to manage the increased customer volume. In general, Ennen says that their customer relations have gotten better and that they have a lot of new customers that did not know about Outnorth before, but by searching on the internet have found them. Outnorth shares information with their customers about the Covid-19 situation and they have a page on their website with FAQ (frequently asked questions) where they answer questions that customers have about how they handle Covid-19. Even if they try to keep their “customer promise”, Outnorth explains to their customers that there might be delays due to high demands, and the customers usually have an understanding of the situation. Furthermore, Ennen explains that they have modified their marketing to some extent, by making it more performance-based and has a direct connection to a certain activity. For example, it can be to offer customers products for a certain price. Right now, it is important for them to create awareness about them as a brand, as they have many newer customers. It is important for them to also be present in social media.

Covid-19 effects on international activities

“Other than in Sweden, we have customers in Norway, Denmark, Finland, and Germany. And these countries, like you, may know have shut down in another way than Sweden has.”

He further explains: *“People in Norway and Denmark are staying home, schools have closed and physical stores have closed and even the border to Denmark has been closed, which makes customers from these countries turn even more towards e-commerce since they have no other choice since the physical stores are closed.”*



When it comes to international distribution, Outnorth uses different freight companies for deliveries to customers outside of Scandinavia and some countries in South Europe for example Spain and Italy, have been completely closed down for a few weeks. Outnorth has therefore been unable to deliver parcels to these countries completely and they have lost customers Italy, which is understandable in this situation as many other companies have lost customers from Italy as well. However, Italy has never really been a huge part of the international customers for Outnorth anyways, so it has not affected them too badly in this aspect as well. To other countries, there may be longer delivery times, but other than that, Outnorth's international activities have not been that affected by Covid-19.

Action and response

“The challenge ahead is to know “how long will this situation last?”, and to sit down and start planning strategies for how the purchases will lie ahead and which products will be sold and so on. So, there will likely be bigger consequences ahead, but in our case, it is mainly positive”

Some responses Outnorth has had due to Covid-19, is to have most of their employees work from home, however, the warehouse is still up and running with employees. They have made some restrictions and changed routines for the warehouse so that not many people are there at the same time, in order to minimize the risk of catching the virus. Ennen explains that their inventory and purchase of inventory, are the parts of the company that are most affected by Covid-19. At the same time, the company has been positively impacted by more sales and new customers. It is up to the company to keep their “customer promise” so that the customers stay with them. Since they have been prepared to some extent, by employing more people, the effects have been positive so far. However, if they had not planned and taken strategic steps, they would have been underemployed right now. Therefore, Ennen says that it is important with planning. At the moment, Outnorth is making sure to follow the recommendations from WHO, and they are making sure to clean the offices, working from home, and if an employee were to get the coronavirus, they have prepared other employees to work instead of them. Lastly, Ennen states that the most important thing in this situation, is to have information and to be able to adapt to new situations, which Outnorth has done. Ennen thinks that they have made a good job and reacted in a good sense to the Covid-19 situation.

4.4 Hem.com

Hem operates within the design and furniture industry, based in Stockholm, and founded in 2014. They operate mainly in Europe and America and have employees in Sweden, New York, and England. The respondent for Hem is Isac Epstein who is the COO of the company.



Digital Business Environment

Epstein stated that their team operating in New York, United States, is now on quarantine which is tough for them as a firm.

“We have now put our team in Sweden on a layoff and they are now only working 60% and have in that way slowed down our operations.”

This is a negative impact on the firm and the company cannot operate as usual. He explains:

“We are now awaiting the worst outcome from this and are mainly waiting until the situation gets better”

Hem.com's primary customers are hotels and restaurants and at the moment, a lot of hotels and restaurants are highly affected during the Covid-19 situation. These customers are nowadays most affected due to social distancing where people are not allowed to gather as many in one place. Hem.com has paused many projects due to this situation. In meanwhile, they are solely working through digital platforms more which the teams are used to do and since the company has a global team, the business activities are operated digitally.

“Our business model is digital and is put up in a way so that it will most likely benefit us in the long-run “

As an e-commerce firm, he said that they do have advantages to still be able to work online during the lockdowns. On the contrary, he added that Hem.com's competitors have lately considered sending some retailers into different places around the world where the retailers can meet with other customers in person. Hem.com's digital business environment has not been affected to that extent compared to its competitors. Their digital business model has not been modified besides they were aware and prepared for the upcoming disruptions and the shift that could occur due to the Covid-19 situation. Moreover, the company has slowed down the marketing funds.

Covid-19 effects on value chain

“We have a large part of our production in Italy, and this is the part that has impacted us the most. But other than that, we currently have products in our inventory that we can survive off as a company”

Epstein explains that Hem.com's value chain has been affected to some extent due to the U.S and parts of Europe reacting badly to Covid-19. For example, some cities in Italy are on lockdown and it is nearly impossible to go through some municipalities which is the reason why some parts of the value chain faced some disruptions such as the distribution channel. The distribution part was hit in the very beginning.



“If you see the value chain as a knot with relations in between, if a knot gets affected then the connection to the relations will also be affected”

At the beginning of the Covid-19 outbreak, the Hem.com team shared information concerning Covid-19 to their customers through newsletters and emails, where they informed their customers that their e-commerce shop will still operate as usual during these moments. In addition, Epstein stated that customer demands have not increased, and it is too early to predict how the Covid-19 situation has affected the customer demands. Due to the Covid-19 effects on the firm, he declared that the Hem.com office landscape will probably change and be in different areas in the future which has positive impacts for their online shop. Fortunately, the Hem.com team will continue to work and book meetings online with their customers as usual since there are still some of their team available to work as long the products are still in the warehouse the company will continuously receive and send their orders to customers.

Covid-19 effects on international activities

The company produces its products in various factories in Europe such as in, Polen, Italy, Sweden, and more. When the products are manufactured, the firm sends them directly to the warehouses in Polen and the US in order to be able to send the orders directly to customers all over the world. Furthermore, customers do contact them to order or ask questions through the Hem.com website and email. As mentioned earlier, Hem.com customers are located all across the world for example in New Zealand, America, and Europe. Due to the Covid-19 lockdowns in some countries, the company looked for some studios for a short term in Stockholm and New York in order to receive some packages of various products so that the team available can send the orders to the customers during Covid-19. Currently, the major effect of this situation has hit them hard in their production and factories in Italy. However, during these times, the firm is still selling the products available in the warehouse until this period of waiting is over. In contrast, Hem.com international business activities seem to be less affected at the moment, however, more affected on the customer's side since they have faced difficulties to receive or pick up their orders, their customer's relation has not actually been affected until this day, mainly suppliers and the production in Italy were most affected since the beginning of the lockdowns and less in the US or Europe.

Action and response

“The parts of the company that is the most affected due to this situation must be the parts that handle incoming orders and the parts of the business that handles physical events”.

He continues:

“It is too early to say if the firm has been positively impacted in any way, but I do believe that there mostly will be some positive aspects to come out of this situation later on.



However, this situation also affected their team in the US where they have stopped working from the office and forced to stay home during this period. The respondent stated that some of their team are still operating and sending orders to their customer online as long that they still have products in their warehouse. Epstein stated that their digital business might have opportunities guaranteed for the designers who design furniture. Hem.com's incoming orders have decreased to 90% during this period which is a negative impact on the firm. In conclusion, he added that e-commerce shop is more of a distribution channel, therefore, it can differ to some other firms selling, for instance, digital products over the internet and looking at the firms like Apotea and Mat hem these firms are coping very well during this times because their products are essentials and most consumed. The e-commerce firms selling the most essential products or needed on a daily basis, those firms are now benefiting more than Hem.com.

4.5 Nordiska Fönster

Nordiska Fönster is a Swedish e-commerce firm, founded in 2002 and is operating within the window industry. They also sell products like, doors, outdoor spaces, and skylights. Their main market is Sweden and they sell to Norway and customers in other countries. The respondent for Nordiska Fönster is Henrik Wendt who is the head of marketing and sales.

Digital Business Environment

“We do not currently have employees working from home, except if they feel like they feel somewhat ill. I find it that nothing has changed due to the situation”

Most things in the company are unchanged and they have not made any modifications in their business models. They do, however, have more digital meetings with their suppliers and manufacturers as they can no longer travel outside of the country. Wendt explains that they have some advantage with being mainly e-commerce, as e-commerce is booming at the moment due to Covid-19 which has shown some effects on their company as well. Their sales have been increasing since the begging of the year and they are not slowing down.

“We keep working as usual and instead of slowing down our operations during these times, we put more effort into it now. You can't put brakes on uphill, you must gas more uphill!”

Furthermore, they have seen some business opportunities due to Covid-19. As families are traveling less, and canceling plans for trips, they can instead invest in their homes by changing their windows and etc. Wendt further explains that they are quite flexible in their business model and how they operate since they are a smaller company with around 20-15 employees. Them being e-commerce, also makes it easier for them to adapt to different



situations. However, at the moment, they have not developed a plan for a crisis, they are following restrictions and if things were to escalate, they would handle it from case to case.

Covid-19 effects on value chain

Nordiska Fönster now uses more digital communication solutions in their value chain and share information digitally. The Covid-19 situation has some minor effects on their distribution channels as some freight companies have some distributions with their transportation. Wendt explains that these problems have shown more domestically and not as much abroad. With the e-commerce industry booming right now, transportation around the Stockholm-area has been a lot and there have been some delays within the forwarding agents. Their manufacturing company has changed some routines and implemented new strategies; however, those changes have not been affecting Nordiska Fönster. However, one thing that they have experienced with production is the lack of a specific part for the windows. There has been a lack of products of window frames all across Europe due to Covid-19 and they have shared this information with their customers on their website. However, this is the only information about Covid-19 that they have been sharing with customers. Feedback and needs from customers have still not changed as they are still running their business as usual.

“We see it as an opportunity, if many others are pulling out of marketing, we increase it instead and make more TV-marketing to get more exposure, and it is cheaper for us since no one else is investing in TV-marketing currently”

Furthermore, Nordiska Fönster is having sales record and have doubled their revenue compared to last year. Wendt can't really say if this is due to Covid-19 or not, or if their sales would be higher or lower without Covid-19 since they already had these record sales since January and February. Furthermore, there have been some problems with Covid-19 when it comes to payment options for their customers. They use credit payments, for example Klarna, which have now increased their demands for consumers due to people losing their jobs and being laid off from work. Right now, it is harder to find financing solutions for some customers, as most of them make financial plans with banks, when purchasing from Nordiska Fönster. For the most part, their value chain has not been distributed and their customers are satisfied with their offering right now.

Covid-19 effects on international activities

Nordiska Fönster has mainly customers in Sweden, and they do sell to Norway, Denmark, and Finland and other countries as well. Norway has been shut down, unlike Sweden, however, they have not seen negative effects from any lockdowns either. They have now started a marketing campaign in Norway, which has given them some responsibility. Furthermore, they work together with suppliers and manufacturing companies in Europe to develop their products, but they have not experienced any negative impacts from lockdowns in other



countries. As mentioned before, they can no longer travel to other countries that have impacted their international activities in that way, but other than that they have not been impacted.

Action and response

The most effects of this situation are on their sales since customers are having a harder time with financing and some of them don't want to take the risk of investing or buying the most expensive products during this period. Wendt explains: "On the other side, there could be negative aspects of this situation when maybe not many people are willing to invest half a million to change the windows of their homes, or exclusive sliding doors and so on. People are most likely worried about their income right now." (Wendt, 2020). The company is now trying to find new payment solutions for its customers. The respondent also said that due to Covid-19, some of their customers are not financially stable because of the layoffs and not being able to work fulltime. However, Wendt mentioned that the firm can see some business opportunities from this situation. Since many people now cannot travel out of the country, the customers might spend money to invest in their home with furniture, or to have a summer feeling on the balcony with benches and more. This can be a great opportunity for the firm by increasing revenue.

"Our competitors have started to slow down the speed of their operations, which gives us the opportunity to act faster and come out stronger"

For the moment, Nordiska Fönster is still growing faster and has only been lightly affected by the virus. Nordiska Fönster has not yet developed a strategic plan during the Covid-19 situation, this due to the fact that they have barely been impacted, and if they were to experience some impacts, Wendt states that they will handle it case by case. He states that they are quite flexible in how they can handle uncertainties since they are a smaller group of employees, and they can make quick decisions regarding different situations. Furthermore, he stated that as an e-commerce firm they are doing the best for the firm to avoid negative impacts. Due to this current situation the firm has not received more visitors for their greatest exhibition.

4.6 RoyalDesign

RoyalDesign is a leading e-commerce firm in the design and furniture industry. The company was founded in 1999 in Kalmar, Sweden but was positioning towards the American market. Today they are available in 13 different markets across the world and physical stores in Sweden. The respondent for RoyalDesign is Clara Eriksson who is the E-commerce Manager for the Norwegian market.



Digital Business Environment

Eriksson stated that Royal Design has been affected to a certain extent by the Covid-19 situation. Due to their firm being mainly online, the sales and incoming orders have not been directly affected by the current situation. The main issue is that some products that are not available on their websites due to the lockdowns in some countries. Since they have few physical stores that are now mainly closed, their online market has more advantages during this situation. The respondent said that their digital business environment has been affected less.

“ Most of our revenue is from our online sites which are advantageous in this situation, yes, we have been affected but not really that we see it in order intake yet but it will be affected if we do not have products on sites if you say so “

The respondent stated that due to Covid-19, their employees are working from home for the last two months, which has made them work more digitally. Furthermore, Eriksson said some departments like inventory and customer service have their systems available at their office, therefore, they cannot work from home. If any employee working in the inventory or customer service has a small symptom, they are obligated to stay home. She also said that due to this current situation many employees have been absent and sick more than before which has affected their digital business environment.

“This has obviously affected our customers and the entire organization, but we try to solve it in different ways so that it still rolls on, but it is a changed situation for everyone within the company”

Eriksson stated that their firm's business model will change due to the Covid-19 situation, but it has not yet been set up since it is in process. She said that the modifications in their business model have affected the employees in the firm, where some of their team were fired or have to work part-time.

“The entire company will be affected, and we will need to make cost efficiency improvements and savings packages and such, there are changes that are happening even though most part of the company is digital”

The respondent said that Covid-19 has affected their business environment as their meeting is not in person anymore. Some departments from above such as purchasing departments and other in the head office are depending more on digital equipment to book meeting using mobile phones or video links than before. Eriksson mentioned that the firm was more digital even before the Covid-19 situation, but their meetings with their team operating in Gothenburg have only been only since the pandemic outbreak. Eriksson said that she has a daily conversation with their team in Gothenburg through video links and has only met the team once.



Covid-19 effects on value chain

RoyalDesign has customers all over the world, Eriksson said that they have 17 websites in different countries across Europe and in different languages. Moreover, she said that their international customers are even in Japan, South-Korea and Australia most of their customers are from Sweden and Scandinavia. The respondent mentioned that Covid-19 has affected some parts of its value chain activities due to lockdowns in some countries. They have retailers from several brands that have shut down their production and the respondent states:

“The production being shut down will be affected later since there will be fewer products available to sell online”

Furthermore, she stated that they have suppliers that they usually buy products from, but these suppliers have not been able to produce more products due to factory lockdowns. Furthermore, this is a problem that certain brands have been experiencing.

“Due to lockdowns, it has been difficult to receive some products in our warehouse which affects the customers”

The respondent said that their firm has noticed there is a stop in sales from a specific country, however, it has not affected their value chain badly. Moreover, communication with their suppliers and manufactures has increased since they have to be more updated now, in order to know which products that are not able to be produced.

During the pandemic, the inventory and warehouse department have been using robots to avoid more manual work and the respondent also said that they are doing the best to work safely. However, they have noticed that it has been easier to send smaller sizes than the larger ones. In addition, the respondent mentioned that they have informed their customers about the Covid-19 situation through newsletters and websites, which has increased their customer feedback where most customers ask about their orders. However, the respondent said that they have for the moment to be more informative to their customers about delivery delays which also has increased their information and communication with customers. She also said that they have been more transparent about the disruptions and have to inform the customer. The respondent said that the firm has also noticed a higher level of online sales during Covid-19. In addition, she mentioned that RoyalDesign increased the marketing performance on social media to inspire more people to buy furniture and articles that can give customers a vacation feeling or decorate a home office. Their marketing includes an AR system that gives the customers' ability to use their phones and see how the products could fit their place.

“For instance, to show customers how a lamp fits into a cinema room to get the exact right dimensions, etc. that online sales can help create more visual through AR tool using a mobile phone”



Covid-19 effects on international activities

Royal Design has international activities across the world and the respondent said that their export and import products are not affected during the current situation. Due to lockdowns and the pandemic outbreak, Eriksson said that they have home delivery for customer orders directly to the door, which has not been an issue. Their forwarding agent has developed new routines to deliver orders in a safer way. She said that they have an ID signature update where the freight agents can track if the customers are home in order to deliver the products and avoid fraud.

“Due to some lockdown, there are some delays in different zones in countries such as Norway, they have closed some trains area which causes delivery delays to happen”

Action and response

Eriksson stated that the situation of their firm could have had more challenges if it was not online. She gave an example of H&M physical stores that were shut down across the world due to the Covid-19. She continued,

“.. no one has been able to predict this type of pandemic; however, we are very grateful to have this type of digital business model also that our online websites have most of the revenue and sales”

RoyalDesign respondent mentioned that their firm has noticed that customers have purchased more items such as furniture to decorate their homes. She said that on their online websites they have information to inform customers that RoyalDesign operates by the rules from the public health authority and WHO recommendations on how to manage their sales and deliveries and the entire flow as well. The information is to inform customers that the inventory department operates safely where they have been using more robots in the warehouse. This information has been updated on the RoyalDesign website to let customers know that their orders are packaged safely. In conclusion, the respondent said they have made new routines since the pandemic outbreak, by being more informative to their customer and sending more links update about the delivery delays to their customers more than before. In general, the respondent stated that Covid-19 had impacted the firm negatively.



4.7 Summary of Findings

Concept	Company X	Outnorth	Nordiska Fönster	hem.com	RoyalDesign
Digital business environment	Few changes, relying on more digital equipment	Very few changes, virtual meetings within the company	Not changed, operating as usual	Changed to a larger extent, working from home, layoff	Changed to a high degree, fewer employees
Covid-19 impact on firm	To some extent	Not very much	Not very much	Impacts to a higher degree	Very high impacts
Impact on suppliers/manufacturers	Some disruptions in production	Barley any impacts, few problems with China	One specific material not available at the moment	Stopped production/larger extent	To some extent, some suppliers stopped production
Impacts on distribution	Larger extent, harder to deliver parcels	Barley any impacts, some delays	Not much impacted, few delays within the Sthlm region	Larger extent, harder to deliver parcels	Barley any impacts, distribution as normal, few delays
Impacts on sales	Increased sales	Increased sales	Increased sales compared to last year	Too early to predict	Increased sales
International activities	Some issues with China	Not affected	Not affected	Impacts on a higher degree, problems with Italy	Not affected
Opportunities	More sales, more customers, recruiting more employees	More sales and new customers	More people staying home=more customers buying	For the product designers	Redesigning their business model
Threats	Future threats, not having enough products	Employees getting infected by the virus	Financial difficulties from customers part	Decreased customers	Less employees
Actions due to Covid-19	Steering sales towards existing inventory	Steering sales towards products in high demand	No new actions	Waiting it out, working from home	Changing and modifying business models/operations

Table 3: (Designed by the authors, 2020).



5 Analysis

In this chapter, an analysis based on the case findings will be presented of each concept; Digital business environment, Value chain, International activities and action and response. A comparison between the case findings will be made and discussed as well as connected to the theoretical framework that has previously been presented.

5.1 The Digital Business Environment in Current Covid-19 Times

Three of the respondents stated that they have not been too negatively affected by Covid-19 and have therefore not made any major changes in their business operations and the business environment is almost the same as before. Digitalization is a key factor as to why some of these companies are not being too affected and Buer et al. (2018), explains that digitalization is a core element for creating an effective plan and control in a company. The authors argue that digitalization allows these 3 companies to have all the resources they need to operate as normal as possible during these times, and it allows the employees in the firms to have less human contact but still being able to work, as they can do it through digital channels. These companies being e-commerce further allows them to operate as usual and still have customers during a pandemic, as they don't have to think about closing the store or adjust their opening times like physical stores have been forced to during the pandemic and this also relates to Wigand (2006), who stated that electronic commerce has shifted the definition of a company due to the abilities they have. The interaction between a company and customer no longer needs to be physical and they can instead interact through digital channels.

Furthermore, the respondents were already dependent on digital technology before the Covid-19 situation and are being even more dependent on it during the Covid-19 situation. Wigand (2006), states that the sets of technologies and database management are the major drivers of E-commerce. The companies now have to use more digital communication channels for communications throughout the companies and have more virtual meetings with employees, customers, and suppliers. Company X has now implemented visitor restrictions, which makes them rely more on their digital equipment to implement new ways of having meetings. However, it can be argued that RoyalDesign and Hem.com, do not have the same resources as the other firms as they have been impacted to a larger extent. These two companies also rely on digitalization, but due to different resources, strategies, and planning, they have been impacted differently. RoyalDesign for example has to now rethink their strategies and come up with new effective plans that can support them during these times.

The development of technology and other tools of communication has also contributed to modification of business activities (Wigand, 2006). Company X and Hem.com have furthermore, stated that their employees are working from home now, either full time or to some extent, which also makes the employees rely on digital equipment for their work with digital tools like laptops, computers, and smartphones, which are tools that usually are used at the office as well, and can be used to work from home by, for example, answering emails,



calls and having meetings. This points to the fact that the more digitalization increases in a company, or in general, the quality of new solutions can also improve (Rothlauf, 2011). The digitalization of firms also includes how they digitize their activities partly, or fully to their electronic environment, for example activities with logistics, operations, and marketing (Kayikci, 2018). Nordiska Fönster, however, is still working as usual and they do not have employees working from home currently and almost everything within their firm is the same as before Covid-19, except for increased cleaning in the offices.

From the empirical findings, the authors have analyzed that e-commerce firms do have some sort of advantage in this situation by already being digital. For example, company X, Outnorth, Nordiska Fönster have not been forced to do any major changes in there the way that they operate except for having more digital meetings, and maybe working from home more than before. This could be a result of their digital business models, as some important component of business models for digital firms includes being explicit and offer appropriate information and knowledge to support the managers of e-commerce firms (Al-Debei et al., 2008). The empirical findings show that three of the companies' business models are mainly flexible and can be easily adapted to smaller changes. Outnorth, company X, and Nordiska Fönster's business models offer these companies appropriate information and knowledge, as they do monitor the current environment by looking at how the Covid-19 situation is affecting other firms and how it is affecting society and customers behaviors. By taking in the information from customer's behavior, they can adjust their business models accordingly. Outnorth have not changed anything in their business model. Instead they have only adjusted and redefined it by implementing new offerings to customers such as home deliveries, as they have noticed that people are less willing to go out and expose themselves in these current times. Nordiska Fönster has also not modified their business model due to the Covid-19 situation, because the effects on their company have been almost nonexistent. Another reason for Nordiska Fönster's business model being flexible is due to them being a smaller company with fewer employees, which the respondent states in the empirical findings. RoyalDesign however, has experienced difficulties in its current business model and its operations. They are taking a completely different approach compared to the other companies and are instead planning to redesign and remake their whole business model so that the new business model can support them and the managers by being more explicit and offer the appropriate information they need.

Business models should be adaptable and cope with uncertainties, complex, and rapidly changing environments (Al-debei, 2008), and the external environment has really changed since Covid-19. The changing environment has mainly impacted RoyalDesign and their current business model has not been able to adapt to it, due to them not being prepared for the consequences which the pandemic has brought and not having the sources to support enough employees. The effects that RoyalDesign is experiencing can also be a result of having specific suppliers that have not been able to adapt to the changing environment and due to circumstances with strict quarantine and social distancing in some countries, for example,



Italy where it has been harder to ship products to companies in other countries. Company X and Outnorth are adaptable firms and they have only changed and adjusted a few things in their business environment and business models, and they are still up and running almost as usual through this complex and rapidly changing environment that Covid-19 brings. Nordiska Fönster has not yet been impacted to the extent where they have to adapt their business model to the situation, however, they are confident that if things were to escalate or change, they would handle the changes, case by case. Hem.com seems to not have adapted to the changing environment either, in a way where they still can operate as usual. Instead, they are taking the approach to work mainly from home as much as they can, make revenue from existing inventory, and mostly wait for the situation out. Keen and Williams (2013), states that the business model should be designed and developed for future planned businesses, and in comparison, to other respondents from the data, RoyalDesign is in the process of developing their business model which has been affected negatively due to the external environment. However, it can be argued that restructuring their business model could end up benefiting them as they now have seen how the environment has reacted to this situation, and they can take the knowledge that they have gathered so far during this situation, to fully support them in the future.

Furthermore, the digital business model should help the company to have more control in their company and ensure that they can compete with the needed and appropriate information in which the business model should provide (Sawy and Pereira, 2012). Outnorth, Company X, and Nordiska Fönster shows in the empirical findings that they have business models that allows them to have a certain control over their company, which helps them to compete appropriately during these times. For example, Outnorth and company X, have an advantage at the moment since most of their products are not sold to physical retailers. This means that most of their revenue comes directly from their online shop, compared to other types of e-commerce firms that have some of their products in physical retailers, and therefore has parts of their revenue come from physical stores instead of solely their e-commerce shop. This means that company X and Outnorth currently have a competitive advantage again both physical retailers and some e-commerce shops. It also means that they have a higher degree of control of their business model compared to RoyalDesign, for example, which has several physical stores that they rely on for their revenue and therefore, they have a lower degree of control over their business. This points to a new finding, that e-commerce firms can have different level of degree of control in their business models, which the theoretical framework does not highlight.

All of these respondents mention how e-commerce has been booming and their sales have therefore increased. E-commerce is available for almost everyone in today's era, and due to the factors of value creation for e-commerce, being transaction efficiency, complementarity, lock-in, and newness, online websites are increasing sales and reforming the world of e-commerce (Schafer et al., 1999). It is clear from the empirical findings that the Covid-19 situation has turned customer's demands of products more towards e-commerce shops, rather



than physical stores due to lockdowns and avoiding exposure to the virus. Customers for these e-commerce firms can feel “safer” when shopping from their websites, as they can avoid exposing themselves to the virus by having less human contact, than if they were to go outside and shop from a physical store.

Outnorth and RoyalDesign have the experience of being both a physical store and e-commerce. Outnorth is experiencing fewer customers in their physical stores, meanwhile, RoyalDesign has been forced to shut down some of theirs. This points to the fact that most e-commerce firms are not being negatively impacted when it comes to sales and customers, but rather positively impacted during the Covid-19 times. However, from the analysis and findings it is understandable that the impacts can differ depending on what type of company it is, what they are selling, who their customers are, and where they import products from. This has not previously been mentioned in literature from the theoretical framework. RoyalDesign is an example of a company that has had increased sales, but instead of positively affecting them, it has rather negatively affected them. This due to them not being able to handle all of the increased orders, and them having a lack of inventory. Hem.com is also experiencing some negative impacts, unlike the three other firms, and this is mainly due to them having a certain type of customers, which are restaurants, hotels, and offices.

5.2 Value chain

Farid and Hanantasema (2000), states that the purpose of the value chain is to design, produce, and deliver services to meet the customer's needs. Michael Porter (1985), states that the value chain can be complex since it involves activities that include strategic business activities which consist of: inbound logistics, operations, outbound logistics, marketing, services, and sales. Three of the respondents said that they have experienced problems in their production. Company X, Hem.com and RoyalDesign had to put a hold on of their value chain activities such as production due to lockdowns in some countries where employees are on quarantine, which might create more issues in their value chain activities during the upcoming months. Unlike other respondents, company X and Hem.com has not been able to produce some products during Covid-19. The empirical data shows that e-commerce firms have faced some issues in their value chains such as problems with deliveries and having less production. This relates more to Michael porter's (1985) theory, where he said that value chain activities are diversified to a certain level therefore the e-commerce firms have to meet difficulties to control their value activities from certain countries due to the pandemic effects according to the data. Consequently, the empirical findings show that value chain activities that involve certain products have increased like Outnorth. From the empirical findings, Covid-19 has challenged e-commerce firms on different levels, since the value chain activities in certain countries were affected to a certain degree and other less affected.

Moreover, the distribution channel and production parts of the value chain have been the most affected. From the data collection, some e-commerce firms were affected more or less than



others to a certain degree. The similar effects from respondents were that some lack of production has caused delivery delays on particular products due to factory shutdowns. Roosendaal et al. (2003), suggested that in order to achieve more effectiveness and efficiency, firms should try to combine each activity of the physical value chain to the virtual one. However, the respondents said that to achieve more effectiveness they have tried to propose their customers with several solutions, such as, helping customers with other transportation modes and other payment methods. Besides, respondents explained that due to the payment changes, the e-commerce firms have realized that their customers were more comfortable making more orders which has in return increased the company's sales and customer demands.

Pagani (2013), states that firms can track customer's information and become aware of their preferences and therefore, make targeted efforts in meeting their demand before their competitors. For instance, Outnorth has realized a preference for certain products in their customer information. The empirical data shows that the Outnorth team has made efforts with their suppliers to meet customer high demands which have to a higher extent increased their sales during the Covid-19 period. Outnorth and RoyaDesign's communication with suppliers and manufactures has increased due to certain issues with production and factory shutdowns. This shows that Covid-19 has pushed e-commerce firms to develop their service quality by finding different solutions in order to meet customer's needs and develop more customer intimacy, which has positive impacts on both parties since more customers still prefer to purchase online. Besides that, most e-commerce firms continuously operate their value chain activities as usual which is somehow positive at the moment. Turban et al. (2000), stated that in a virtual setting, customers can feel more comfortable with sharing their personal information, rather than in a physical setting. This relates to the empirical findings, where many of the respondents have explained that due to their online shops being available, they have developed more customer intimacy by receiving more customers and customer feedbacks than before Covid-19 situation. Customers have shared more personal questions and asking about products with discounts for express delivery. The customer's feedback has helped e-commerce firms to find financial solutions to their customers and enabled e-commerce firms to fulfill customer's needs during Covid-19. This has made more people comfortable to build more long-term relationships with online firms.

As Rayport and Sviokla (1995), stated, a firm's customer relationship can be enhanced through feedback from customers, and respondents said that their customer relationship has developed and gotten better than before which is a positive impact on the firm. Respondents describe that they share information about the Covid-19 situation, where one firm created a new page on their website for customer questions. Others have shared Covid-19 information through emails or websites which has been efficient to create a customer intimacy, by holding a conversation and giving updates to their customer about their orders during this period. Due to Covid-19, two of the firms in the empirical findings, have increased their marketing through social media performance and TV marketing to bring more awareness to their firm



during these times. According to Eriksson, Royal Design has introduced virtual system AR that could track more customer information and their preferences by using a mobile phone. This system shows to which degree the firm is making efforts than other firms to meet customer's needs during this pandemic. This is a great competitive advantage that the firm has developed than other competitors might not have.

According to Ignatenki et al. (2019), the development of information and transportation technologies and its advantages have allowed firms to expand their production into tasks performed at other locations to take advantage of different factor costs. From the empirical findings, respondents said that they developed new routines as home delivery at the door. RoyalDesign has developed more transportation technologies where its forwarding agents have updated new ID technology to avoid fraud to make sure that the orders are delivered to the right customer. The Covid-19 situation has allowed RoyalDesign to develop better transportation technology which is an advantage that enables the firm to keep sending customers' orders in different countries at the moment. The respondents mentioned that due to the restrictions that freight companies have during the Covid-19, e-commerce firms arranged other transportation modes to deliver the orders to their clients. The empirical data shows that e-commerce firms have made extensive efforts to keep their customers and their online business ongoing during this current situation. Some of their efforts were made to bring awareness about the firm's brand on social media and be present for more potential customers.

5.2.1 International activities

Blair (2005), states that the international value chain is used to make known that there most likely is a long distance between the local producer of goods and services and the global consumer. From the empirical findings, most respondents have explained that their suppliers and manufacturers are located in different countries in mainly Europe where there is some distance between them and the consumer. Respondents said that due to the lockdowns and long-distance, it is impossible to travel and enter some countries where the firms have their production factories. Furthermore, respondents said that due to this they are dependent on digital equipment to keep a dialogue with their suppliers and manufacturers. A particular, respondent also mentioned that they also had some disruptions in South-Korea, and China was it seem impossible to send packages to their customers. Respondent X said that they usually send the parcels by DHL for their delivery across the world. However, due to the Covid-19 restrictions, DHL sent the parcels back which is a negative impact on their international customers. Clearly due to the distance, e-commerce firms have experienced certain issues to control all their international activities due to the current situation and specifically among the countries on lockdowns.

Swoboda, Foscht and Cliquet (2008), said that value chain activities that include production in other countries, means that goods and services cross borders many times throughout the chain and passing through several countries more than once. Due to the Covid-19 situation many



products and orders have crossed several countries like China, South-Korea, and Italy more than once since the customers living in China, South-Korea, England, and Italy had difficulties to go out to pick their orders during the lockdown. The most negative effect was that respondent X and RoyalDesign said that it was easier to deliver smaller sizes on the packages than the larger ones. Otherwise, respondents mentioned that besides the countries that are on lockdowns their international activities have not been affected that much expect the longer delivery delays. The respondent from Hem.com said that their value chain activities like production in Europe were mainly affected at the beginning of the Covid-19 outbreak. Ghemawat (2007), stated that if the countries that the company is exporting to are culturally close to the home market, it is usually more relevant to control the entire value chain from the head office in the home market. The empirical data show that most of the respondents do export their products from Europe where they have their production factories and most suppliers. However, due to the lockdowns in Europe especially in Norway, the customers have not been able to go and pick their orders, which has been impossible to control the value chain close to the home market.

The data shows that e-commerce firms have various international activities in several countries. For instance, Outnorth has international customers across the world including, Norway, Finland, Germany, and Denmark. During the Covid-19, company X has used different freight companies for customers outside Scandinavia like South Europe such as Spain and Italy where they are now on lockdown. Meanwhile, RoyalDesign had more advantages in delivering customer orders. However, the respondent Eriksson said that they had no issues with freight companies. Most delivery delays are due to some locations across the world is on lockdown and the parcels can therefore not move freely. From, the empirical date RoyalDesign has not experienced major issues in their international activities such as delivery delays were not too extended. As Eriksson said in common as the most respondents, the disruptions are coming from suppliers and manufacturers due to the lockdowns and less production which might cause fewer sales in the future if the factories continuously stop producing. However, company X seems to have more disruptions in their international activities than compared to RoyalDesign.

Ghemawat (2007), states that for international firms, it is common to centralize the upstream activities in the home market or third country. This means that the research and development and production activities are performed in the chosen place (home market or third country) and the downstream functions (marketing and sales and service), are decentralized and spread out in the export markets. From the empirical findings, the respondent from Hem.com and company X said that they have their international activities in both two different countries. Since Hem.com operates in Stockholm, Sweden, and New York, the US, the firm has experienced difficulties to maintain their value chain activities in both countries. As for company X, they have international activities in Sweden and South-Korea. However, company X has been less affected than Hem.com, because South-Korea has handled the spread of the virus in a more effective way than other countries have. In comparison to



Hem.com, the respondent said that the team in New York, US is on quarantine therefore the firm had to look for emergency studios for short-term both in Stockholm and New York where they can have storages. Nordiska Fönster mainly has customers in Nordic countries such as Sweden, Norway, Denmark, Finland, and more. Since the lockdowns in Norway, the respondent from Nordiska Fönster said that the firm has not experienced negative impacts yet therefore they have their suppliers and manufacturers to produce their products in different countries in Europe.

5.3 Action and response

In general, e-commerce firms are responding to the recommendations from WHO, either by working from home, cleaning more in their offices, being more hygienic and have hand sanitizer everywhere in their workplace. Even if Covid-19 has been an external impact for many businesses across the world, the respondents from the cases have not experienced any larger complications, impacts, or changes due to Covid-19, except for RoyalDesign and Hem.com.

RoyalDesign now needs to react more strategically compared to the other cases and the action they are taking is to change in their operations and business models to be able to support them during this period of time. Most e-commerce firms are experiencing some positive impacts due to Covid-19, and these are mainly increased sales and new customers. The authors of this thesis argue that the reason for this positive impact, is due to customers choosing to shop from e-commerce firms where they can have less human contact during a pandemic. For example, Nordiska Fönster, Outnorth, and Company X have not made any major changes in the way they operate the firm. Instead there have been some adjustments. According to Yuki and Lepsinger (2006), today's business environment can be turbulent, and therefore, it is important for businesses to respond to emerging threats and opportunities in an appropriate way. Furthermore, leaders of companies have lots of responsibility and they should make decisions based on encouraging innovation and adaptation (Yuki and Lepsinger, 2006). Outnorth shows that they have made some strategic decisions since Covid-19, even though they have not been too affected they have made some strategic planning by employing more people. It can, therefore, be argued that even smaller strategic planning and decisions can make much difference in a pandemic like this one, and it is important to be prepared for both opportunities and threats that can come with it.

Company X and Outnorth have furthermore, implemented some newer strategies due to Covid-19, and that is to steer their sales towards their existing inventory. Outnorth has seen some higher demands for certain products due to Covid-19 and is, therefore, trying to expand its inventory in that product department. Company X stated that even if the effects have not been too visible, all parts of the firm are still somehow getting affected and that people in the firm who has higher positions, now needs to act more strategically towards the situation. This



furthermore relates to what Yuki and Lepsinger (2006), said about the leader's positions in times of change and external impacts.

Adapting to external changes can also come with threats and opportunities that need to be identified (Dervisiotis, 2007). It is clear from the empirical findings that all of the cases have identified business opportunities during Covid-19 times. Outnorth is seeing the opportunity to make more profit from sports clothing and gear and is, therefore, trying to expand their inventory for that product department. Nordiska Fönster can see the opportunity to profit from people traveling less. Hem.com said that there could be opportunities for them when it comes to their product designers who design furniture, however, Hem.com also stated that at the moment, it is too early for them to see how the Covid-19 situation will affect them.

RoyalDesign has mainly identified threats, which is the paused production of its suppliers. Another threat that all cases identified, is how the future will affect them. It is clear from the current situation that if it would continue for a longer time, and more people were to lose their jobs, it can cause a recession. If people were to lose their jobs and incomes, then these companies would have no income as well. There are uncertainties with the future of these companies and some of them are worried since nobody knows how long this situation will last. Business environments can be quite uncertain at times, especially in times during change and uncertainties can include, political and economic change (Mascarenhas, 1982) or in this situation, unpredictable impacts such as Covid-19. Therefore, the authors argue that even if most of the cases are in a mainly good situation right now, there can still be some unexpected impacts in the future and this current situation is very uncertain. It is therefore very important for e-commerce firms to identify threats and act strategically.

According to Sikich (2008), firms need to develop an ability to adapt to external changes and factors, for them to not have negative effects from the external impacts. Most of the companies from the cases have easily adapted to this situation so far by making some adjustments in their business model and etc. (Al-Debei et al., 2008). Furthermore, according to Yuki and Lepsinger (2006), there are values that a firm needs to have in times of change, including flexibility. Companies like, company X, Outnorth, and Nordiska Fönster are quite flexible with their business models and operations, they have been able to easily adapt to changes even though there have been disruptions in some of their production and distribution. This, furthermore, is a reason why the Covid-19 situation has not impacted them too negatively yet. Outnorth stated that they do think it is important with some strategic planning in situations like this, even if it is planning for smaller changes. Planning in this way includes external monitoring which is more effective if people from all levels of the company are involved in the process (Kettinger, et al., 1997). All of the cases have involved all of their employees by letting them know about the situation, what is going on in the company, and what they can be expected in the upcoming months.

Strategic planning is the process of determining where the company is and where the company wants to be, and the process involves identifying tactics and deciding which



resources and actions are needed (Kettinger, et al., 1997). The cases have shown to use different tactics since Covid-19. Two of the firms are steering their sales towards existing stock and keep selling what they have until the situation is solved. They are using existing rescuers while their production is on hold, and by doing so, they are identifying resources and actions needed for the company at the moment. Company X and Outnorth have also made some strategic decisions towards the situation, by employing more people for the warehouse. They knew that there would be the possibility of their sales increasing due to people shopping more from e-commerce during Covid-19 times, and they prepared for it by employing more staff for the upcoming orders. The authors believe that, if they had not made this decision, and also preparing for the upcoming months, they could have had it more difficult now and experienced more problems. RoyalDesign has instead made the strategic decision to change its current operations since the way that they operate now, has not been effective for them during these times.

Furthermore, examining external change is putting opportunities and threats in context to make decisions about how the company should respond (Yuki and Lepsinger, 2006). Most of the cases have identified that the possibility of their employees getting infected by the virus can be a threat to them. If an employee was to get the virus, there is a great possibility of more people in the company getting it, which could lead to even more difficulties within the company. The authors also believe that a future recession can be a threat for these companies, but also to society as a whole. Many people have lost their jobs or are on a layoff due to Covid-19, and if this were to keep happening, people would lose their incomes and not be able to buy products from companies, which could lead to a lot of uncertainty for firms and nations. This also relates to Macarenhas (1982), that at times, the business environment can be quite uncertain, and uncertainty can be one example of a threat for a firm, especially during Covid-19 times.

Lastly, all of the respondents have been affected in different ways and have therefore responded and taken actions in different ways. The authors therefore argue that not all e-commerce firms are experiencing the same issues and are being impacted differently. Some of them have experienced mainly positive impacts, while others very negative impacts. They, therefore, have to identify what strategic decisions and actions they should take, depending on their impacts and respond to the current Covid-19 situation accordingly.



6 Conclusions

This chapter will conclude this thesis as a whole, as well as the analysis and finally answer the research questions. The theoretical and practical implications will further be brought up and discussed, and a reflection of the limitations of the study will be finalized. Lastly, this chapter will be stating some suggestions for future research.

6.1 Answering the research questions

The Covid-19 situation can impact e-commerce firms differently, depending on what kind of firm they are, which sector, and where in the world they have production and manufacturing facilities. Covid-19 has also shown signs of positive impacts for some of the e-commerce firms from the empirical findings in this thesis. The outcomes of the situation, and how it will further impact them in the future, is however unclear. The current information that there is about e-commerce and Covid-19, points to the fact that e-commerce is growing and making even more profits than before, due to the situation. The growth is mainly caused by people not wanting to go out and expose themselves to the virus, and therefore shops from e-commerce rather than physical stores during this period. Most e-commerce firms have experienced increased sales, which affects their business operations to some extent, however, some e-commerce firms are responding differently and are being affected in other ways than most, and others are almost not impacted at all. The purpose of this thesis is to answer the following main research question (RQ): How are international e-commerce firms affected by the Covid-19 outbreak? To be able to answer this question more explicitly, first, the following sub-questions needs to be answered: (1) Which parts of their value chains are being impacted by Covid-19? and (2) How are they dealing with the Covid-19 situation?

Sub question 1: Which parts of their value chains are being impacted by Covid-19?

The theoretical framework has illustrated that e-commerce firms usually perform virtual value chain activities, which can make them gain several advantages. The activities of a virtual value chain are based on information. However, to achieve more efficiency, the virtual value chain should try to integrate the activities of the traditional value chain into the virtual ones. Furthermore, the theoretical framework illustrates the international value chain, which is important for international oriented firms to consider implementing the eventual internationalization of the value chain functions. The empirical findings implicate that the cases have experienced different implications and disruptions in their value chain activities due to Covid-19. The most common parts of the value chain that has been affected are production, where several cases had either smaller or bigger disruptions and paused production. The reason being the specific country the cases had suppliers and manufacturers in and the most common countries that had or are having problems with production has shown to be Italy and China, where they have had to shut down factories due to Covid-19. One case had a minor problem with a specific material being unavailable in Europe, due to Covid-19, and another case had increased their marketing. Increased sales of e-commerce firms have



also been a common effect due to Covid-19, which the empirical findings also demonstrate. It can be concluded that the most common parts of the e-commerce firm's value chain that are being impacted by Covid-19 are production and sales. However, the results have shown to differ a lot from case to case.

Sub question 2: How are they dealing with the Covid-19 situation?

The theoretical framework Business adaptation to external change illustrated that it is important for businesses to respond to external change and the emerging threats and opportunities that can come with it. They need to respond appropriately by encouraging innovation and adaptation. Furthermore, the theoretical framework showed that certain values are important for businesses to have in times of change, and these being flexibility, improvement, initiative, and striving for excellence. Businesses should also envision the external change and what outcomes they want out of the situation. The empirical findings demonstrate that e-commerce firms are dealing with the situation in different ways, depending on how they have been affected so far. One case is not dealing with the Covid-19 situation at all and have not experienced or implemented any changes in their operations since the pandemic, not even working from home. Another case has been dealing with the situation by decreasing working times, working fully from home, and waiting for the situation out. This company has mainly been unable to respond or deal with the situation in any other way, due to their situation with customers, suppliers and having one of their offices in a city with forced quarantine. Furthermore, another case is dealing with the situation by changing their business model and adapting it more to the external impact and therefore trying to respond to the situation in an appropriate way that can eventually support them during Covid-19. The two other cases are dealing with the situation by continuing their business operations as usual, but also adapting to smaller changes such as, working from home to some extent, appropriately steering their sales, and responding to their increased sales. The empirical findings, furthermore, shows that all of the cases have identified threats and opportunities that the external change comes with and trying to respond to these. However, with the situation being so uncertain, and no one knowing how long it's going to last for, the companies are uncertain of how to deal with potential future complications. In conclusion, it can be said that e-commerce firms need to deal with the situation in a way that is most appropriate for them and how they have been impacted.

Research Question: How are international e-commerce firms affected by the Covid-19 outbreak?

The sub questions have helped with answering the main question. Covid-19 is a new phenomenon which means that academic literature and articles have been lacking during the process of this thesis. However, the theoretical framework illustrates that e-commerce firms need to have business models that are explicit and offer them the appropriate information and knowledge in order to support them. Furthermore, the digital business model should enable the e-commerce firms to compete better with the appropriate and necessary information that they have. Furthermore, digital business models should help the firms to cope with



uncertainties that a rapidly changing environment brings. The empirical findings display that e-commerce firms are being affected differently. Some cases have been affected to a larger extent and some have not been affected at all. Only one case demonstrated that they were in the process of adapting to the situation by changing their business model and reconstructing it, because of Covid-19 and the implications it has brought on them. This company is the only case from the empirical findings that have lost employees, either by having to let them leave the company to save finances or due to being infected by the virus and quarantined. Another company has been affected in a way that they have been unable to go through with some projects and have lost customers, due to them mainly having customers in the hotel and restaurant industry. This company has also been affected in the way that they are on layoff and working less. The other companies are mainly working as usual with more minor adjustments. However, it can be said from the findings that e-commerce firms are mainly experiencing increased sales from customers, due to Covid-19. Furthermore, all of these companies are still operating and selling products to customers and have not been forced to close down. Therefore, it can be concluded that e-commerce firms have advantages to some extent in times of Covid-19 even though they are being affected differently, depending on the type of firm they are.

6.2 Theoretical Implications

Research regarding Covid-19 in relation to international e-commerce firms have so far been close to non-existent in business research, therefore, a research gap has been easy to identify. This thesis aims to fill in the research gap, the authors researched the Covid-19 pandemic and how it affects e-commerce firms and their operations. The outcome of the thesis has revealed that the effects and impacts of Covid-19 on e-commerce firms are different and the cases from this thesis have shown signs of both negative and positive impacts. This research revealed that, e-commerce firms that have some physical stores had more difficulties to keep their entire value chain activities ongoing as usual during Covid-19 situation, since the physical stores were on shutdowns. In addition, the thesis shows that larger e-commerce firms, especially when the firm is located in more than one country, has faced more issues due to less employees since many employees were not able to go to the office or work full time.

The sales of e-commerce firms have increased to some extent; however, some have experienced disruptions in their value chain activities such as production. E-commerce firms must act and respond accordingly towards the Covid-19 situation, depending on how they have been affected, and in some instances even change and modify their digital business model, to support the firm during a pandemic. The findings of this thesis further highlight the digital business environment, how the Covid-19 situation reacts in such an environment, and how e-commerce firms respond to the situation in a digital environment.

This thesis has furthermore contributed to theory regarding Covid-19 in a business context, by identifying the e-commerce firm's different perspectives on the pandemic and their experiences regarding the situation so far. The elements consisting of this process include the



value chain activities (including virtual and international value chain), effects on e-commerce firms, and action and responses. For e-commerce firms, the effects and actions and responses can vary depending on their digital business environment. The external environment must, therefore, be monitored to act accordingly.

6.3 Practical Implications and Recommendations

The findings of this research show that e-commerce firms have been affected and the analysis can be useful for other e-commerce manager as instruments to compare the actions with other firms in order to make better decisions. These findings can provide another point of view for managers to understand processes from other responses. From the conclusion, e-commerce firms have been affected dependent on their current digital business environment. Due to certain experiences, the data revealed that some firms have made changes and efforts than others. The findings can contribute to other similar industries as sources of effects on e-commerce firms. By obtaining an understanding of this situation, e-commerce firms can have issues to operate as usual during the Covid-19. However, due to social distancing firms have realized that they can keep their business operations ongoing through digital platforms.

Therefore, the authors recommend and suggest e-commerce firms analyze the external environment and how it could affect them now or in the future. By firstly analyzing and monitoring the external impact, e-commerce firms can act in a more prepared way by making sure that they always have more products in warehouse. The authors even suggest other e-commerce to offer more express delivery in times like Covid-19 to avoid long delivery delays, since looking at the findings some companies were putting more efforts to satisfy their customers than others did. It is always better to be more prepared rather than unprepared, even if operating on a digital platform which at times can even bring digital advantages.

6.4 Societal Contributions

This thesis can, furthermore, contribute to an understanding of how a world-spread virus can influence international business environments and digital business environments, and eventually, how it affects firm's business operations and how they can adapt to new changes that a pandemic can bring. The Covid-19 outbreak is a social unrest and has led to governmental response in several countries, which then affects industries and less people are working due to social distancing rules. Ultimately, this creates consequences for society and national economies.

Furthermore, this thesis contributes to an understanding of how a pandemic like Covid-19 can directly affect e-commerce firms and how it affects them differently depending on aspects such as size, suppliers, customers and also how firms respond depending on their individual impacts.



6.5 Limitations

Throughout the progress of this study, a few limitations were noticeable which have had a certain influence on the quality of the findings. Firstly, the limited sampling size of five cases has most likely affected how the findings has been generalized to applicable to the e-commerce industry as a whole. Next, all the companies were mainly based in Sweden, which could affect the results by not including e-commerce firms from countries that have been more affected and having stricter restrictions to Covid-19 than Sweden has. Including e-commerce firms that are based in for example, Italy or England, could have made the results from the findings quite different and given it further depth. Lastly, the interviews being conducted through telephones might have affected in-depth answers given by the respondents. By conducting telephone interviews, the surroundings and environment of the respondent could not be analyzed.

6.6 Future research

Research regarding Covid-19 in the context of international e-commerce is currently almost non-existent, due to the Covid-19 situation being so current, and therefore, this thesis contributes to the previously unstudied area. Furthermore, the limitations of this thesis are also some suggestions for further research. The suggested future research that may contribute to filling the research gap even more are:

1. *Investigate how e-commerce firms from different markets/countries are affected by Covid-19 and how they deal with it.* This would contribute to give a more in-depth analysis of how the firms can be affected depending on the country.
2. *Investigate the aftermath of Covid-19 in relation to businesses and how they have been affected through the whole process/situation.* This could further contribute to the topic of Covid-19 and give another perspective than the studies that will most likely emerge during the beginning of Covid-19.
3. Conduct similar research with a quantitative approach that enables the possibility of generalizing the results with many more cases and participants of several industries. Furthermore, this could contribute to deeper analysis and results and find more similarities and differences in this thesis.



Reference List

Literature

- Adams J., Hafiz TA. and Raeside, R. (2014). *Research Methods for Business and Social Science Students*, New Delhi: Sage Publications.
- Bernard, H.R. (2002). *Research methods in anthropology: Qualitative and quantitative method* 3rd Ed., Walnut Creek, California: Altamira Press.
- Birchler, U. and Büttler, M. (1999). *Information economics*, Routledge.
- Boeije, H. (2010). *Analysis in Qualitative Research* Ltd.1st Ed., Sage publications.
- Brinkmann, S. and Kvale, S. (2015). *InterViews: Learning the craft of qualitative research interviewing* 3, Los Angeles: Sage Publications.
- Bryman, A. (2016). *Social research methods Fifth*, Oxford University Press.
- Bryman, A. (2008). *Social Research Methods* 3rd Ed., Oxford University Press.
- Bryman, A. and Burgess, B. (Eds.). (1994). *Analyzing Qualitative Data*, London: Routledge.
- Buckley, J.W and Chiang C.H. (1976). *Research methodology and business decisions*, Canada, National Association of Accountants.
- Choi, S.Y., Stahl, D.O. and Whinston, A.B. (1997). *The economics of electronic commerce*, Indianapolis: Macmillan Technical Publishing.
- Clifford, N., Cope, M., Gillespie, T. and French, S. (Eds.). (2016). *Key methods in geography*, Sage.
- Creswell, J.W. and Poth, C.N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*, Sage publications.
- Eisner, E.W. (2017). *The enlightened eye: Qualitative inquiry and the enhancement of educational practice*, Teachers College Press.
- El Sawy, A. and Pereira, F. (2013). *Digital business models: review and synthesis: Business modelling in the dynamic digital space*, Springer, Berlin, Heidelberg.
- Fernandez-Stark, K. and Gereffi, G. (2019). *Global value chain analysis: a primer. In Handbook on Global Value Chains*, Edward Elgar Publishing.
- Kirk, J., Miller, M.L. and Miller, M.L. (1986). *Reliability and validity in qualitative research*, Sage.
- Kumar, R. (2014). *Research methodology: a step-by-step guide for beginners* 4th ed., Sage Publications.



Leavy, P. (2014). *The Oxford Handbook of Qualitative Research*, USA: Oxford University Press.

Marschan-Piekkari, R. and Welch, C. (Eds.). (2011). *Rethinking the case study in international business and management research*, Edward Elgar Publishing.

McKeown, N. and Durkin, M. (2016), *The Seven Principles of Digital Business Strategy*, New York: Business Expert Press.

Meier, A. and Stormer, H. (2009). *eBusiness & eCommerce: managing the digital value chain*, Springer Science & Business Media.

Porter, M. (1980). *Competitive Strategy*, New York: The Free Press.

Porter, M. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*, New York: The Free Press,

Ritchie, J. and Lewis, J. (2003). *Qualitative Research Practice*, London: Sage publications.

Rothlauf, F. (2011). *Design of modern heuristics: principles and application*, Berlin: Springer Berlin Heidelberg.

Saunders, M., Lewis, P. and Thornhill, A. (2007). *Research Methods for Business Students* 4th ed., England: Pearson Education Limited.

Sikich, G.W. (2008). *Protecting Your Business in a Pandemic: Plans, Tools, and Advice for Maintaining Business Continuity*, Greenwood Publishing Group.

Slater, D. (1998). *The power of positive linking*, The CIO, August.

Wefers, M. and Daub, S. (2011). *U.S. Patent No. 7,925,659*, Washington, DC: U.S. Patent and Trademark Office.

Digital references

Abdin, M.D. (2020). *Doing Businesses During COVID-19 Crisis and Afterwards*. [online] Available at: <https://ssrn.com/abstract=3577715>. [Accessed 2020-04-16].

Al-Debi, M.M., El-Haddadeh, R. and Avison, D. (2008). *Defining the Business Model in the New World of Digital Business*. [pdf] Available at: <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1350&context=amcis2008>. [Accessed 2020-04-14].

Alicke, K., Azcue, X. and Barriball, E. (2020). *Supply-chain recovery in coronavirus times-plan for now and the future*. [online] Available at: <https://www.mckinsey.com/business-functions/operations/our-insights/supply-chain-recovery-in-coronavirus-times-plan-for-now-and-the-future> [Accessed 2020-04-04].



Baldwin, R and Lopez-Gonzalez, R. (2013). *Supply-Chain Trade: A portrait of Global Patterns and Several Testable Hypotheses*. [online] Available at: <https://www.nber.org/papers/w18957>. [Accessed 2020-04-22].

Crets, S. (2020). *How the coronavirus is affecting online retailers*. [online] Available at: <https://www.digitalcommerce360.com/2020/03/12/coronavirus-affects-online-retailers/>. [Accessed 2020-04-03].

Denger, E. (2020). *How to modify your e-commerce strategy during the coronavirus crisis*. [online] Available at: <https://www.digitalcommerce360.com/2020/04/01/how-to-modify-your-ecommerce-strategy-during-the-coronavirus-crisis/>. [Accessed 2020-04-03].

Dijk, V. and Trinekens, J. (2012). *Global Value Chains*. [pdf] Available at: <http://library.oapen.org/bitstream/id/19147beb-d141-47bc-a4cd-62a666798547/408877.pdf>. [Accessed 2020-04-22].

Eavis, P. (2020). *How Bad Could It Get? Companies Gauge the Coronavirus Impact*. [online] Available at: <https://www.nytimes.com/2020/02/28/business/economy/companies-coronavirus-economy.html>. [Accessed 2020-04-03].

Farid, M. (2001). *B2B E-commerce: Value chain transformation, enablers and barriers, technology, privacy and security*. [online] Available at: <https://dspace.mit.edu/bitstream/handle/1721.1/8887/48851994-MIT.pdf?sequence=2&isAllowed=y>. [Accessed 2020-04-22].

Fernandes, N. (2020). *Economic Effects of Coronavirus Outbreak (Covid-19) on the World Economy*. [online] Available at: <https://poseidon01.ssrn.com/delivery.php?ID=915114116100106127094001028069027066057078053046012082112112065010124089007027126086121057001034018019096113065075017120089124010086069059017103100120031066085127047028095098090103020065095001126096125070114012116010008113115104070122064103098100091&EXT=pdf>. [Accessed 2020-04-05].

Fleming, K. (2020). *Optimizing the ecommerce fulfilment experience in luxury retail during a pandemic*. [online] Available at: <https://www.digitalcommerce360.com/2020/04/17/optimizing-the-ecommerce-fulfillment-experience-in-luxury-retail-during-a-pandemic/>. [Accessed 2020-05-03].

Fraser, D. (2020). *Coronavirus effects on the markets-the week of economic contagion*. [online] Available at: <https://www.bbc.com/news/uk-scotland-scotland-business-51888442>. [Accessed 2020-04-03].

Frost and Sullivan. (2020). *Coronavirus Outbreak Aerospace Industry Fights Back with Business Mitigation Strategies*. [online] Available at: https://go.frost.com/GL_PR_ADS_CoronaVirusOutbreak_Feb20. [Accessed 2020-04-03].



Holman, J. (2020). *Americans Adopting E-Commerce Faster Than Ever Amid Pandemic*. [online] Available at: <https://www.bloomberg.com/news/articles/2020-03-31/americans-adopting-e-commerce-faster-than-ever-amid-pandemic>. [Accessed 2020-04-03].

Kaplan, J., Frias, L. and McFall-Johnsen, M. (2020). *A third of the global population is on coronavirus lockdown- here's our constantly updated list of countries and restrictions*. [online] Available at: <https://www.businessinsider.com/countries-on-lockdown-coronavirus-italy-2020-3?r=US&IR=T>. [Accessed 2020-04-03].

Markovitch, S. and Willmott, P. (2014). *Accelerating the digitization of business processes*. [online] Available at: <https://digitalstrategy.nl/wp-content/uploads/2014-J-Accelerating-the-digitization-of-business-processes.pdf>. [Accessed 2020-04-23].

MPHonline. (2020). *Outbreak: 10 of the worst pandemics in history*. [online] Available at: <https://www.mphonline.org/worst-pandemics-in-history/>. [Accessed 2020-04-04].

Nee Lee, Y. (2020). *6 charts show the coronavirus impact on the global economy and markets so far*. [online] Available at: <https://www.cnbc.com/2020/03/12/coronavirus-impact-on-global-economy-financial-markets-in-6-charts.html>. [Accessed 2020-04-03].

Porter, H. (2020). *Online shopping in the age of the coronavirus*. [online] Available at: <https://search-proquest-com.proxy.lnu.se/docview/2377438497/fulltext/222344BE45E34558PQ/1?accountid=14827>. [Accessed 2020-05-02].

Porter, M. (2001). *Strategy and the Internet*. [pdf] Available at: <https://www.gospi.fr/IMG/pdf/strategy-and-the-internet-porter-hbr-2001.pdf>. [Accessed 2020-04-14].

Raei, F., Ignatekno, A. and Mircheva, B. (2019). *Global value chains: what are the benefits and why do countries participate?* [online] Available at: <https://www.imf.org/en/Publications/WP/Issues/2019/01/18/Global-Value-Chains-What-are-the-Benefits-and-Why-Do-Countries-Participate-46505>. [Accessed 2020-04-22].

Sing, S. (2020). *Impact of the Coronavirus on Business*. [online] Available at: <https://www.forbes.com/sites/sarwantsingh/2020/03/02/impact-of-the-coronavirus-on-business/>. [Accessed 2020-04-03].

Sterling, G. (2020). *Coronavirus and e-commerce: it's complicated*. [online] Available at: <https://marketingland.com/coronavirus-and-e-commerce-its-complicated-277480> [Accessed 2020-04-03].

UNCTAD. (2020). *Global trade impact of the coronavirus (COVID-19) epidemic*. [online] Available at: <https://unctad.org/en/PublicationsLibrary/ditcinf2020d1.pdf>. [Accessed 2020-04-03].



Journals

- Al-Debei, M.M. and Avison, D. (2010). Developing a unified framework of the business model concept. *European Journal of Information Systems*, 19(3), pp. 7-9.
- BarNir, A., Gallagher, J. M. and Auger, P. (2003). Business process digitization, strategy, and the impact of firm age and size: the case of the magazine publishing industry. *Journal of Business Venturing*, 18(6), pp.789–814.
- Bhatt, G.D. and Emdad, A.F. (2001), An analysis of the virtual value chain in electronic commerce. *Logistics Information Management*, 14(1/2), pp.78–85.
- Buer, S.V., Fragapane, G.I. and Strandhagen, J.O. (2018). The Data-Driven Process Improvement Cycle: Using Digitalization for Continuous Improvement. *IFAC-PapersOnLine*, 51(11), pp.1035–1040.
- Campbell, D.T. (1955). The informant in quantitative research. *The American Journal of sociology*, 60, pp.339-342.
- Constantinides, E. (2006). The Marketing Mix Revisited: Towards the 21st Century Marketing. *Journal of Marketing Management*, 22, pp.3-4, 407-438.
- Corbin, J. and Morse, J.M. (2003). The unstructured interactive interview: Issues of reciprocity and risks when dealing with sensitive topics. *Qualitative inquiry*, 9(3), pp.335–354.
- Cutcliffe, J.R. and McKenna, H.P. (2002). When do we know that we know? Considering the truth of research findings and the craft of qualitative research. *International journal of nursing studies*, 39(6), pp.611–618.
- Davies, G. and Dwyer, C. (2007). Qualitative methods: are you enchanted or are you alienated? *Progress in Human Geography*, 31(2), pp.257–266.
- Dennis, Z.Y., Cheong, T. and Sun, D. (2017). Impact of supply chain power and drop-shipping on a manufacturer’s optimal distribution channel strategy. *European Journal of Operational Research*, 259(2), pp.554–563.
- Dervitsiotis, K.N. (2006). Building trust for excellence in performance and adaptation to change. *Total Quality Management & Business Excellence*, 17(7), pp.795-810.
- Doody, O. and Noonan, M. (2013). Preparing and conducting interviews to collect data. *Nurse researcher*, 20(5), pp.28–32.
- Dubois, A. and Gadde, L.E. (2014). Systematic combining—A decade later. *Journal of Business Research*, 67(6), pp.1277–1284.
- Gallagher, J.M. (2002). E-commerce and the undulating distribution channel. *Communications of the ACM*, 45(7), pp.89–95.



- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The qualitative report*, 8(4), pp.597–607.
- Grandon, E.E. and Pearson, J. M. (2004). Electronic commerce adoption: an empirical study of small and medium US businesses. *Information & management*, 42(1), pp.197–216.
- Greis, N.P. and Kasarda, J.D. (1997). Enterprise logistics in the information era. *California Management Review*, 39(4), pp.55-78.
- Gustad, G., Dhillon, S.S. and SidibÉ, D. (2004). Local use and cultural and economic value of products from trees in the parklands of the municipality of Cinzana, Mali. *Economic Botany*, 58(4), p.578.
- Hasanat, M.W., Hoque, A., Shikha, F.A., Anwar, M., Hamid, A.B.A. and Tat, H.H. (2020). The Impact of Coronavirus (Covid-19) on E-Business in Malaysia. *Asian Journal of Multidisciplinary Studies*, 3(1), pp.85–90.
- Hewitt-Taylor, J. (2001). Use of constant comparative analysis in qualitative research. *Nursing Standard (through 2013)*, 15(42), pp.39.
- Humphrey, J. and Schmitz, H. (2002). How does insertion in global value chains affect upgrading in industrial clusters? *Regional studies*, 36(9), pp.1017-1027.
- Jamshed, S. (2014). Qualitative research method-interviewing and observation. *Journal of basic and clinical pharmacy*, 5(4), p.87.
- Kaplinsky, R. (2000). Globalisation and Unequalisation: What Can Be Learned from Value Chain Analysis? *The Journal of Development Studies*, 37(2), pp.117–146.
- Kaur, Gagandeep. (2011). Traditional Commerce Vs. E-Commerce. *International Research Journal of Management Science and Technology*. 2(3), pp.334-340.
- Kayikci, Y. (2018). Sustainability impact of digitization in logistics. *Procedia Manufacturing*, 21, pp.782–789.
- Keen, P. and Ronald W. (2013). Value architectures for digital business: beyond the business model. *Mis Quarterly*, 37(2), pp.643-647.
- Kettinger, W.J., Teng, J.T. and Guha, S. (1997). Business process change: a study of methodologies, techniques, and tools. *MIS quarterly*. 21(1), pp.55-80.
- Lee, C. (2001). An analytical framework for evaluating e-commerce business models and strategies. *Internet Research*, 11(4), pp.349–359.
- Lee, J. and Cho, J. (2005). Consumers' use of information intermediaries and the impact on their information search behavior in the financial market. *Journal of Consumer Affairs*. 39(1), pp.95-120.



- Lewis, J.L. and Shepard, S.R.J. (2006). Culture and communication. *Landscape and Urban Planning*, 77, pp.291-313.
- Liu, L. and Wu, J. (2010). Virtual value chain and competitive advantages in the context of e-commerce. *International Conference on Industrial Engineering and Engineering Management*, 17, pp.1467–1472.
- Liu, Y., Gayle, A.A., Wilder-Smith, A. and Rocklöv, J. (2020). The reproductive number of COVID-19 is higher compared to SARS coronavirus. *Journal of Travel Medicine*, 27(2), pp.1-4.
- Lyon L.M. and Hardesty L.H. (2005). Traditional healing in the contemporary life of the Antanosy people of Madagascar. *Ethnobotany Research and applications*, 3, pp.287-294.
- Maggs-Rapport, F. (2001). Best research practice: in pursuit of methodological rigour. *Journal of advanced nursing*, 35(3), pp.373–383.
- Mascarenhas, B. (1982). Coping with uncertainty in international business. *Journal of International Business Studies*, 13(2), pp.87-98.
- Morris, N. (2009). Understanding Digital Marketing: Marketing Strategies for Engaging the Digital Generation. *J Direct Data Digit Mark Pract*, 10, pp.384–387.
- Patton, M.Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health services research*, 34(5 Pt 2), p.1189.
- Picard, R.G. (2000). Changing business models of online content services: Their implications for multimedia and other content producers. *International Journal on Media Management*, 2(2), pp.60-68.
- Rayport, J.F. and Sviokla, J.J. (1995). Exploiting the virtual value chain. *Harvard business review*, 73(6), p.75.
- Roosendaal, H.E., Huibers, T.W.C., Geurts, P.A.T.M. and Van Der Vet, P.E. (2003). Changes in the value chain of scientific information: economic consequences for academic institutions. *Online Information Review*, 27(2), pp.120-128.
- Schafer, J.B., Konstan, J.A. and Riedl, J. (2001). E-commerce recommendation applications. *Data mining and knowledge discovery*, 5(1–2), pp.115–153.
- Schmidt, R., Zimmermann, A., Möhring, M., Nurcan, S., Keller, B. and Bär, F. (2015). Digitization—perspectives for conceptualization. *European Conference on Service-Oriented and Cloud Computing*, 567, pp.263–275.
- Seidler, J. (1974). On using informants: a technique for collecting quantitative data and controlling measurement error in organization analysis. *American sociology review*, 39, pp.816-831.



- Singh, M. (2012). Marketing mix of 4P's for competitive advantage. *IOSR Journal of Business and Management*, 3(6), pp.40-45.
- Smith, J. and Firth, J. (2011). Qualitative data analysis: the framework approach. *Nurse researcher*, 18(2), pp.52-62.
- Stenbacka, C. (2001). Qualitative research requires quality concepts of its own. *Management Decision*, 39(7), pp.551-556.
- Swoboda, B., Foscht, T. and Cliquet, G. (2008). International value chain processes by retailers and wholesalers-A general approach. *Journal of Retailing and Consumer Services*, 15(2), pp.63-77.
- Tongco, M.D.C. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research and applications*, 5, pp.147-158.
- Treacy, M. and Wiersema, F. (1993). Customer intimacy and other value disciplines. *Harvard business review*, 71(1), pp. 84-93.
- Tremblay, M.A. (1957). The key informant technique: a non-ethnographic application. *American Anthropologist*, 59, pp.699-701.
- Verhoef, P.C., Lemon, K.N., Parasuraman, A., Roggeveen, A., Tsiros, M. and Schlesinger, L.A. (2009). Customer experience creation: Determinants, dynamics and management strategies. *Journal of retailing*, 85(1), pp.31-41.
- Vladimir, Z. (1996). Electronic commerce: structures and issues. *International journal of electronic commerce*, 1(1), pp.3-23.
- Webb, K.L. (2002). Managing channels of distribution in the age of electronic commerce. *Industrial Marketing Management*, 31(2), pp.95-102.
- Wigand, R.T. (1997). Electronic commerce: Definition, theory, and context. *The information society*, 13(1), pp.1-16.
- Womack, R. (2002). Information intermediaries and optimal information distribution. *Library & Information Science Research*, 24(2), pp.129-155.
- Yukl, G. and Lepsinger, R. (2006). Leading change: Adapting and innovating in an uncertain world. *Leadership in Action: A Publication of the Center for Creative Leadership and Jossey-Bass*, 26(2), pp.3-7.
- Zott, C. and Amit, R. (2017). Business Model Innovation: How to Create Value in a Digital World. *Marketing Intelligence Review*, 9(1), pp.18-23.



Oral references

Ennen, H. (2020). CEO, Outnorth, Telephone interview [2020-05-06].

Epstein, I. (2020). COO, Hem.com, Zoom interview [2020-05-06].

Eriksson, C. (2020). E-commerce manager, RoyalDesign, Telephone interview [2020-05-12].

Respondent X. (2020). E-commerce manager, Company X, Telephone interview [2020-04-30].

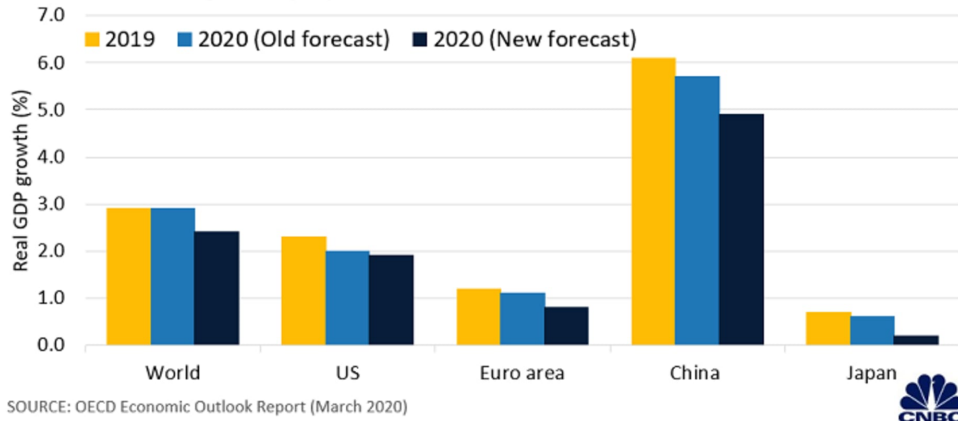
Went, H. (2020). Head of marketing and sales, Nordiska Fönster, Telephone interview [2020-05-07].



Appendix A - Global economic growth slowdown

Global economic growth slowdown

The Organisation for Economic Co-operation and Development (OECD) downgraded its 2020 real GDP growth projections for almost all economies



Appendix B – Interview guide

Interview Guide

General information:

- Company name:
- Name of the participant and position:
- Industry:
- Would you like to be anonymous?

Digital business environment

1. How do you describe the firm's current working conditions as a digital firm?
(To gain more general information about them as a business)
2. Have you noticed any changes in the company due to Covid-19?
(To see if their business environment has been impacted)
3. Has your company reacted or taken new implementations into the firm due to the Covid-19 situation?
 - If so, how?
(To see which specific changes they have implemented).
4. Have you modified the business model and operations of the firm, due to the Covid-19 situation?



5. During the Covid-19 19-times, do you think your company has digital advantage compared to traditional businesses?

-If so, how? what advantages?

(To gain an understanding of how digital business can differ to traditional)

International activities:

6. In how many countries to you have customers? Which countries?

(To understand the degree of their internationalization)

7. Some countries are on lockdown, has this affected your distribution channels?

(To gain an understanding of how their distribution channels have been affected)

9. How has Covid-19 impacted your international business activities with your suppliers/manufacturers?

(To gain knowledge about how their international operations have been affected)

10. Do you operate your business activities all from one place, or do you have different locations where activities are performed?

- Have the location of your value chain been affected to due to Covid-19
- If so, how? and which activities?

(To understand how their international value chain has been affected)

Value chain activities:

12. Has Covid-19 19 changed the way you exchange information with your suppliers, manufacturers and customers?

- If so how?

(To gain knowledge about the effects on the virtual value chain activities)

13. Have you identified any disruptions of the firm's production due to Covid-19?

- what kind of disruptions?

14. Have you identified any disruption in the distribution?

15. have you identified any disruption in the sales and service activities?

(To gain knowledge about how the physical value chain activities have been affected ex. logistics, operations, marketing and sales, and services)

16. Do you share information to your customers about the Covid-19 situation?

- If so, how? Where do you share the information?

(To gain knowledge about how they bring virtual value to their customers through information)



17. Has the Covid-19 situation affected your international customer relations?

(To gain more details about their customer experience)

18. Has your customers' demands and feedback shifted since the Covid-19 situation?

- If so, how do you meet their demands and needs?
- How do you respond to the feedback?

(To gain knowledge about how the Information intermediaries and customer intimacy has been affected)

19. have you modified your marketing due to Covid-19?

Conclusion of Covid-19 impacts and responses

20. Which part of the business would you say have been affected the most by Covid-19?

21. If some parts have been affected, are the impacts positive, negative?

22. Does the firm have a general approach to risk and uncertainty?

23. Have you seen any new business opportunities since Covid-19?

24. Have you identified any treats because of Covid-19?

25. To which degree have the changes affected the way to operate the firm?

26. Lastly, is there anything you would like to add that might be interesting for us to know?