



MSc in Management - Market Relationship and Customer Engagement

Course of International Business

E-commerce businesses in an international dynamic environment. A qualitative case study about how iSi GmbH has been affected by the Brexit agreement.

Supervisor

Prof. Maria Jell Ojobor

Candidate

Camilla Salvatori

721521

Assistant Supervisor

Prof. Pietro de Giovanni

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CHAPTER 1 – Introduction

The chosen research area will here be presented. It will introduce the topic through an overall review of the current situation. Followed by some general background information, then there will be the problem discussion which has the aim to outline the theorization. Moreover, the research question that this thesis aims to answer will be presented, and lastly, for this chapter, an outline of the study will be identified.

1.1 Background Information

1.1.1 2020, the year of disruptions

The year 2020 will undoubtedly be remembered by many people as the most dreadful year ever and many were happy to leave it behind them. It has been a year defined by a number of terrible episodes: from the fires in the Australian forest to Covid-19, from heatwaves to many protests and social unrest, and finally, to conclude the year in the “best way” possible, there was the Brexit agreement. All of these events affected the international economy in a large number of ways and thus it would be a fault to not consider their impact on what the future will look like from now on. Certainly, looking back to this year, there is one thing that stands out loud and clear “*Change is hard, it happens gradually and then suddenly*” (Yao, 2020)¹.

This past year gave us a great starting point to rethink what is going on in our world and how we are dealing with the dynamics of our economy. The two striking events of the year, Brexit and Covid-19, should have given us some food for thought. Both of them, have been an enormous change for how we see the world in where we live and both will contribute to even more changes in how we are going to establish our economic relationship in the future. Everything is in needs to be a rethink. Consequently, many firms were enabled to pull off a complete transformation in their businesses, thus they have become more of a digital enterprise or more driven by data and analytics.

¹ Yao, Richard. 10 December 2020. *2020 In Retrospective: A Year of Disruption & Acceleration*. Medium, IPG Media Lab. medium.com/ipg-media-lab/2020-in-retrospective-a-year-of-disruption-acceleration-96ee00d53dc2.

Together with the pandemic and the new UK-EU deal, the climate change topic was another topic in the center of 2020 discussions. The world has passed 417 ppm of CO₂ in the atmosphere, almost 50% above preindustrial levels of 280 ppm. Even though the coronavirus helped to decrease this number, society will need to find new solutions to deal with this (Yudelson, 2020)².

During the year 2020, the accelerations in market trends or changes in the way of doing business to which all firms had to quickly adapt were many. What the year had thought us anyway was that other than taking this only as a threat, it could be seen as an opportunity to plan for the future and keep thinking outside the box. Perhaps, in hindsight, 2020 will be considered as the year in which the world has learned more lessons. It will be partially looked back thinking about what things were lost and the understanding of the fact that the humankind has a collective capacity to change and adapt. In the end, many people will wish to forget this past year, but we can learn from it and the new knowledge of which priorities are meant to take care of shall be remembered for years to come, together with the necessary changes it facilitated.

1.1.2 Covid-19

The coronavirus outbreak first appeared in the region of Wuhan, China in 2019. Nowadays, it is referred to as Covid-19 as a shortened version of “coronavirus disease of 2019” (WHO)³. The virus had the capacity and characteristic to spread incredibly quickly between people and in just a few months, a good portion of the world was infected (MphOnline, 2020)⁴. Furthermore, while the virus was diffusing between people, many companies across the world were also getting affected by it. The negative consequences

² Yudelson, Jerry. 26 June 2020. *2020: Astounding Year of Disruption, Year of Transformation*. Reinventing Green Building - Jerry Yudelson, "The Godfather of Green". www.reinventinggreenbuilding.com/news/2020/6/11/2020-astounding-year-of-disruption-year-of-transformation.

³ WHO. "Timeline: Who's Covid-19 Response." *World Health Organization*, World Health Organization, www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline?gclid=EAIaIQobChMIpMmutdz58gIVzYKDBx37zA84EAAYASAAEgIOZvD_BwE#event-115.

⁴ MPHonline. 2020. *Outbreak: 10 of the worst pandemics in history*. MPHonline homepage. <https://www.mphonline.org/worst-pandemics-in-history/>.

involved also some of the world's biggest companies which saw their manufacturing being disrupted, their stores being empty without consumers, and they struggled to find a solution to counteract (Eavis, 2020)⁵. Thus, organizations had to shift and make changes overnight in order to survive. Some of the most hard-hit sectors by the pandemic effects were for example airlines, leisure, and hospitality, but also bars and restaurants which saw their clientele going to zero from one day to another (Fraser, 2020)⁶. According to an article by McKinsey & Company (2020)⁷, companies needed to optimize production and distribution capacity, and to assess realistic final customer demand at the beginning of the pandemic. A most recent study, always by McKinsey (2021)⁸, points out that the priorities now are to find a way to optimize hybrid teams, attract and retain workers with needed capabilities, and make the most of scarce skills. Moreover, they also predict an even faster growth in the IT services than these past years. It should grow by more than 6 percent per year in 2021 and 2022, more quickly than global GDP (McKinsey & Company, 2021) which on the other hand would have a 7 percent loss compared to the 3.4 percent growth forecast dating back to October 2019 (Filippini et al., 2021)⁹.

The pandemic changed the economic world as much as the surrounding world in which people are living. Technology and the Internet luckily were there to help the society and they were more advanced than ever in order to make the situation easier to handle. They made sure that the possibility of continuing to do business was not only a possibility but security, even in the critical situation which the world was experiencing. Particularly, e-commerce platforms have proven to be crucial for the continuation of economic activities all

⁵ Eavis, P. 2020. *How Bad Could It Get? Companies Gauge the Coronavirus Impact*. New York Times. <https://www.nytimes.com/2020/02/28/business/economy/companies-coronavirus-economy.html>.

⁶ Fraser, D. 2020. *Coronavirus effects on the markets-the week of economic contagion*. BBC <https://www.bbc.com/news/uk-scotland-scotland-business-51888442>.

⁷ Aliche, K., Azcue, X. and Barriball, E. 2020. *Supply-chain recovery in coronavirus times- plan for now and the future*. McKinsey & Company. <https://www.mckinsey.com/business-functions/operations/our-insights/supply-chain-recovery-in-coronavirus-times-plan-for-now-and-the-future>

⁸ McLaughlin, Katy. 8 September 2021. *COVID-19: Implications for business*. McKinsey & Company. <https://www.mckinsey.com/business-functions/risk-and-resilience/our-insights/covid-19-implications-for-business>

⁹ Filippini, Federico and Yeyati, duardo Levy. 9 June 2021. *Social and economic impact of COVID-19*. Brookings Institution. Brookings Global Working Paper #158.

over the world. Due to physical stores closing because of the virus, this is pushing consumers to go online for their necessities (Holman, 2020)¹⁰. Buying through digital means, made possible access to every products while there was the implementation of very strict measurements and lockdowns to avoid the spread of the virus. Thus, the e-commerce sector has proven resilient and to be essential also for the functioning of society during these hard times through the sale and delivery of fundamental products such as food and pharmaceutical products to risk groups. Furthermore, the coronavirus forced more people to work and learn remotely and caused us all to reconsider the work-life balance. Our culture moved further into the digital world where technological influence is stronger than ever. The possibility of working from home more frequently became more and more a secure.

The COVID-19 outbreak has made it clear how important is the digitalisation across all areas of the economy and society. Hence, it is mandatory now for both businesses and governments to invest in digital innovation. This will also be linked to a shift to a more sustainable economy.

1.1.3 The Brexit agreement

The Brexit agreement is the decision of Britain to leave the European Union (EU). This was the consequence of a referendum held in 2016 when the pro-exit faction triumphed. The United Kingdom (UK) legally left the Union on the 31st of January 2020, but a whole year passed before the two parties came to an understanding to settle the post-divorce relations to be able to leave each other on good terms. Accordingly, the actual economic separation was finalized on the 31st of December 2020 after months of negotiations, misunderstandings, inconclusive discussions within the British government. Numerous citizens interviewed in the last three years said that they did not face the 2016 referendum with adequate awareness of the consequences that Brexit would have entailed, especially in the economic field (Forlani, 2019)¹¹. For instance, 84% of the members of the Science

¹⁰ Holman, J. 2020. *Americans Adopting E-Commerce Faster Than Ever Amid Pandemic*. Bloomberg homepage. <https://www.bloomberg.com/news/articles/2020-03-31/americans-adopting-e-commerce-faster-than-ever-amid-pandemic>.

¹¹ Forlani, Mariasole. 19 January 2020. *La Brexit ed il futuro dei traffici commerciali tra Regno Unito e Unione Europea*. Il Caffè Geopolitico - APS. <https://ilcaffegeopolitico.net/115559/la-brexite-ed-il-futuro-dei-traffici->

Council have defined the possible exit from Europe as "disastrous", especially for new generations of researchers (Mantovani, 2016)¹².

At the beginning of 2020, the divorce took a backseat because of the coronavirus. Then, in the late summer, discussions returned to monopolize the debate and the specter of no-deal was dusted off. The relationship between the Boris Johnson government and the European negotiators became tense, resulting in real breakdowns in negotiations, legal actions and mutual warnings. Much has been discussed about the practical repercussions that the nation's exit from the Union system will have on free movement, transportation of goods, trade, financial services, and more.

Furthermore, the pandemic has aggravated tensions within the British government, struggling with an unprecedented economic crisis and, at the same time, has united European states in guaranteeing their own interests. The victory of the decision to leave had strong economic consequences on world markets and the UK lost its AAA rating. The Bank of England began cutting interest rates and took other emergency measures to help stop the economy's slide into recession, which was then exacerbated by the pandemic (Silvestri, 2021)¹³. Since the British economy was already dominated by uncertainty, the Brexit agreement made many companies move their headquarters to other EU countries since nothing was known also in terms of taxation.

Before the agreement was negotiated, the possibility of leaving without one was high and this would have left the British in a condition of isolation, at least temporarily. In the end, a deal was reached and it was supposed to exclude the imposition of reciprocal duties on goods. It was clear, however, the conditions would have never been as advantageous as remaining within the customs union. What the two sides agreed on was the fact that there would have been a "*level playing field*". Meaning that London would have been able to deviate from European regulations, but not to the point of damaging free and fair competition.

commerciali-tra-regno-unito-e-unione-europea?gclid=EAlalQobChMI77XU_tf78gIVIAcLCh1LfgJVEAAYAiAAEgKXcfD_B

¹² Mantovani, Rebecca. 16 June 2016. *Brexit, tutto quello che c'è da sapere in 10 domande e risposte*. Focus.it. <https://www.focus.it/comportamento/economia/tutto-quello-che-ce-da-sapere-sulla-brexit-in-9-domande-e-risposte>

¹³ Silvestri, Violetta. 4 January 2021. *Brexit, cos'è? Significato e conseguenze*. Money.it. <https://www.money.it/Brexit-significato-e-conseguenze#conseguenze>

To ensure that, the EU would have obtained a particularly streamlined and fast arbitration mechanism in the event of future disagreements on the deal and the possibility of applying sanctions.

What every commercial person was scared of was the fact that trade would have been affected drastically by the agreement. As a matter of fact, in 2019, the UK exported 43% of its goods to the EU and was therefore far more vulnerable to the lack of a trade deal than each individual European country. With the negotiated deal, a thing was sure there would have been no new tariffs in general; there would be no new goods taxes or import limits on what can be traded between the UK and EU from the 1st of January 2021, only new border controls, such as security and customs declarations (Tosini, 2021)¹⁴.

1.2 Problem Discussion

In his paper about E-Commerce, Yannis Bakos (2001)¹⁵ pointed out how e-commerce is a growing market, and this trend is not going to change easily thanks to the digitalization of our society which is increasing every other day. Even if it's old, those trends can still be recognized 20 years later. E-commerce helps to reduce search costs both from the customer perspective and the seller perspective. Hence, the relationship between the two parties of the economic transaction becomes easier thanks to the usage of technology. Also in the paper by Raisinghani (1997)¹⁶ it is pointed out how much e-commerce is beneficial and helpful for the world economy, helping companies to prioritize the customer experience as a must.

Moreover, according to the research by Statista (2020)¹⁷, worldwide online retail sales have been growing significantly every year since 2014 and they are not going to stop until 2023. The revenues of the retail sector with respect to e-commerce are projected to grow

¹⁴ Tosini, Gianfranco. 13 January 2021. *Brexit: quali saranno le conseguenze*. Siderweb - La community dell'acciaio. <https://www.siderweb.com/articoli/top/708639-brexit-quali-saranno-le-conseguenze>

¹⁵ Bakos, Yannis. 2001. *The Emerging Landscape for Retail E-Commerce*. Journal of Economic Perspectives, vol. 15, no. 1, pp. 69–80.

¹⁶ Raisinghani, Mahesh S. July 1997. The Economics of Electronic Commerce. Journal of Global Information Technology Management, vol. 3, no. 3. Chapter 1, page 20 to 59 and Chapter 4, page 137 to 155.

¹⁷ Tugba Sabanoglu. 30 November 2020. Statista. *Global retail e-commerce sales 2014-2021*. Statista (homepage) <https://www.statista.com/statistics/379046/worldwide-retail-e-commerce-sales/>

to 6.54 trillion US dollars in 2022. Online shopping is one of the most popular online activities worldwide and its growth was even more accelerated by the pandemic. E-commerce, thanks to the virus, experienced huge growth. A survey from SearchNode (2021)¹⁸ proves that the global lockdown which happened during the spring of 2020 helped most of the e-commerce companies to increase their revenues. Furthermore, 90% of the respondent companies experienced a growth in their online sales. Most of the companies who participated in the survey had a positive effect both during and after the lockdown. Thanks to digitalization and technology, it is possible to take down both geographical and time barriers since a business can be simultaneously in many different places at many different hours of the day.

As a consequence, competition between merchants is intense and, therefore, moderating the negative effects of uncertainty is a necessary requirement as it remains the biggest obstacle to the success of online shopping. For instance, the COVID-19 crisis has revealed the strengths of the Single Market, but it has also highlighted its weaknesses. Given the fact that the digital world has an increasingly cross-border nature, many EU businesses have struggled to comply with the new regulatory fragmentation and diverging approaches that the different countries have adopted towards the crisis. As a matter of fact, legal experts are struggling when it is about the multidimensional nature of e-commerce regarding laws and regulations (Out-Law Guides, 2021)¹⁹. This was especially emphasized by the Brexit agreement. Particularly, this will characterize a new rise and reshaping of how the EU and UK relationships will be from now on.

For example one of the biggest change that Brexit added to the trade between Britain and the Union, especially when talking about e-commerce, was the so long-promised “no taxes on imports” problem. As it will be explained more in details later, the taxes on imports/exports were imposed in the end and they affected the commerce between UK and EU drastically increasing the costs for customers and sellers (Teltow et al. 2018)²⁰. As a

¹⁸ Deimantė Vaičiūtė. 12 January 2021. Search Node. *30 E-Commerce Trends*. Search Node (homepage) <https://searchnode.com/blog/ecommerce-trends/>

¹⁹ Out-Law Guides. 20 Apr. 2021. Introduction to Taxation of e-Commerce. Pinsent Masons, Pinsent Masons homepage. www.pinsentmasons.com/out-law/guides/taxation-of-e-commerce.

²⁰ Tetlow, Gemma, and Stojanovic, Alex. October 2018. *Understanding the Economic Impact of Brexit*. Institute for Government, pp 12-48

matter of fact, some enterprises faced increased difficulty in conformity with respect to the EU's VAT e-commerce package. Moreover, while they were trying to manage the impact of Britain's withdrawal from the European Union, they were also trying to sustain the ongoing economic damage due to COVID-19 (Cano, 2020)²¹.

Moving forward, it is possible to state that while on one hand, the coronavirus outbreak made it possible for the technology to develop even more and for businesses to adopt e-commerce platforms in order to continue doing business, on the other hand, the Brexit agreement made it more difficult due to all the new regulations and laws that started to take place since January 2021.

The research will then be focused on studying how e-commerce businesses' performance can be affected by the shifts in the international dynamic environment in which they are operating. Especially, because of this, how e-commerce uncertainties can increase transaction costs. As a matter of fact, e-commerce uncertainties and how to manage them are two critical aspects in the digital world. One shining example is how different is the online market with the traditional one. In their research, Chatterjee and Datta (2008)²² emphasize the transparency aspect involved in the latter with respect to the former. Other uncertainties will then be introduced in details later in the research.

Moreover, it would be useful to try and find some solutions in order to help businesses to adapt to the new upcoming challenges. This research attempts to address such gaps in the literature by focusing on two objectives:

1. To develop a framework that can assess the influence of e-commerce uncertainties on the transaction costs which then decrease transaction efficiency;
2. To use the framework in order to examine the data gathered and give a partial solution to the phenomena.

²¹ Cano, Mattias Cruz. 30 November 2020. *MNEs may struggle with EU VAT e-commerce package*. International Tax Review. <https://www.internationaltaxreview.com/article/b1p6d5k5x5ywf7/mnes-may-struggle-with-eu-vat-e-commerce-package>

²² Chatterjee, Sutirtha, and Pratim Datta. January 2008. *Examining Inefficiencies and Consumer Uncertainty in E-Commerce*. Communications of the Association for Information Systems, vol. 22.

1.2.1 Research Question

The purpose of this thesis is to investigate how Brexit affects the international environment in which e-commerce firms operate. The Brexit agreement, from the beginning of 2021, has been the source of changes in the relationship between the EU and the UK and in the international environment in which they jointly do business. The effects on e-commerce firms are still barely perceivable because the agreement it is a new shift, 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 Brexit situation and in general how they can face this type of challenge. All of the research will be focused on the E-Commerce Retailing Industry and the EU-UK relationship. As previously mentioned, the topic is still new and too wide to give a completely new prospect, but while studying the current situation in which e-commerce companies need to survive there will be the possibility to give some new insights regarding the situation in general and to be able to obtain some new findings that were not been considered yet. Hopefully, the study framework will contribute to understanding in deep the changes to which the whole economy will have to adapt and to give some solutions.

The goal of the study conducted will be to answer the following research question: *How can (small) e-commerce businesses overcome the challenges due to changes in the international environment in which they operate?*

1.3 Thesis Outline

The research will be structured as follow. The first chapter will serve as an introduction for the research area through the presentation of general and background information about the topic which will then be studied. It will make the reader aware of what is behind the research and the problem discussion will introduce him to what the aim of the investigation is.

Moving onto the second chapter, there will be the literature review which is needed in order to let the lector empathize a little bit better with what revolves around the topic discussed and, particularly in this case, what is Brexit, which is a good portion of the focus of the research.

The third chapter, together with the following one, will be the core of the study. Here the conceptual framework which has been used to analyze the findings from the empirical data will be given and it will provide a deep comprehension of the theories

Then, chapter 4 will present and analyze the data collected during the empirical examination through the usage of a qualitative research method. At first, the company taken into consideration will be outlined and then the research methods and approaches used are presented. Moving forward, there will be explained the data collection design and how it has been collected. In the end, the results are outlined. The empirical part consists of an interview conducted on some of the employees of the company. All questions from the questionnaire can be found in the appendix.

The last chapter, which is the analysis chapter, will discuss the connection of what has been discovered from the interviews to theory. This is also the concluding chapter of the thesis which concludes the findings and analysis, and it contains recommendations, limitations and suggestions for future research.

CHAPTER 2 – Literature Review

This chapter will bring some general concepts which are fundamental to the research. The purpose of this literature review is to provide an understanding of what lies behind the thesis. It will be defining and introducing each topic for the purpose of making the study understandable.

2.1 The Digital Environment

A good definition for the digital environment is “*A setting or place produced through computer technology—including websites, mobile applications, social media, audio, and video content, and other web-based resources—that allow social interaction*” (IGI Global)²³.

However, there is no actual way to define the digital environment because it is the conglomeration of all of the different events, facts, realities into a tangible experience of a changed way of being such as digital technology, the ubiquity of the internet, the mass appeal of mobile phones and many others (Hoffmann, 2009)²⁴.

2.1.1 The Digitalization Process

In Gartner’s IT Glossary²⁵, *digitalization is the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business.* This actively demonstrates that the revolutionary changes brought by the Internet are countless and that both businesses and consumers have been affected by it.

²³ IGI Global. What Is Digital Environment . IGI Global - International Academic Publisher , Timely Knowledge , www.igi-global.com/dictionary/models-of-competences-for-the-real-and-digital-world/7610.

²⁴ Hoffmann, 2009. What Do We Mean by Digital Environment? Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis, vol. 53, no. 9, 2009, pp. 1689–99

²⁵ Gartner Information Technology Glossary. Definition of Digitalization - Gartner Information Technology Glossary. Gartner, Gartner homepage. www.gartner.com/en/information-technology/glossary/digitalization.

In the past years, there has been an increase in the usage of personal screens in our everyday life. This leads to the outcome of technology completely shaping and controlling our reality. Particularly, after the pandemic of Covid-19, we work, play, socialize, and learn digitally. This situation made the shift in our day-to-day life to a technological basis even more plausible and most of our activities, if not all of them, depend on it. The current scenario is permeated by an economic crisis that leads companies to be more competitive. The competition, however, is not played only in the national ambit, but it widens the borders because of these technologies and the informatization of the internal and external organizational systems.

One of the key points of the digitalization process is about how general data can be transformed into a different kind that can be stored, processed, and transmitted digitally. This can help businesses to spread and move data indefinitely and wherever with absolutely no degeneration which instead happens with paper documents that can deteriorate (Satyendra, 2016)²⁶.

In the research by Parviainen, Päivi, et al. (2017)²⁷, is shown that the potential advantages of digitalization are endless and the most and well known is cost reduction. For the record, through the digitization of processes that require a huge amount of information, costs can be cut by up to 90 percent. Through the aforementioned process, also time efficiency can be improved. Furthermore, the informatization of operations is able to offer progressive growth. In the study, it is stated that the most digitalized countries are able to obtain around 20 percent more in economic benefits than those which are less digitally advanced.

Moreover, in this context, a major role is played by the automation process. This process is whether shifting work roles or transforming business processes generally and fundamentally this is what digitalization is all about. Shifting your operations to an online

²⁶ Satyendra. 30 July 2016. Digitization Process. IspatGuru, IspatGuru homepage. www.ispatguru.com/digitization-process/

²⁷ Parviainen, Päivi, et al. March 2017. Tackling the Digitalization Challenge: How to Benefit from Digitalization in Practice. International Journal of Information Systems and Project Management, vol. 5, no. 1, pp. 63–77

platform is what increases the efficiency of your company and ensures data transparency (Bloomberg, 2019)²⁸.

Following the article aforementioned by the Forbes contributor Jason Bloomberg (2019), the whole process can be summed up in three steps: digitizing information, digitalizing processes, and roles that make up the operations of a business, and following these, we have digitally transformed the strategy and the business itself.

2.1.2 How to do business in a digitalized world

Starting an online site is now possible for everyone thanks to the many software that allows and helps to create the website for free. Especially to help you with the technical knowledge needed for programming and to make everything work smoothly. This is fundamental to take on new opportunities and to not miss any chance. Studying and finding your competitors is what can inspire you and make you valuable in the game. The cardinal element in doing business online is that everything revolves around the customer. The success of an online platform is dependent on having the right answers at the right time and providing clear direction to their consumers (Yazdanifard Rashad, 2011)²⁹.

All of these tips are crucial, in the context in which we are living, because, no matter what you are selling or in what industry you are competing, the digitalization of your business operations will be essential to be profitable. In the research of Päivi Parviainen and others (2017), how digitalization impact an organization and how it helps the company reach their goals are both shown using three viewpoints:

1. *Internal efficiency* - i.e., improved way of working for employees via digital means and re-planning internal processes and operations providing better access to useful data;
2. *External opportunities* - i.e., new business opportunities in the existing business domain (new services, new customers, etc.);

²⁸ Bloomberg, Jason. 29 Apr. 2018. Digitization, Digitalization, And Digital Transformation: Confuse Them At Your Peril. Forbes Magazine. www.forbes.com/sites/jasonbloomberg/2018/04/29/digitization-digitalization-and-digital-transformation-confuse-them-at-your-peril/?sh=31f1840f2f2c.

²⁹ Yazdanifard, Rashad. 2011. *Uncertainties Faced in E-Shopping; Suggesting Possible Solutions*. International Journal of E-Education, e-Business, e-Management and e-Learning, vol. 1, no. 2, v1.17.

3. *Disruptive change* - digitalization causes changes in business roles completely.

Moreover, in their study, they managed to create a framework for tackling digitalization in companies.

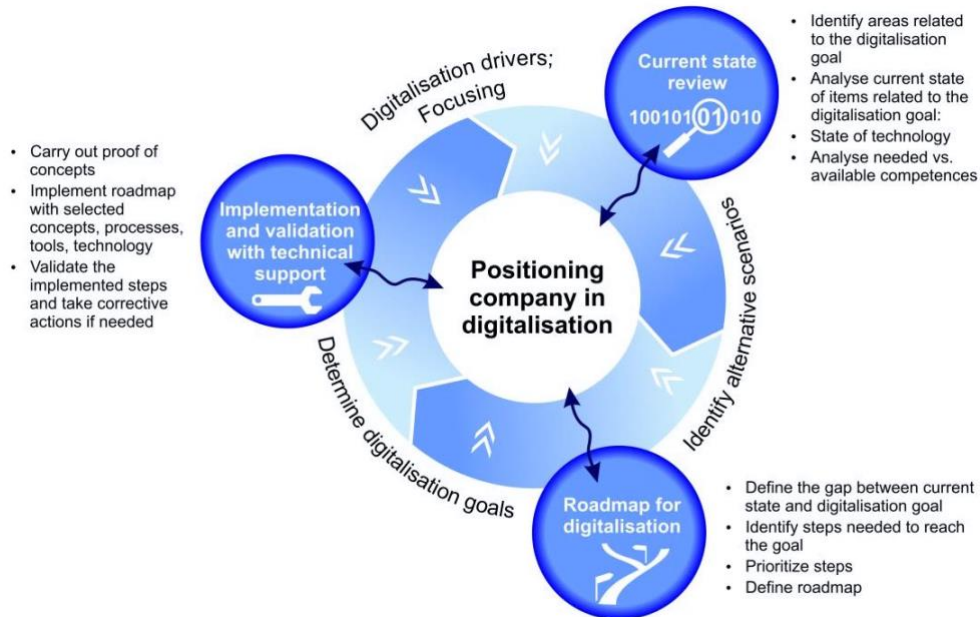


Figure 1: Parviainen, Päivi, et al. March 2017. *Tackling the Digitalization Challenge: How to Benefit from Digitalization in Practice*

The model shown in *Figure 1* is a good summary of how a company can find the right positioning for themselves online. It is divided into four main steps which are further subdivided into other steps:

- The first step, *Positioning a company in digitalization*, consists of analyzing the impact that digitalization can have on the organization and then decide the goal for the change;
- The second step is the *Review the current state of the company* on two main aspects. First regarding the impact that digitalization will have on their desired position and then evaluate the difference between the present situation and the wanted future one;
- The third step, *Roadmap for digitalization*, concerns the approach and the actual actions needed to fill in the gap to reach the desired position.
- The last step, *Implementation with technical support*, is about implementing and validating the actions and make changes in previous steps if needed.

As a consequence of these online transformations firms are having, doing business is becoming gradually challenging. The reason for this is the continuous pressures to innovate, reduce cost, adopt transformative technologies, create personalized customer experiences, adapt to changing markets, and many others. In addition to all these burdens, companies need to deal with a large number of existing laws and regulations and also be aware of the new emerging ones. Since technology is developing faster than the law, the answers to legal questions are often not clear creating more complexity and uncertainty regarding cybersecurity M&A, taxes, antitrust, and so on and so forth (Allgrove and Vond Dietze, 2018)³⁰.

In conclusion, it is fair to say that, in order to remain competitive and efficient, businesses need to think about how technology can transform their companies and implement the changes to keep up with the movements of the context in which they are performing. Firms have to constantly rethink their business model to face the changes in the environment and to adapt to new challenges.

2.1.3 The digital business model

When talking about business model, there is no actual definition that could embrace all its aspects but it can be interpreted as the company's core strategic plan for making a profit (Kopp, 2020)³¹. In general, it includes the most important information needed to understand and to make a business work such as products or services, target markets, future expenses, customers, and so on.

Since the advent of the technology and all the innovation it has entailed, also the notion of business model was adapt to these changes and thus the concept of *digital business model* happened. Following the general definition of business model, the digital business model is the strategy to enhance the value proposition of the company and create benefits for

³⁰ Allgrove, Anne-Marie, and Von Dietze, Anna. 22 January 2018. Doing Business in the Digital World. Lexology, Baker McKenzie. www.lexology.com/library/detail.aspx?g=84f0d21a-51e5-4e85-9bcc-e5b5bd469584.

³¹Kopp, Carol M. 3 July 2020. Business Models. Investopedia, Investopedia homepage. www.investopedia.com/terms/b/businessmodel.asp.

the customers through the usage of digital technologies (Innolytics Innovation, 2020)³². The main goal of this digital solution is to generate a significant advantage concerning the traditional business model and improve several aspects of an organization.

In order to create a digital business model, it is fundamental to bear in mind that everything moves around the key component of the customer or end-user of the product the company is selling (Cuofano, 2021)³³. Other than this, other fundamental elements need to be taken care of:

- The product or service that the company is offering to the final buyer.
- The understanding of the distribution channels to make the product/service available. These are innovating every other year such as social media, search engines to name some of them.
- The value proposition and the added value generated by the usage of technology is what makes this business model type so advantageous.

2.1.4 Digitalization in retailing

Retailing is defined as all those activities and services with the aim of selling directly from the company to the customer most commonly for personal use (Righini, 2021)³⁴. Digitalization has impacted this industry with more and more integrated into all kinds of operations that are making this sector working.

In their study, Johan Hagberg and others (2016)³⁵, in order to capture the increasing importance of digitalization for the retailer-consumer interface, the researchers developed a conceptual framework that is focused on 4 main points: exchanges, settings, actors, offerings.

³² Innolytics Innovation. 25 February 2020. Digital Business Model. Innolytics Innovation, Management System Software. innolytics-innovation.com/digital-business-model/.

³³ Cuofano, Gennaro. 21 May 2021. *Digital Business Models Map: The Most Popular Digital Business Model Types*. FourWeekMBA. fourweekmba.com/digital-business-models/.

³⁴ Righini, Edoardo. 21 May 2021. Between Growth and Apocalypse: The Impact of e-Commerce in the Retail Sector. Doxee. www.doxee.com/blog/customer-experience/the-impact-of-e-commerce-in-the-retail-sector/.

³⁵ Hagberg, Johan, et al. 2016. The Digitalization of Retailing: An Exploratory Framework. *International Journal of Retail and Distribution Management*, vol. 44, no. 7 pp. 694–712.

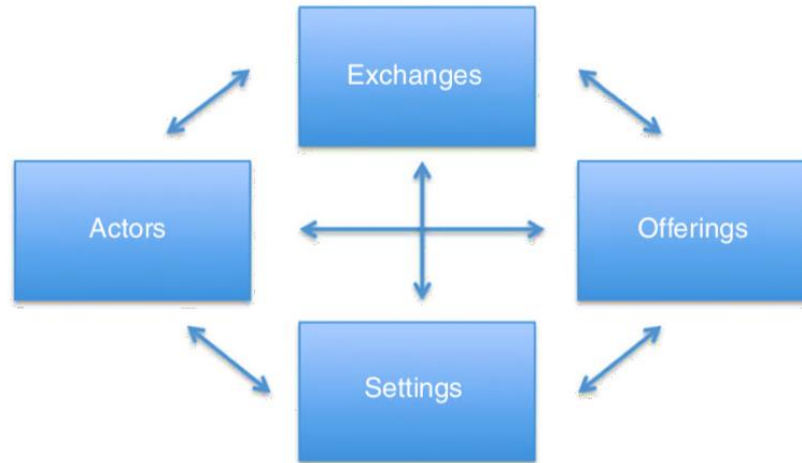


Figure 2: The Digitalization of Retailing: An Exploratory Framework. Hagberg, Johan, et al. 2016.

The structure shown in *Figure 2* indicates all the main transformations that digitalization brought in the retail sector. These are increasingly visible for everyone in the industry and are also many such as the transformation of channels of communication, transaction, and distribution which are becoming to be more and more online. As a matter of fact, nowadays if a customer wants to purchase something, he simply has to go online looking for what he wants, choose the product that fits him better and pay with one click.

A particular role in this changing purchasing process is played by consumer recommendations and communications through social media. For this matter, knowing your customer and having personalized marketing is a must for retailers.

Moreover, the shift from physical services to digital services and the increasing use of digital devices in every step of the buying process, includes also the actors and settings which are part of the transaction. As demonstrated by all of these findings, retailing and digitalization does not have their only common point in the e-commerce presence, although it is the most primarily discussed topic.

What has been very useful and a good intermediary of these broader effects is indeed the increasing use of mobile devices. These appliances, thanks to their ability to connect to the internet, have begun to change consumer practices as previously explained. Thus, digitalization is likely to have a far-reaching effect on every actor participating in the retailing industry and there is a need for a deep understanding of the phenomenon (Hagberg, Johan, et al. 2016).

2.2 Brexit

The literature review and data available about the effects of the Brexit agreement on small e-commerce companies is not very broad because the pact took place not even a year ago. For this reason, it will be hard to establish some certified results, especially on a large scale. The data available will be for the most forecasts. The research will try to use the information available in order to give the best solution to the problem that is being studied.

2.2.1 Brexit agreement and what lead to it

Brexit is a shortened version of *British Exit* and is the term used to refer to the decision of the United Kingdom (UK) to leave the European Union (EU) (Watters, 2016)³⁶. This outstanding outcome is the most significant event in Europe since the fall of the Berlin Wall in 1989 and may mark the beginning of the end of the European Union as it has been known until now. The process is likely to fragment the Union solidarity (Petrova, 2017)³⁷. The decision was made on the 23rd of June 2016 and it didn't come into action immediately. In other terms, British people voted to leave the EU in 2016 but they officially left it on the 31st of January 2020 (BBC, 2019)³⁸.

The sentence was the result of the referendum of June 2016 in which more than 30 million people participated and gave their vote. The winning side, thus the "Leave the EU" side, won by nearly 52% to 48% – 17.4m votes to 16.1m – (Morris, 2018)³⁹. Most voters in England and Wales supported Brexit, particularly in rural areas and smaller cities (Mueller, 2019)⁴⁰.

³⁶ Watters, Ashley. 18 July 2016. *What Is Brexit?* Dummies, Dummies homepage. www.dummies.com/education/politics-government/what-is-brexit/.

³⁷ Petrova, Perno A. Yu. 2017. *Brexit*. Dipartimento di Comunicazione Interculturale e Traduzione Tecnica – Sezione di tecnologie di stampa e comunicazione dei media.

³⁸ BBC. 30 July 2019. *Brexit: Your Simple Guide to the UK Leaving the EU*. BBC News, BBC. www.bbc.com/news/uk-46318565.

³⁹ Morris, Chris. 22 November 2018. *Brexit: What's in the POLITICAL Declaration?*. BBC News, BBC. www.bbc.com/news/uk-politics-46303751.

⁴⁰ Mueller, Benjamin. 24 January 2019. *What Is BREXIT? And What Happens next?* The New York Times, The New York Times homepage. www.nytimes.com/interactive/2019/world/europe/what-is-brexit.html.

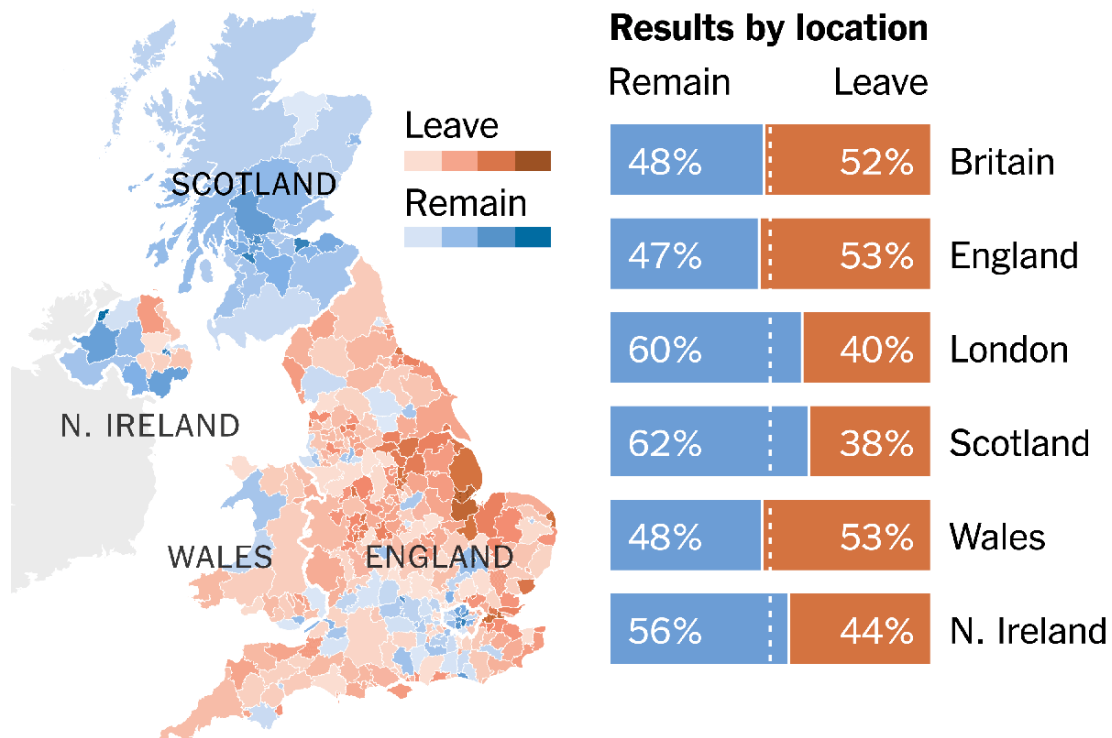


Figure 4: The division of the vote in the UK - Mueller, Benjamin. 24 January 2019. What Is BREXIT? And What Happens next? The New York Times, The New York Times homepage.

The Independence Party, or the Leave party, was not supported by the Prime Minister David Cameron while they were pushing to abandon the European Union. They were arguing that UK's participation in the agreement was a restrictive element for the country. On the other hand, the Conservative Party and the Prime Minister together were in favor of remaining in the union because they thought that the UK could receive business benefits by participating in the Single Market (Watters, 2016).

In the end, since Mr. Cameron was not in line with the goals of the majority of the country, he resigned. Theresa May came into action after him to try to stipulate the withdrawal agreement, but without success. After Mrs. May's resignation, Mr. Boris Johnson was elected and guided the country through the most critical stage of Brexit: the trade negotiations that determined how closely linked Britain remains with the bloc (Mueller, 2019).

At the beginning, the withdrawal notification was submitted by the Prime Minister of that time, Theresa May, on the 29th March 2017 after Article 50 of the Lisbon Treaty. That gave the two parties two years to negotiate all the affected issues. Surely, this was not a long

time to rework a relationship that's lasted for more than four decades (Petrova, 2017). For this reason, the UK did not leave straight away but it took some time because at first, they needed time to agree on a new deal. Originally, the withdrawal deal which was negotiated was not approved, and both sides agreed to keep many things the same until the 31st of December 2020. The final deal was agreed on the 24th of December 2020 (BBC,2020)⁴¹.

Together with the withdrawal agreement, there was a political declaration, which was about the future cooperation between the UK and the EU. It was a much shorter document and not legally binding. It was considered a set of ambitions about everything that can include any future relationship between the UK and its nearest neighbors (Morris, 2018).

Before talking about the main points of the agreement, another important definition to give is the two concepts which were defined how Brexit should have hit the whole of Europe. The *Hard Brexit* meant leaving the EU quickly with no restrictions other than a new free trade agreement. The UK would have left all the EU sanctioned Institutions, out of the European Investment Bank, drop out of the European single market, no more freedom across the borders of the EU member states (Clark, 2019)⁴². On the other hand, the *Soft Brexit* would have retain complete access of capital with restricted access of people. Theresa May acknowledged the increased likelihood of a Soft Brexit in September 2017. Indeed, she proposed the two-year transition period after the UK left the EU in order to allow continued access to markets. In return, the UK would have continued paying its EU membership fees until 2020 (Petrova, 2017).

In the end, the agreement came into action on the 1st of January 2021, and until then not much changed. Now, since the beginning of this year, the free movement of people, goods, and services between the UK and the EU will end. Thus, a lot will change from before and now about how people live, work and travel (BBC, 2021)⁴³. The whole Brexit agreement

⁴¹ BBC. 30 December 2020. *Brexit: What You Need to Know about the UK Leaving the EU*. BBC News, BBC, 30 Dec. 2020, www.bbc.com/news/uk-politics-32810887.

⁴² Clark, Tor. 8 October 2019. *Brexit: How, When and What?* YouTube, TEDxTalks. www.youtube.com/watch?v=beVQoBD7iT8.

⁴³ BBC. 28 January 2021. *Brexit: Seven Things Changing on 1 January*. BBC News, BBC. www.bbc.com/news/explainers-54195827.

is more than 1,200 pages long but there are some key points that are worth to be highlighted (Edgington, 2020)⁴⁴.

First of all, the deal approved that there will be no more freedom to travel and to work. The British people wanting to go into most of the European countries will need a visa if they travel for more than 90 days in any 180-day period (BBC, 2021). The hardest to negotiate was fishing and some UK fisherman are still unhappy with what was agreed. Over the next five-and-a-half years, the UK will gradually gain a greater share of the fish from its own waters. From 2026, the UK and the EU will hold regular talks on fishing access. So there could be more heated arguments ahead (Edgington, 2020). There are some changes in the rules for UK citizens living in any EU country. Although, if you are already in a European country you have some protections thanks to the withdrawal agreement, you will still need to check the country's specific rules. For example, if you are an English national and you live in France you will need to obtain a new residents' permit. This is also true for EU citizens living in the UK. Everyone will need to check if they have the right to stay in the country they are living in. In the case of wanting to move to the UK after Brexit, there will be a new points-based system. The government says they want to attract people who can contribute to the economy, thus, it will treat EU and non-EU citizens equally. People moving to the UK to work, live or study will have to apply and pay for a visa (BBC, 2021). Moreover, companies who are offering their services to the EU will lose their automatic right of access to these markets and will surely face some restrictions. Doctors, chefs or architecture will no longer be automatically recognized as professionally qualified. However, the two parties will try to keep negotiating in order to improve access for the service sector in the future (Edgington, 2020).

Regarding any deal with other countries, now that it's no longer in the EU, the UK is free to set its own trade policy and can negotiate deals with other powers. The only exception will be Northern Ireland which will continue to follow many of the EU's rules in order to avoid a hardening of its border; nevertheless, new checks will be introduced on goods entering the country from the rest of the UK (BBC, 2019).

⁴⁴ Edgington, Tom. 30 December 2020. *Brexit: What Are the Key Points of the Deal?*. BBC News, BBC. www.bbc.com/news/explainers-55180293.

When looking for reasons which brought the UK citizens to leave the EU and be on their own, there are many that can come up to mind, but only some of them are actually relevant for an explanation. It is fair to say, that, in general, English people have always thought that they were better than the other EU citizens and they always believed that on their own they can grow better and stronger and, surely, this is not entirely false.

Already looking at geography, they have always felt detached from the rest of the Union. British history is global and imperial; a profound sense of exceptionalism, reinforced by relative economic success (Henley et al, 2020)⁴⁵. As well, politically speaking, Britain has always defined itself as the most powerful. They attribute to themselves the fact that the various world wars were won. Without their intervention, Europe would have been doomed. However, after the Brexit decision, major businesses have announced that they were thinking about leaving Britain because of the new rules imposed, or have at least threatened to do so (Mueller, 2019).

The choice of English people to vote for this exclusion from EU common rules means exclusion from most trade and partnerships with them. Hence, Brexit feels like a vote not just for legal and economic disaster but for isolationism, xenophobia and regression in a globalised world (Edwards, 2016)⁴⁶.

The Brexit decision may be interpreted as being a revolt against globalisation by British people or maybe just a rejection of all foreign things. This will not benefit either them or the other European countries because collaboration is what gives you power. For this reason, the need for inclusive globalization is more than ever needed. *Inclusive Globalization* is a concept introduced by Kofi Annan, the former Secretary-General of the United Nation, during a speech at Yale University in 2002. He said during his speech: “*The glass House of globalization has to be open to all if it is to remain secure, bigotry and ignorance are the ugly faces of the exclusionary and antagonistic globalization*”. In order to get back to inclusivity and to avoid misinformation, the world will need more interaction across diverse

⁴⁵ Henley, Jon, et al. 27 January 2020. *Brexit Explained: How It Happened and What Comes Next*. The Guardian, Guardian News and Media. www.theguardian.com/news/2020/jan/27/brexit-explained-how-it-happened-and-what-comes-next.

⁴⁶ Edwards, Lilian. 2016. *Brexit: 'You Don't Know What You've Got till It's Gone.'* SCRIPTed, vol. 13, no. 2, pp. 112–17.

communities and more movement across different countries. The positive benefits of globalization which everyone can gain advantage from are many and this is something Brexit is not considering at all (Betts, 2016)⁴⁷.

Since the starting of the deal, there has been no guarantee about what the post-Brexit world will look like (Mueller, 2019). Countries will discover what the future will be while things are being negotiate and no one can say for certain how long it will all take to stabilize. The only certain thing is that every deal must be consistent with the EU's four freedoms (the free movement of goods, services, capital and people), and nothing will go against the sovereignty of the United Kingdom (Morris, 2018).

2.2.2 Repercussions inside the UK

The repercussion of Brexit on the economy of the UK is not something that can be established with the information available until now because it is a completely new change in the markets of Europe. Economists disagree on the consequences of this decision but there are a few studies that tried to establish a forecast of what will happen in the next years with the Brexit ongoing. *Compromise* and *uncertainty* are the two keywords for Brexit (Clark, 2019).

The paper by Latorre et al. (2019)⁴⁸, examines 12 economic models that try to estimate the impact of Brexit. All their research have been conducted before the withdrawal agreement was negotiated. This study proves that the UK will lose much more than the EU because of the Brexit agreement. As the former European Commission President, Jean Claud Juncker said: "There is no good Brexit".

The predictions about what Brexit will bring to the UK vary hugely. The vast majority agree on the fact that Brexit will reduce economic growth. But, for example, as shown in Figure 5, the study from the Economists for Free Trade (EFT) affirms that Brexit will bring a great increase to the UK economy (Teltow et al. 2018). More studies disagree on the fact that the agreement will bring only negative effects and these different answers are due to the

⁴⁷ Betts, Alexander. 2016. Why Brexit Happened and What to Do Next . TED, TEDSummit , www.ted.com/talks/alexander_betts_why_brexit_happened_and_what_to_do_next/up-next?language=en.

⁴⁸ Latorre, María C., et al. March 2019. *Brexit: Everyone Loses, but Britain Loses the Most*. SSRN Electronic Journal, pp. 1–21.

large variation in the assumptions fed into those models, which are for the most unrealistic and thus not meant to prove something. For example, some of the positive outcomes they reached are coming from the hypothesis that the UK conducts trade liberalization both with the EU and the rest of the world, and it also creates a liberal strategy inside its economy which is something unreliable (Latorre et al. 2019).



Figure 5: Forecast of the long-term impact of Brexit relative to remain in the EU - Tetlow, Gemma, and Stojanovic, Alex. October 2018. *Understanding the Economic Impact of Brexit*. Institute for Government

Both papers from John Springford (2018)⁴⁹, deputy director of the Centre for European Reform, and Born et al. (2017)⁵⁰, present a comparison between the UK and an imaginary doppelgänger which is made of different countries for the two types of researches. The countries in combination have roughly the same economic characteristics as England before the referendum and it shows how the doppelgänger continues to evolve that way so that the effects of the agreement could be determined. It calculated that the UK economy, in the third quarter of 2018, shows a slight reduction. The particular reason for this is due to higher inflation and lower business investment.

⁴⁹ Springford, John. 27 January 2019. *The Cost of Brexit to September 2018*. Centre for European Reform. no. of January, pp. 27–29, <https://www.cer.eu/insights/cost-brexite-september-2018>.

⁵⁰ Born, Benjamin; Müller, Gernot; Schularick, Moritz; Sedláček, Petr. December 2017. *The Economic Consequences of the Brexit Vote*, CESifo Working Paper, No. 6780, Center for Economic Studies and ifo Institute (CESifo).

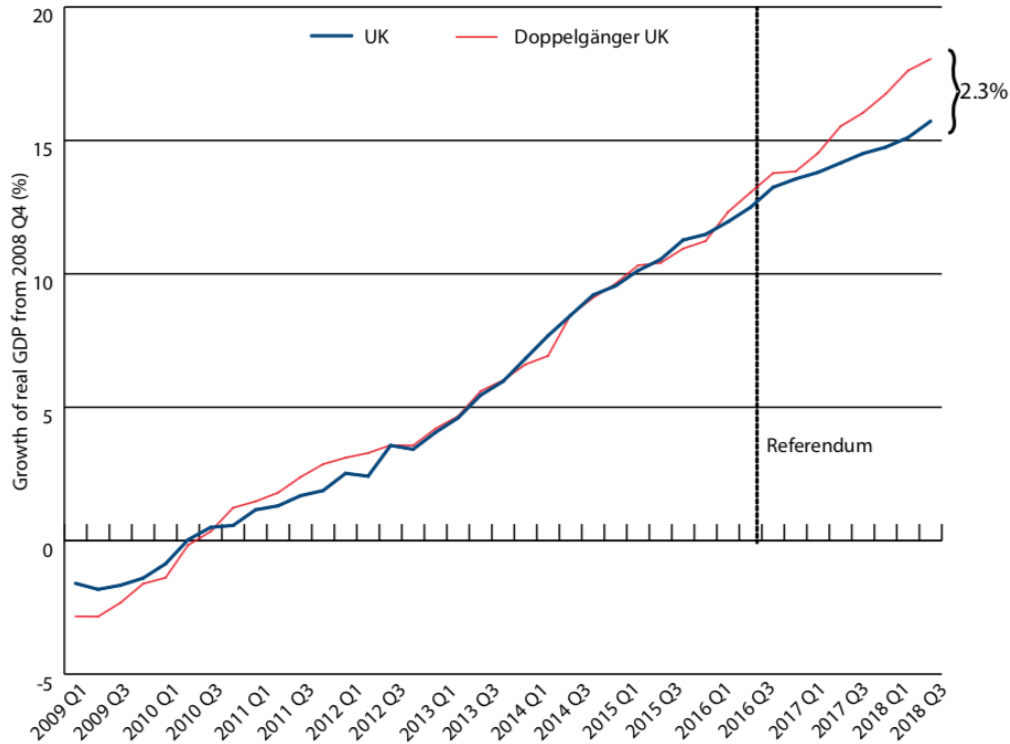


Figure 6: The cost of Brexit - Springford, John. 27 January 2019. *The Cost of Brexit to September 2018*. Centre for European Reform. no. of January, pp. 27–29, <https://www.cer.eu/insights/cost-brexit-september-2018>.

The UK’s GDP losses from a hard Brexit in 2018 will be -2.53 percent in most of the models analyzed here while under the soft Brexit it will contract by -1.23 . A *Soft Brexit* means that the UK achieves a trade relationship with the EU like that of Norway and similar to the “Brexit white paper,” while *hard Brexit* means for the UK moving to a World Trade Organization status in other terms a “no-deal” situation. A soft Brexit would be preferable because it will cut the losses roughly by half (Latorre et al., 2019; Springford, 2018).

In the study by Born et al (2017), it is shown how already in the third quarter of 2017 the output loss amounted to approximately 1.3 percent, and the cumulative loss in GDP was close to 20 billion pounds. These results show that the decision to leave has already had a substantially negative impact on UK output before Brexit actually happens.

The losses derived by Brexit would be incurred because of increased barriers to trade, due to higher tariffs, non-tariff barriers (NTBs), and increased “frictions” that constrain supply and value chains. Prediction says that only the tariffs would reduce GDP by -0.38 percent, and together with NTBs produce a -1.17 percent reduction. The larger these barriers are, the more negative the impacts for both UK and EU. Trading with third nations, for

example, the US, will not be enough for the UK to recover from the negative impact of Brexit. This implies that firms will experience a reduction in economies of scale, productivity, and factor remuneration due to the access to fewer customers (Latorre et al., 2019). Trade is fundamental for the UK because a significant share of the economic output of the country is bought by overseas sellers and, on the other hand, English consumers buy a significant amount of goods from overseas. As a matter of fact, it is demonstrated that the UK exports have grown less quickly than they would have done. Around 5% fewer firms now start to export to the EU and more businesses are dropping out of the EU export market (Teltow et al. 2018). Some other data shows that 54% of UK manufacturers faced export difficulties after Brexit and 65% faced higher costs; the Bank of England predicts 1% of economic output reduction this year (WION, 2021)⁵¹.

Other than a possible downgrade in the average economic outlook, the outcome of the Brexit vote also increased economic uncertainty considerably. The two measurements used in the study are the Economic Policy Uncertainty (EPU) index and the macroeconomic uncertainty (MU), respectively compiled by Baker et al. (2016) and Jurado et al. (2015) For instance, the EPU reached an unequalled high in July 2016 and stayed high since (Born et al. 2017):.

In the end, it is possible to state that all the studies mentioned before are agreeing on the fact that the Brexit vote will damage both the UK and the EU and that the repercussions will be far worse for the UK than for the rest of the EU. One need only to think that since the referendum, the pound has devalued by 11% meaning that foreign investors have no confidence in the economic prospects of the country. This actively demonstrates why the UK has dropped from the top to the bottom of the league among the G7 group of major advanced economies (Teltow et al. 2018). Furthermore, London will not be seen as the world's leading financial centre. The European Union as first could limit London's role with some regulations and this may encourage financial service companies to locate elsewhere in the EU (such as Frankfurt) or even in the USA (Cumming, 2016)⁵².

⁵¹ WION - The World Is One News. 15 February 2021. *UK: 54% Manufacturers Facing Export Difficulties* . *YouTube*, WION homepage. www.youtube.com/watch?v=sQD7YpQynMo.

⁵² Cumming, Douglas J., and Shaker A. Zahra. 2016. *International Business and Entrepreneurship Implications of Brexit*. *British Journal of Management*. Vol.27 pp. 687–92.

The scariest part is that the predictions show how the effects are not only large but once they will be going, they will remain, unless another shock undoes the effects of the primary shock.

2.2.3 Repercussions outside the UK – How Brexit shaped the relationship between the European Union and Britain

The European Union is a unique economic and political union between 28 countries (after the Brexit agreement, now 27 nations). The early stage of the deal was after the Second World War and the goal was to reach economic cooperation between the countries. They wanted to abolish barriers for trade to become economically interdependent with one another and more likely to avoid conflict. At first, it began only as an economic union with the European Economic Community (EEC), created in 1958, but then it has evolved into an organization spanning various topics. The name was then changed to the European Union (EU) in 1993 (European Union, 2021)⁵³.

The EU is the world's most deeply integrated economic area and it is quite impossible to replicate what they had with the idea of a new agreement. Every deal that will be made will imply cost increases in transactions and a variety of potential negative shocks as an outcome (Latorre et al., 2019).

The European Union was kept in place for 70 years between countries and it spread the positive message of “if we work together we can achieve more” (Clark, 2019).

The most important gain in being a member of the European Union was to be a part of the European Single Market which by definition is “*one territory without any internal borders or other regulatory obstacles to the free movement of goods and services (...) The European single market is one of the EU's greatest achievements. It has fuelled economic growth and made the everyday life of European businesses and consumers easier*” (European Commission, 2017)⁵⁴.

⁵³ Anonymous. 16 March 2021. *The EU in Brief*. European Union. europa.eu/european-union/about-eu/eu-in-brief_en.

⁵⁴ Anonymous. 5 July 2017. *The European Single Market - Internal Market, Industry, Entrepreneurship and SMEs*. European Commission, ec.europa.eu/growth/single-market_en.

The benefits of the rules within the European Union are many and advantageous not only for the economy or industries in general but for the European Citizen. This is because your rights do not exist only in the country where you are from, but they are recognized all across Europe and can be predicted and protected by your local lawyer everywhere. (Edwards, 2016). Thanks to the many profits in being a member of this deal and the abolition of border controls between countries, people were able to travel freely throughout most of the continent and to choose in which EU country they want to study, work or retire.

After 47 years of valid membership, the UK with Brexit finally leave the EU and this had major repercussions on the relationship with the Union and on its own economy (Henley et al., 2020). First of all, some predictions say that Brexit will affect the EU's GDP with a fall between -0.16 and -0.35 percent (Latorre et al., 2019).

Some of the issues that dominate the debate about the Brexit agreement are also the issues of security, migration and citizens' rights of foreign residents or the external security agenda (Henökl, 2017)⁵⁵. However, the biggest repercussion in the cross-border relationship between the UK and the EU will mainly concern how the two forces will establish their new commercial bond and the rules that will regulate it. Data says that 49% of UK trade is with the EU (Fusacchia et al. 2020)⁵⁶. Thus, reductions in foreign trade are much larger in the UK because they lost access to the huge EU market since it takes around half of its trade while, on the other hand, the EU will simply lose the UK which is a much smaller share.

Moreover, other predictions show how the commercial relationship will change:

- Trade will fall 10% in the long term and Brexit related trade disruptions are equal to £5 billion (WION, 2021);
- Reductions in exports will vary between -16.94 and -7.54 percent in the UK and between -3.48 and -1.54 percent in the EU. While, the drop in imports amounts to -14.42 and -6.44 percent in the UK and -3.82 and -1.69 percent in the EU (Latorre et al 2019).

⁵⁵ Henökl, Thomas. 17 July 2017. *How Brexit Affects EU External Action: The UK's Legacy in European International Cooperation*. Futures, vol. 97. Pp. 63-72 journal homepage: www.elsevier.com/locate/futures

⁵⁶ Fusacchia, Ilaria, Salvatici, Luca and Winters, L Alan. December 2020. *The Cost of Brexit*. UK Trade Policy Observatory, Univerisy of Sussex. Chatam House – The Royal Institute of International Affairs.

Unconfirmed reports before Brexit took place confirmed that the UK and the EU were able to agree on a free trade agreement, just a week before the end of the transition period, to preserve the duty-free, quota-free trade between them that has ruled for three decades. Unfortunately, this was not true and the reduction in trade was mostly influenced by the increase in the costs of UK goods and services due to three main factors: transport costs, tariffs, and some non-tariff barriers. Both of these barriers could go up or down, depending on the agreements reached (Teltow et al., 2018). Hence, the Free Trade Agreement effect at the beginning of 2021 not only imposed extra costs or caused delays in shipping times but disrupted the operation of UK businesses (Polyak, 2021)⁵⁷

The tariffs, which are taxes imposed by another country's government on the import of UK goods, can add to the cost of UK goods bought abroad. While goods that move between countries within the EU have no tariffs at all because of the European Single Market.

Because of the “zero tariff and zero quota” promised made by Boris Johnson, many people may have been surprised because “*they believed the tariff-free trade deal negotiated between the UK and EU meant there would be no extra charges*” said Chris Hickson, a retired logistics and freight forwarding expert living in France (Henley, 2021)⁵⁸. This is actively demonstrated by the fact that anyone in the UK receiving something from the EU (and vice versa) which is worth more than £39 will now face a bill for import VAT at 20%. Moreover, items above £135 attract import duty between 0% to 25% of the item's value depending on what it is, what material it is made from and its declared value (Brignall, 2021)⁵⁹.

The reason behind tariffs is if more than 40% of the pre-finished value of a product is neither of British nor EU origin. There is also the cost of the whole necessary paperwork,

⁵⁷ Polyak, Frida. 13 May 2021. *The Impact of Brexit on Cross-Border Ecommerce between the UK and EU*. ThePaypers. thepaypers.com/expert-opinion/the-impact-of-brex-it-on-cross-border-ecommerce-between-the-uk-and-eu--1248996.

⁵⁸ Henley, Jon. 7 January 2021. *Customers in Europe Hit By Post-Brexit Charges When Buying from UK*. The Guardian, Guardian News and Media www.theguardian.com/politics/2021/jan/07/customers-europe-hit-by-post-brex-it-charges-buying-from-uk.

⁵⁹ Brignall, Miles. 21 January 2021. *EU Website Purchases: The Import Charges UK Customers Have to Pay*. The Guardian, Guardian News and Media. www.theguardian.com/money/2021/jan/21/eu-website-purchases-the-import-charges-uk-customers-have-to-pay.

including customs declarations required on goods being traded in both directions (O'Carroll et al., 2021)⁶⁰.

On the other hand, the non-tariff barriers relate to government policy. The two major barriers are regulatory barriers and customs checks (Teltow et al., 2018). The EU Member States will impose controls on UK goods. Thus, all freight that travels from the Union to the UK or vice versa without the correct documentation will be stopped before boarding services. The Reasonable Worst Case Scenario (RWCS) on the 1st of January 2021 predicted that around 40 - 70% of trucks traveling between the two powers might not be ready for new border controls (Cabinet Office, 2020)⁶¹.

At the end of 2020, predictions said that the customs checks would have caused major delays and costs. Thus, there was a need to manage this congestion. As a matter of fact, a trial at France border gave a glimpse of how things would be in January 2021. Whether a deal is reached or not, the government warned about queues of 7,000 lorries on the main motorway routes to both the UK or the EU (O'Carroll, 2020)⁶².

For all these reasons, many companies decided to stop shipping to the continent after Brexit. Thus, the cooperation between EU-UK will become less structured and less predictable. Hence, to overcome this situation and find the best solution to deal with the Brexit issues, all the business sectors are required to take action to adapt to these changes.

2.3.4 How does Brexit affect digital relationships

Relevant to the research is the Brexit effect on digital reality. Being in the EU was most advantageous for the UK. The concept of the European Single Market and the objective

⁶⁰ O'Carroll, Lisa, and Jon Henley. 8 January 2021. *Johnson Promised Tariff-Free Trade – so Why Is Brexit Reality so Different?* The Guardian, Guardian News and Media. www.theguardian.com/politics/2021/jan/08/business-finds-snags-in-johnsons-jumbo-tariff-free-brexit.

⁶¹ Anonymous. September 2020. *Reasonable Worst Case Scenario for Borders at the End of the Transition Period on 31 December 2020*. Cabinet Office.

⁶² O'Carroll, Lisa. 24 November 2020. *Trial of Brexit Border Checks Causes Five-Mile Lorry Queues in Kent*. The Guardian, Guardian News and Media. www.theguardian.com/politics/2020/nov/24/trial-of-brexit-border-checks-causes-five-mile-lorry-queues-in-kent.

of the agreement have contributed to the creation of what is today the backbone of copyright, data protection and e-commerce laws in the UK (Edwards, 2016).

E-commerce in the UK is one of the largest in the world, according to the E-commerce Europe Group, with a total retail sales of 14.5%. British consumers spent an average of €3,625 in 2015 and 36% of shoppers said that they are always keen on buying items online coming from other countries. Thus, for many companies, Brexit will mean a reshaping of processes in order to ensure the ongoing success of their e-commerce strategies (Owen, 2021)⁶³. Unfortunately, after the Brexit deal, some predictions say that 70% of European e-shoppers may stop buying from UK websites. And 69% of UK shoppers could stop buying cross-border altogether (Butcher, 2020)⁶⁴.

In the beginning, while negotiating the agreement, in the political declaration it was declared as follows *“In the context of the increasing digitalization of trade covering both services and goods, the parties should establish provisions to facilitate electronic commerce, address unjustified barriers to trade by electronic means, and ensure an open, secure and trustworthy online environment for businesses and consumers”* (Eur-Lex, 2020)⁶⁵. What this meant is that the importance of data and an agreement regarding it was fundamental. The UK hoped that the EU would have grant access to the whole new data available with the incoming years and the new technologies. But the Union made it clear since the beginning that the UK couldn't expect the same access to the databases as in the past (Morris, 2018).

Moreover, the UK will have to request access to the databank and they will no be anymore a member of the EU's law enforcement agency, Europol, but the arrangement will be similar to the one that the US currently has. Also, they are not obliged to comply with the standards of data protection of the Union (Edgington, 2020).

The registration of any new .eu web domain under the name of any UK registrants is now not possible because the EURid has reserved these rights for EU citizens and residents only.

⁶³ Owen, Mike. 12 January 2021. *Is Your E-Commerce, Brexit Proof?*. CustomerThink. customerthink.com/is-your-e-commerce-brexit-proof/.

⁶⁴ Butcher, Stephanie. 22 December 2020. *Brexit: A Complete Guide to Shipping and Ecommerce*. Sendcloud. www.sendcloud.com/brexit-guide-ecommerce/.

⁶⁵ EUR-Lex. 2020. *Lex Access to European Union Law*. EUR-Lex. eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.C_.2020.034.01.0001.01.ENG.

Thus, companies may face additional costs in order to get new domains or simply for general website admin (EURid, 2021)⁶⁶.

Regulations, especially non-tariff barriers, have an impact on e-commerce businesses and, when these are different between countries who are trading with each other, exporting and importing become much more challenging. The brands will now have to be careful with their products: what to write on labels or have different packaging procedures depending on where the product is coming from and where is going. The process exporters faced was much easier within the European Single Market (Latorre et al 2019). The regulatory requirements are product-specific and they may differ for the UK and EU. Thus, e-commerce retailers may need to have two sets of packaging and labeling for goods for the two different markets, the UK one and the EU one (Jones,2021)⁶⁷.

E-commerce stores located in an EU country will face many changes. The one thing which is sure is that they will need an EORI number to ship their products to the UK which is an identification number companies need to have in order to do business across borders. This is useful especially for customs checks because this number helps to exchange information quickly between authorities.

Upon custom checks, there are some documents that are mandatory in order to cross borders and these are (Butcher, 2020):

- *Custom Declaration CN22* – when sending goods weighing up to 2 kg and up to 425 euros in value;
- *Custom Declaration CN23* - when sending goods weighing over 2 kg and/or more than 425 euros in value;
- *Commercial Invoice* – it needs to be attached to any commercial shipment going abroad and it includes information about the contents of the package and any agreed terms, such as who pays the customs charges;

⁶⁶ EURid. "Brexit Notice." *EURid.eu*, 1 July 2021, eurid.eu/en/register-a-eu-domain/brexit-notice/.

⁶⁷ Jones, Sally and Alam, Rushmila. 2021. *Impact of Brexit on E-Commerce Retailers Selling Goods across the UK-EU Border*. pp. 26–27.

- *Certificate of Origin* - it shows the origin of the product and therefore certifies in which country a product was made.

Tariffs will become payable when trading goods between UK and EU and the specific rates will depend on the customs classification of the product, despite there was a promise made from the Prime Minister Boris Johnson saying there was a “tariff-free trade” starting after the transition period. What everyone has said about leaving the EU is that the deal was made to ensure that from the 1st of January 2021, there would be no tariffs on goods and no limits on the amount that can be traded. The trade deal to ensure the tariff and quota-free flow of goods which the EU was willing to agree to was only if the UK pledges zero dumping – that is, not lowering social and environmental standards to outcompete the EU (Henley et al., 2020). In the end, tariff occurred and this was a bad turn for any e-commerce business, UK or EU based, that will need to overcome this change when a cross-border relationship occurs with an EU country or the UK, respectively.

UK people buying from European websites are unexpectedly facing import bills of more than £100 that must be paid before the courier is able to deliver the package even though at the time of the order, the company had promised free international delivery (Brignall, 2021)⁶⁸. Unfortunately, even if the purchase was made before the tariff came into action, what counts is when the parcel is delivered.

As a consequence of the lack of certainty that revolves around the EU’s VAT e-commerce package businesses are struggling to understand how to act. Even though the EU’s VAT e-commerce package has the purpose of facilitating trade, combat fraud and ensure fair competition, this is not always complied with. Furthermore, it was noted that it is not easy for companies to implement the procedures within a short time frame and with no clarity about them. Companies need also to manage all other requirements from the countries they operate in. This actively demonstrates why companies have asked for a unified and simplified approach to reporting qualifications. "Some simplification would be very much welcome and would help organizations to drive those changes," said Donata Koren, head of tax at Zalando (Cano, 2020).

⁶⁸ Brignall, Mike. 21 January 2021. *Britons Buying from EU Websites Hit with £100 Customs Bills*. The Guardian, Guardian News and Media. www.theguardian.com/politics/2021/jan/21/britons-buying-from-eu-websites-face-more-than-100-import-duties.

CHAPTER 3 – Theoretical Framework

The purpose of this chapter as a theoretical background is to provide a deep comprehension of the theory that is needed to prove the thesis analyzed here. I will be fundamental in order to defining and connect each theory to what is needed to be prove.

3.1 Transaction Cost Theory (TCT)

A key point in this research will be the concept of transaction cost theory (TCT) studied by Williamson 1979⁶⁹, which, in a nutshell is what helps companies to minimize transaction costs through the organizations of these procedures in alternative modes. The aim of it is to understand what is the best way to achieve economic efficiency by minimizing the costs of exchange. What the transaction cost theory implies is that each type of transaction creates some cost that can be of monitoring, controlling or managing them (Young, 2013)⁷⁰.

A general definition and what lies behind the transaction cost theory is the Transaction Cost Economics (TCE) which is based on four elements, which will be fully discussed later in this chapter (Corporate Finance Institute, 2019)⁷¹:

- The world is full of unpredictable and uncertain way of living.
- Organizations that enter into transactions find it expensive to leave them because of bargaining and asset specificity.
- Limited rationality is a fundamental part of individuals. They obtain and process limited information.
- The opportunistic behavior of the humankind makes it harder for agreements to be compelled after a long period of time.

Moreover, the TCE revolves around this statement: “Uncertainty exists in the market and it can be removed within the firm”. Hence, this confirms the fact that

⁶⁹ Williamson, Oliver E. October 1979. *Transaction-Cost Economics: The Governance of Contractual Relations*. Journal of Law and Economics, vol. 22, no. 2, 1979, pp. 233–61.

⁷⁰ Young, Suzanne. 2013. *Transaction Cost Economics*. Encyclopedia of Corporate Social Responsibility, edited by Samuel O Idowu et al., Springer Berlin Heidelberg, pp. 2547–52.

⁷¹ Corporate Finance Institute. 18 November 2019. *Transaction Costs*. Corporate Finance Institute. corporatefinanceinstitute.com/resources/knowledge/economics/transaction-costs/.

uncertainty would be one of the main sources of the cost that is created in every transaction happening (Hyung-Deok, 2003)⁷².

The types of transaction costs which can be generally be defined as the costs of running the economic system of firms are (Corporate Finance Institute, 2019):

- *Search and Information costs*: these concern the costs when looking for the agents with whom the transaction will take place.
- *Bargaining and Decision costs*: these are those related to finding an agreement between the two parties to purchase what is needed.
- *Policing and Enforcement costs*: these are the costs which helps the parties in the contract to make sure that each one of the keep their word.

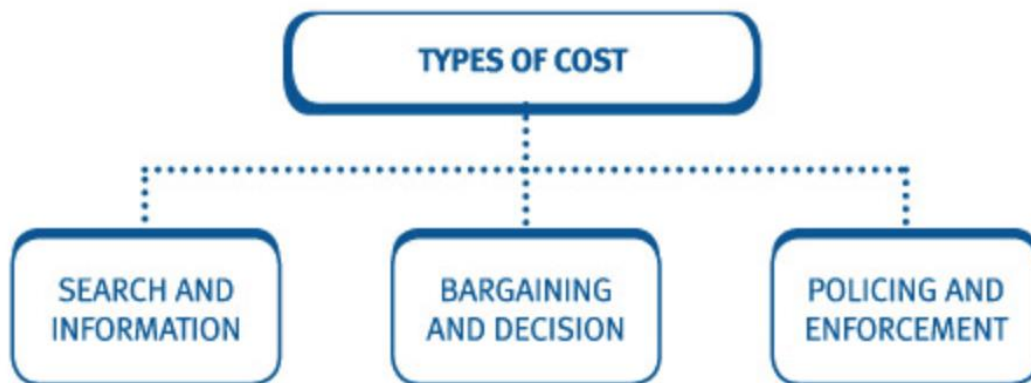


Figure 2: KFKB. Transaction Cost Theory. Kaplan Financial Knowledge Bank, kfknowledgebank.kaplan.co.uk/transaction-cost-theory.

Some of the factors that impact transaction costs in Williamson theory are:

- *Bounded rationality*: it's a form of rationality where a person's decision-making is limited by the amount of information available. Thus, it is when a customer does not know everything in order to make an optimal decision (Ebrary, 2014)⁷³;

⁷² Hyung-Deok, Shin. 2003. *The role of uncertainty in transaction cost and resource-based theories of the firm*. The Ohio State University, pp. 31-46.

⁷³ Ebrary. 2014. *What Are Transaction Costs?* Ebrary Homepage. ebrary.net/3813/management/transaction_costs.

- *Opportunism*: these are actions taken for an individual's best interests or in simple words "*self-interest seeking with guile*"; the opportunistic behavior is not strictly persistent and always happening but there is always the possibility of it occurring (Ebrary, 2014).

Williamson identified three critical variables which can describe a transaction: how often the transaction occurs (*frequency*), if the transaction takes place (*uncertainty*) and the unicity of the investment needed for the transaction (*asset specificity*). Going into details to explain how these attributes will affect the transaction costs:

- *Frequency*: in this case, if a transaction is a singular transaction, it will not be efficient to pay significant costs, while on the other hand, if it is expected to take place many times, it is justified to implement the usage of more resources to make it count (UKEssays, 2018)⁷⁴:
- *Uncertainty*: regarding a transaction, uncertainty can be on both sides of the seller and of the buyer. For the former, it would be the uncertainty to find a customer or the price. For the latter, it would be the uncertainty of quality, a reliable supplier the time needed to process the transaction or the quantity. To link together the concept of the frequency and the uncertainty of a transaction, those which happen over a long period of time will experience a higher form of uncertainty than those that are executed on "spot markets" because one does not have the mean to predict the future (KFKB)⁷⁵.
- *Asset specificity*: it is "*the transaction in which the investments in the asset would only be valuable from their use of the specific transaction*" (Williamson, 1979). In other words, is how specific is the investment required to perform a certain activity and in case there is a need for reallocation how much the costs will be (UKEssays, 2018).

⁷⁴ UKEssays. November 2018. *Key Characteristics Of Transaction Cost Economics Economics Essay*. UKEssays homepage. <https://www.ukessays.com/essays/economics/key-characteristics-of-transaction-cost-economics-economics-essay.php?vref=1>

⁷⁵ **Figure Error! Main Document Only.**: KFKB. *Transaction Cost Theory*. Kaplan Financial Knowledge Bank, kfknowledgebank.kaplan.co.uk/transaction-cost-theory.

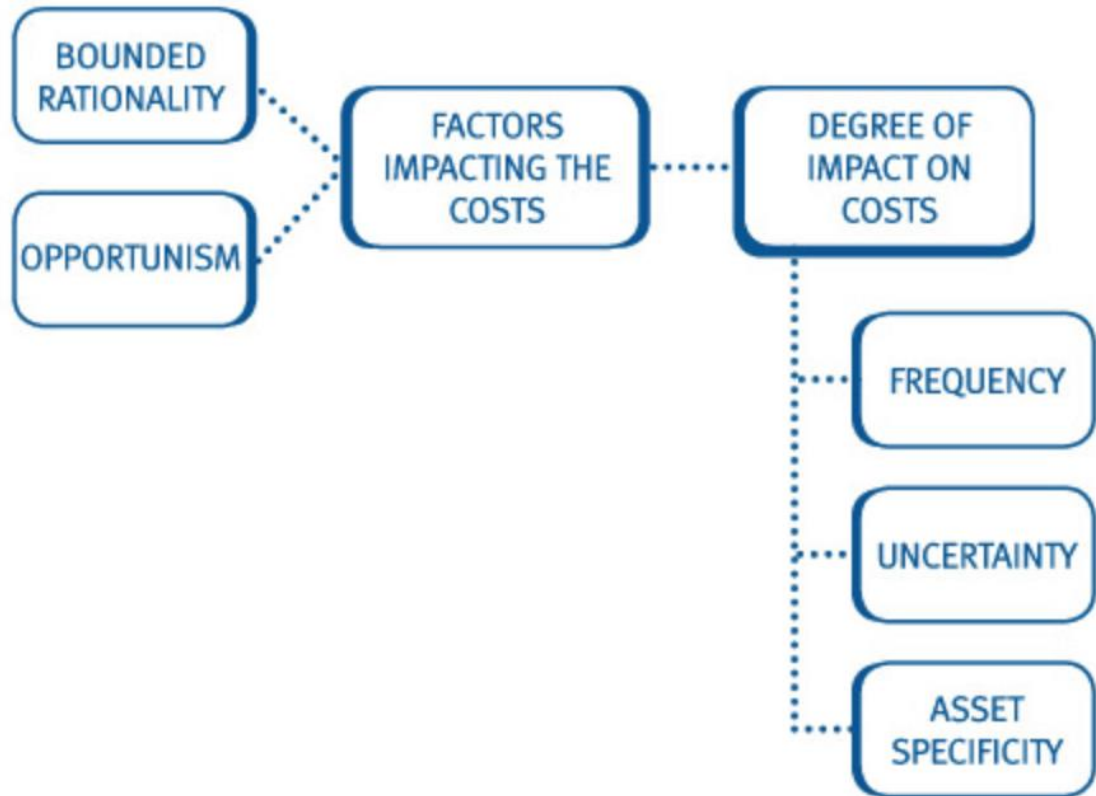


Figure 3: KFKB. Transaction Cost Theory. Kaplan Financial Knowledge Bank, kfknowledgebank.kaplan.co.uk/transaction-cost-theory.

In the end, it is possible to state that Williamson offers a solution by outlining the attributes describing both actors and transactions and it explains why, when and how the bargaining occurs. To summarize the two important assumptions used to describe how the economic actors in the transaction are behaving are the bounded rationality and opportunism concepts, and then the three key dimensions to assess how the transaction is taking place which are the asset specificity, uncertainty and frequency (Rindfleisch, 2019)⁷⁶.

⁷⁶ Rindfleisch, Aric. 11 May 2019. *Transaction Cost Theory: Past, Present and Future*. AMS Review. vol. 10, no. 1–2, AMS Review, pp. 85–97

3.2 E-Commerce

E-commerce is a *business model that lets firms and individuals to buy and sell things over the internet* (Investopedia, 2020)⁷⁷. Because of the environment in which is performing, it can be considered as a quick concept and for this reason, the definition is ever-changing and expanding to include more and more sectors of the economy, as the influence of technology extends.

Since 1997, as written in the study of Mahesh S. Raisinghani, it is general knowledge that the commercial uses of the Internet will have an immense effect on businesses, governments, and consumers.

In particular, in recent years, e-commerce has been the protagonist of reshaping how the economic world is working. This practice has been a very useful strategy because of the great and countless benefits coming with it. The advantages are obvious and they are visible not only in terms of better time management but also in terms of geographical space. Companies are able to conquer a new, unexplored slice of the market and extend their reach. They are able to have a higher payoff in the form of more efficient processes which consequentially brings greater profits due to the lower costs. E-commerce business allows companies to overcome the barriers of physical stores, with the possibility of crossing borders. Most important is that there is the creation of a value chain between customers and the company itself which leads to the prioritization of the customer experience.

As shown in *Figure 3*, e-commerce can be subdivided into different categories depending on the technological impact that can be perceived on the products or services, the process, and the distribution channel or delivery agent (Manzoor, 2010)⁷⁸.

⁷⁷ Bloomenthal, Andrew. 19 May 2021. Electronic Commerce (e-Commerce). Investopedia, Investopedia homepage. www.investopedia.com/terms/e/ecommerce.asp.

⁷⁸ Manzoor, Amir. 2010. *E-Commerce: an Introduction*. LAP Lambert Academic Publishing. Chapter 1: Introduction to E-Commerce. pp. 1–34.

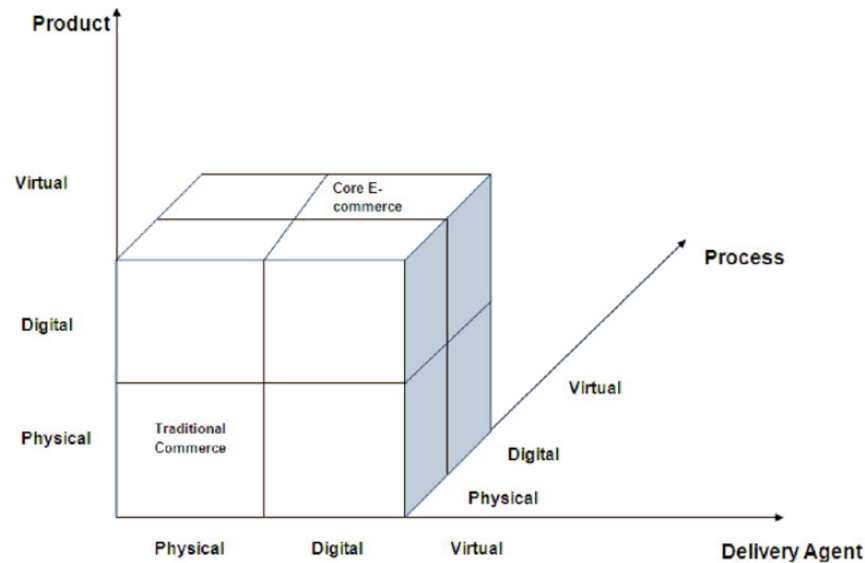


Figure 3: Dimensions of E-Commerce - Amir Manzoor, *E-Commerce: an Introduction*

Other than this, e-commerce can be subdivided also into categories regarding the major market segments in which it operates: Business to Business (B2B), Business to Consumer (B2C), Consumer to Business (C2B), and Consumer to Consumer (C2C).

The e-commerce sector is expected to maintain strong growth and the opportunities are available and achievable from small businesses to multinationals. As proved by statistics from Statista, Internet Retailer, and eMarketer from 2019, e-commerce has already reached a significant share of the total retail trade worldwide. The total value of global e-commerce retail sales in 2019 was \$3.45 trillion. The influence on the economy of e-commerce varies across countries, depending on the level of economic development, Internet access, electronic payments, and consumer preferences. However, it is globally recognized that China is the leading country in these terms, followed by the United Kingdom and South Korea (Spatari, 2019)⁷⁹.

One of the greatest problems regarding e-commerce development requires government intervention. Because of the development of cross-border trade, the issue of taxation in different countries was raised. According to legal experts, e-commerce has some particular characteristics such as a multi-jurisdictional nature for transactions and the

⁷⁹ Spatari, Marcel. October 2019. E - commerce : tendenze recenti e Impatto sul lavoro. Syndex. UILTuCS - Unione Italiana Lavoratori Turismo Commercio Servizi.

possibility of anonymity for the parties involved, this is a major challenge for tax administrations which need to monitor these events (Out-Law Guides, 2021).

For this matter, the current international corporate tax rules are not a fit for the realities of the fast-digitalizing global economy. There is the need for a taxation framework that must be global and ensure a *level-playing field* so that companies are taxed in a fair, non-discriminatory, and channel-neutral way, otherwise, there could be trade wars with non-EU countries. (Ecommerce Europe, 2021)⁸⁰.

In conclusion, as stated also in the paper released by Ecommerce Europe (2021), the need for simpler and more harmonized rules is crucial, particularly for non-EU-based players active in the EU, to prevent unfair competition. These rules should enforce issues such as consumer protection or product safety, against companies based outside the Union. The reason is that national market surveillance authorities are often unable to block unsafe goods from entering the EU. Thus, there is an urge to ensure that the rules created are enforceable globally.

3.2.1 E-tailing: E-Commerce and Retailing

E-commerce has been working closely with every industry sector but it has particularly affected the retailing industry and it has reshaped the way in which most retailers are working nowadays. Digital retail is the only sector that continues to grow constantly.

Electronic retailing (E-tailing) is the sale of goods and services through the Internet. E-tailing can include business-to-business (B2B) and business-to-consumer (B2C) sales of products and services (Hargrave, 2021)⁸¹.

Since the use of e-commerce in the retailing sector is mostly about how companies can reach a large customer base and easily move products in a faster way, it is crucial to have a strong distribution channel for the solid functioning of the processes. This is

⁸⁰ Ecommerce Europe. 2021. Main Priorities for the European Digital Commerce Sector 2021. Ecommerce Europe, www.ecommerce-europe.eu.

⁸¹ Hargrave, Marshall. 7 July 2021. Electronic Retailing (e-Tailing). Investopedia, Investopedia homepage, www.investopedia.com/terms/e/electronic-retailing-e-tailing.asp

fundamental in order to be able to transfer the product which is sold from the company to the consumer without many difficulties and in a limited and reasonable timeframe (Hargrave, 2021).

E-tailing will ensure that the company can reduce the costs for the consumer to looking for them. Thus, buyers will be able to look for more offerings at the same time and compare them in order to establish which one is the most suitable for them and which will perfectly pair their demands. Thus, successful use of e-commerce in retailing will require that the business has strong branding. This means that the website created to compete online must be easy to use, regularly updated and checked and it should meet the customer's changing demand. The products that the company is advertising and selling online must be distinguishable from the competition and this will promote both price competition and product differentiation (Bakos, 2001).

Moreover, other than the customer reaching out for the company, also firms can get to customers easily. Proven by the fact that everything is now possible with just one click, finding customers is less expensive with respect to traditional businesses because the advertising and marketing expenses are lower. This is due to the great use of search engines or social media which helps companies to get visibility. Thus, an engaging website, a good online marketing strategy, and customer data analytics are essential elements for electronic retailing. This can be defined as a true "retail apocalypse". Consumers' habits are now shifting from going to physical stores to purchasing everything online (Righini, 2021)⁸².

3.2.2 Transaction cost theory and e-commerce

Something emblematic about e-commerce platform is how much they can help companies to reduce most of the costs in which they usually incur. Indeed, e-commerce activities' value source is attributed to the saving of the transaction cost and the continuity of the transaction, which clears an important direction of the innovation of e-commerce

⁸² Righini, Edoardo. 21 May 2021. *Between Growth and Apocalypse: The Impact of e-Commerce in the Retail Sector*. Doxee. www.doxee.com/blog/customer-experience/the-impact-of-e-commerce-in-the-retail-sector/.

application (Duan, 2007)⁸³. A company can reduce its costs by including everything inside the company thanks to the usage of technology. It is more efficient to deal with all the activities within the company instead of delegate functions to other agents in the market. Also for this reason, when transaction costs are lower, an economy becomes more efficient. To better understand the relationship between these two elements, it is necessary to give some definition.

Transaction costs are expenses incurred when buying or selling a good or service; they are all the actions action required to make available goods in the market and to facilitate exchanges between who buys and who sells (Investopedia, 2021)⁸⁴. Some examples of these costs can be the price that vendors must pay when having an actual physical store such as the cashiers' or salespersons' salaries, the rent, and, this will also be a constraint for the business because the actual purchase will be possible only in one place i.e. where the store is located. The costs are also existing on the consumer's side such as the time spent to go to a store while if the purchase happens online it is surely time-saving and the client has also the option to compare many alternatives at the same time and choose the one that suits him better. Since e-commerce transactions make the buying process cheaper and easier for the customer, the revenues of the company can increase subsequently.

However, transaction costs are not completely inexistent in e-commerce, they simply require fewer resources than traditional stores. In any case, there are some fees and expenses associated with the mean of payments used through the online platform, the actual e-commerce platform to be used, the shipping costs, the return and exchanges costs which are services that must be available for customers (Nexcess, 2019)⁸⁵.

The transaction cost theory by Williamson, 1979 states that the optimal organizational structure for a firm is one that reaches efficiency by minimizing the costs of exchange. In this theory, transaction costs are seen broadly as every expense needed in running the economic

⁸³ Duan, Zhao. 2007. *Analysis of E-Commerce Model in Transaction Cost Economics Framework*. IFIP Advances in Information and Communication Technology, vol. 251 VOLUME 1, pp. 627–34.

⁸⁴ Downey, Lucas. 30 Apr. 2021. *Transaction Costs*. Investopedia, Investopedia homepage. www.investopedia.com/terms/t/transactioncosts.asp.

⁸⁵ Nexcess. 28 October 2019. *What Are Transaction Costs? How Ecommerce Reduces Costs*. Nexcess, Nexcess homepage. blog.nexcess.net/how-can-ecommerce-help-reduce-transaction-costs/.

system of firms. From the transaction cost economics paradigm, e-commerce can be seen as the governance structure built by a serial of contractual relationships among electronic transactors in order to ensure the value brought for the transactors (Duan, 2007).

From his study of 1997, Raisinghani pointed out how e-commerce can help to understand the economic efficiency of a competitive market. Perfect competition is something not so visible in real markets because the assumptions needed to be met are not feasible. Some of these assumptions are no barriers of entry, perfect information of both buyers and sellers, no product differentiation, and so on. Thus, it is understandable that a society cannot improve welfare by deviating from competitive markets. However, the electronic marketplace is a good illustration of perfect competition because the barriers to entry are low since the cost of transactions is low and the opportunity of perfect information is possible because of the ease of obtains information about products or services. It is possible to define the Internet as the great equalizer, where big firms will have no fundamental advantage over small companies (Raisinghani 1997).

To conclude is possible to state that a good part of the growth of e-commerce is due to the substantial reduction in transaction costs. The only and most important issue of transaction costs is when products are not transparent enough, sellers are more anonymous, and processes are less visible and defined. Thus, because of the type of transactions existing in these markets, the inefficiencies may propel consumers to choose alternate channels (e.g. physical markets). What's important is then to be able to understand the uncertainties and to overcome them.

3.2.3 E-commerce Uncertainties

The transaction cost theory is fundamental to understand e-commerce inefficiencies. It is common knowledge that going international is risky, especially if there is an e-commerce business behind that permits the company to perform on a worldwide basis. The most difficult part for companies when starting their e-commerce platform is to estimate the many variables in the market including the available demand, the exchange rates, and the future economic

and political conditions which will occur in the market. Thus, managing uncertainty is a key issue for e-commerce managers (Giuffrida, 2021)⁸⁶.

General knowledge tells us that the critical aspect of an efficient market is how easy is for sellers and buyers to get information about what circulates in the market thus the availability of data regarding products, services, consumer tastes, and so on. It is well known that that information is a key asset in any exchange. This means that a market may be inefficient when the operators are not aware of the quality of a product for example. For this reason sometimes in the market, the lemons problem arises because only “lemons” remain in the market, meaning that bad products drive out good products. As a matter of fact, informational efficiency in this kind of market is not always guaranteed. The balance between what sellers and buyers know about each other is fundamental in order to make sure that neither of them takes advantage of the other. This situation will only be possible if the actors in the market will be willing to provide all the information needed (Raisinghani 1997).

In e-commerce, objectivity when describing a product’s characteristics is often lacking. The reason for this is because the buyer when doing his/her shopping online gets the information about a product mostly by what the seller wants to share. Thus this leads to a limited ability to capture the true nature of a product, leading to an elevated sense of wariness and uncertainty.

Although the quality problem is common in e-commerce because of the proper nature of digital products, it is not the only obstacle. Any market, online or offline, is inefficient also when the true identity of vendor entities is lacking or the true process cannot be monitored so as to judge seller performance. It is easy and effortless to set up a Website with little or no verification and the reason for this is the presence of minimal entry barriers which made participating in e-commerce very popular. Thanks to the virtue of anonymity, a seller can assume and trade using many identities which are the URLs. The usage of pseudonyms creates anonymity by covering the true identity of sellers, leading to fraudulent representations due to the “faceless” option (Chatterjee and Datta, 2008).

⁸⁶ Giuffrida, Maria, and Riccardo Mangiaracina. May 2021. *Investigating the Relationships between Uncertainty Types and Risk Management Strategies in Cross- Border e-Commerce Logistics*. The International Journal of Logistics Management Emerald Publishing Limited.

Other common uncertainties in e-commerce are (Giuffrida, 2021):

- *Delivery uncertainty*: regarding the transportation times and costs due to long geographical distances, unexpected events, delays, mistakes, and so on;
- *Customer service expectation uncertainty*: related to the level of service perceived by the final customer, which could be compromised by poor return management policies or inadequate customer support. It allows buyers to interact with sellers directly;
- *Compliance uncertainty*: which is about the compliance to local procedures and standards caused by changing tariffs or lack of knowledge about necessary procedures;
- *External uncertainty*: Uncertainty linked to the external environment, which can hardly be controlled by the company and caused by change in regulations, political or global macroeconomic factors, fraud or counterfeiting
- *Inventory management uncertainty*: Uncertainty in inventory planning caused by lack of, imprecise or not updated, information about the status of overseas warehouses, fluctuations in warehousing costs and labor costs in foreign markets.

Online shopping is often related to consumers' characteristics such as cultural, social, or psychological traits. The cultural differences of consumer's online shopping behavior have become very necessary and important. Factors such as motivation, perception, learning, beliefs, and attitude are fundamental when purchasing online and they have a completely different influence from what happens in the traditional shopping environment. Also, an important role is played by how much consumers are online. Those who are more familiar with the environment will for sure purchase more products online than in traditional stores (Yazdanifard Rashad, 2011)⁸⁷.

In the research by Chatterjee and Datte (2008), the difference in transparency between real-life and online markets is emphasized. Consumers often avoid buying online due to these different concerns and uncertainties. They want to maintain a sense of control and security

⁸⁷ Yazdanifard, Rashad. 2011. *Uncertainties Faced in E-Shopping; Suggesting Possible Solutions*. International Journal of E-Education, e-Business, e-Management and e-Learning, vol. 1, no. 2, v1.17.

when purchasing online. This is also proved in the study by Forrester Research (2005)⁸⁸, where it is stated that 65 percent of the e-commerce transactions have been abandoned a shopping cart or failed to complete an online purchase due to these doubts. The physical process allows the consumer to monitor multiple process mechanisms, in e-commerce, this is not possible. Therefore, they are now searching for more information online than ever before in order to be sure about the product, the website, the vendor before making the purchase. The questions that they ask themselves when deciding if it is worth shopping online are for example “Is the seller credible? Is the product correctly represented? Is the transaction process clear?”.

While on one hand, technology tries to simplify the environment by reducing the need to understand how transactions are orchestrated, it has greatly reduced control, knowledge, and predictability regarding the outcome of any exchange in the e-commerce world. The fundamental aspect for every actor in the market is to better know and understand e-commerce inefficiencies in order to be able to act accordingly. From the consumers’ perspective, knowing these uncertainties will help them to make more cautious and prudent decisions regarding what and where to buy online. From the sellers’ point of view, they will be able to change, where needed, their online selling in order to reduce uncertainty.

3.3 Hypothesis

The aim of this research is to investigate how the motivation for an increase in transaction costs can lie behind an aggravation of e-commerce uncertainties (such as vendor uncertainty, delivery costs, delivery uncertainty and so on) that will affect a company’s performance. The reason for this is a shift in the international dynamic environment in which the business is operating.

H: E-commerce uncertainties due to a change in the international dynamic environment increase the transaction costs, and hence negatively impact the businesses’ financial performance.

⁸⁸ Forrester Research. 2005. “E*TRADE battles online fraud with strong authentication”. Forrester Research homepage. <http://www.forrester.com/Research/Document/Excerpt/0,7211,36541,00.html>.

Transaction costs can be viewed as what is a friction in a physical system. Thus, if friction is too great, suggesting that transaction costs are high, no or little economic activity is likely to occur. The ever-increasing and innovative uses of e-commerce for conducting business are definite examples of firms' desires to economize on transaction costs. The figure below suggests through the use of information and communication technology can help businesses in savings on costs (Sirumath, 2004)⁸⁹.

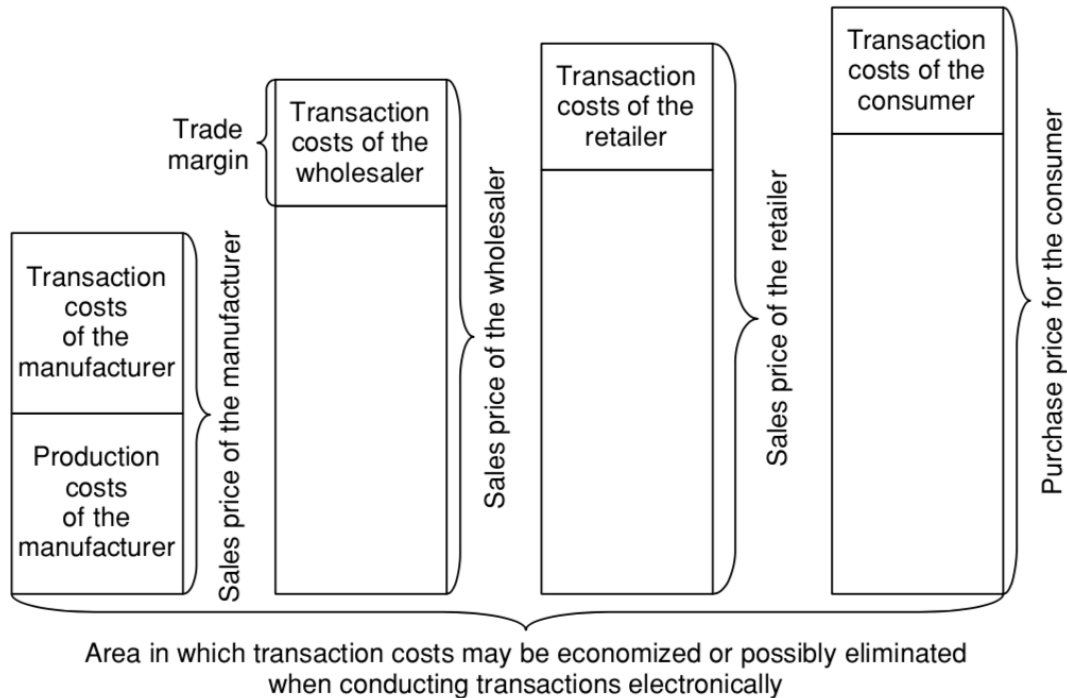


Figure 4: Sirumath, Sangayya S. 2004. *Electronic Commerce*. Vikalpa, vol. 29, no. 3, pp. 494 – 496.

In Williamson's framework (1975), there are two kinds of agents affecting the uncertainty of the transactions: human factors and environmental factors. In both these concepts, the uncertainty component is viewed in terms of environmental, measurement or behavioral. When uncertainty is viewed from an environmental perspective, it is about unanticipated changes in the environments in which an exchange between two parties is happening. Here, the role of uncertainty is that it can result in market failure which will then increase transaction costs. However, environmental uncertainty does not lead always to market failure, it can also enhances the performance.

⁸⁹ Sirumath, Sangayya S. 2004. *Electronic Commerce*. Vikalpa, vol. 29, no. 3, pp. 494 – 496.

Furthermore, in its structure, Williamson names the human uncertainty as *behavioral uncertainty*, referring to one of the two sides of the transaction which will pursue a strategy of non-disclosing, disguising, or distorting the information (Hyung-Deok, 2003). This is a fundamental element when dealing with e-commerce businesses because companies are obliged to make the buyer aware of what he/she is going to purchase online. The approach of non-being clear about a product will lead to vendor uncertainty and quality uncertainty when dealing with online businesses. Thus, in this case, consumers will not be ready to purchase something when they are not sure about what lies behind the transaction.

In my research, I will like to analyze how transaction costs and e-commerce uncertainties are strictly linked to each other. As previously stated, compared to the traditional market, e-commerce and the digital world involves higher uncertainty and more opportunism thus and this can increase costs due to the instability and vagueness of the electronic business. Transaction costs such as search and information costs or bargaining costs can be all interconnected with the concept of vendor uncertainty and asymmetric information, which can lead to the quality problem in the consumer's mind. Customers want to know who is behind the platform they are using and the business they are dealing with.

Moreover, the factors that affect the company's spending in a real market such as bounded rationality and opportunism can are also related to this matter since humans are both constrained and selfish. Companies have as the main goal to pursue their own contentment which is making a profit. As a matter of fact, the main effect of bounded rationality is that all complex contracts are unavoidably incomplete. This is because an agreement should cover not only what it is but also what it will be and everything it can happen which is a really difficult assignment. For this reason, it is hard for transactors to estimate in advance exactly the events which are most of the time random and occasional. Even if for some circumstances this is made possible, the separation of the e-commerce transactors by the Internet would make the bargaining costs pretty high and, in the end, the cost of testifying who breaks the contracts and measure the loss would be very high.

Moving forward, the determinants affecting the degree of impact on costs of bounded rationality and opportunism also play a vital role in the relationship between e-commerce and transaction costs. For example, the more assets specificity is involved in a transaction, the more continuity and harmony of the transaction would be cared about, and the more

requirements to establish certain performance ensure mechanism would be brought out. This is explained by the fact that in e-commerce and thanks to the Internet if the goods are available somewhere else and they have no specificity, both sides of transactors can find other trade partners easily and they don't depend on each other. Uncertainty and frequency are no less. The former regards the necessity and importance of making a choice. As a matter of fact, when a transaction is surrounded by high uncertainty, the customer buying has to choose between the governance structure using the principle of minimum transactions costs. The latter has an impact on the relative value of the transaction. Thus, the more frequently the transactions happen, the easier the expenses to be covered (Duan, 2007).

All of this will then be linked to the Brexit agreement which can by every mean be considered as an environmental uncertainty of e-commerce. Thus, the deal can be seen as the mechanism that lies behind the cause of uncertainty for e-commerce businesses and which will then ultimately impact the transaction costs. First of all, the much-feared deal will undoubtedly have effects on online sales especially with the reintroduction of VAT and customs duties. Now, all transactions will be subject both to VAT and customs duties at the time of entry and exit of goods from the UK. For this matter, the unexpected taxes and the border control which are now a major burden for the e-commerce businesses will also cause uncertainty within a customer's mind and will cause an increase in the company's costs. Moreover, due to the fact that more controls at borders will be added, it is assumed that the times will also vary and this aspect must be considered when a EU buyer wants to purchase from a UK website and vice versa. Clients will have to start considering the possibility that the delivery of the package may require a longer waiting period. Thus, in theory, this will affect the e-commerce uncertainties such as the delivery uncertainty or compliance uncertainty.

In conclusion, with this research, I will try to study and prove how the transaction costs and e-commerce are positively correlated, thus when one increases also the other increases. Specifically, in my study, this will happen when there is a change in the environment surrounding the transactions i.e the Brexit agreement.

CHAPTER 4 -Empirical Part

This chapter will present the methodological approach of the research and subsequently the results. First, there will be the outline of the company studied and then the methods and approaches that will be conducted in this study. Furthermore, the results of the research will be provided.

4.1 The Case Company: iSi GmbH

The company analyzed in this research is named iSi GmbH. They are located in Darmstadt, Hessen, Germany and is part of the Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers Industry (DnB)⁹⁰. They are a fast-growing e-commerce company which was established in 2012. They are specialized online retailers of sanitary products. They are offering a wide range of high-quality bathroom and kitchen products at very competitive prices. Staying in Germany allows them to be close to the major German brands recognized in the world of sanitary ware such as Hansgrohe, Grohe or even Villeroy and Boch.

The company is actually under the domain of H. Ludendorff GmbH. The group is present at 10 locations in Germany. This was not enough and thus they were wishing to develop their business to individuals on the one hand, and outside of Germany on the other hand, hence they decided to set up a subsidiary. The company iSi GmbH was therefore founded. The goal is to help the bigger German company to expand into Europe. As a consequence, they stand out from the parent company by carrying out not only B2B (business

⁹⁰ DnB. *ISi-GmbH Company Profile: Darmstadt, HESSEN, Germany: Competitors, Financials & Contacts.* Dun&Bradstreet. www.dnb.com/business-directory/company-profiles.isi-gmbh.285a62045ee9ab3d2ff085ff5e93cff1.html.

to business) but also B2C (business to customer), towards a more international clientele and distributes its products to the French, Dutch, Italian and British markets.

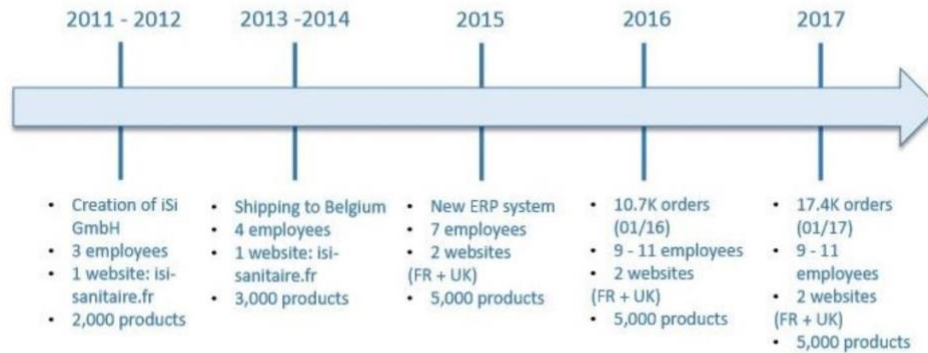


Figure 5: iSi. 2020. About iSi. iSi Intranet, sites.google.com/isi-sanitaire.fr/intranet/isi/about-isi/business-model.

In 2012, when the company first started to operate, there were only three employees that were responsible for marketing, communication with customers, and distribution of goods. Moreover, they were only oriented on the French market and as a matter of fact, they launched their first website: isi-sanitaire.fr. In the first place, on the web page, there were around 2,000 products available.

Moving forward, halfway through 2015, the company decided to initiate a new website (Superbath.co.uk) which was oriented on the UK Market. Market research of that time discovered that British customers were really interested in German plumbing goods and the competitors were low. By this time, iSi had around seven employees and already 5,000 products online on both websites. In 2016 then the company counted 11 employees and they were able to carry out 10.700 orders which arrived at 17.400 by 2017.

With the growth of the company, in 2017, they decided to expand and thus iSi started to ship to Belgium (SuperBath.nl), hire more employees and add around 1,000 products. In the end, in 2018, the company saw an opportunity also in Italy and decided to start a website also there (Superbath.it). In 2021, iSi GmbH aims to expand to Spain and Switzerland with the creation of two new websites. By now, the company can count around 20 employees, 46 brands and more than 300,000 branded bathroom products.

The mission of the company is to sell high-quality German bathroom products at competitive prices which are those that anyone can afford. As it is shown by data, the company is constantly working on expanding its product offering and the markets in which they operate. *“Being close to our customers is paramount, meeting your expectations, and answering any concerns”* is the vision of the business, they strive for the highest level of customer satisfaction. It is one of the fundamental values of the company to be close to the customers and meet their expectations. Both the team and the company are young and they are looking for more opportunities for growth and expansion in other markets. The team is very international and diverse which means that there are plenty of chances to propose your own thoughts and initiatives to the group. Also, the spirit in the company is great because everyone is there to learn and is keen to build up both themselves and the company. Even when is not office hours, boredom is not contemplated because there will be team events to participate in order to have fun and to create the best team bonding.



Figure 6: iSi. 2020. About iSi. iSi Intranet, sites.google.com/isi-sanitaire.fr/intranetisi/about-isi/business-model.

The system that revolves around the company is shown in the figure above. First, the customer searches on its laptop our website and starts to browse for products. He/she will then proceed to look for the items that he/she would like to purchase. Once the order has been made and paid, the website automatically transfers it to the company ERP system (buro+). When the items purchased by the customer have appeared in the system, one employee is in charge of ordering the items from Ludendorff which will then order the products from the suppliers and manufacturers. After that, the next step is to dispatch the desired goods from the warehouse once they arrived there. When this happens, the team in charge of making sure the deliveries are processed correctly has to book the products for the proper customer and then prepare the order. The warehouse will then start to pack goods and hand them to the courier in charge. Once the order has been given to the freight forwarders, there are different delivery times depending on where the goods are going.

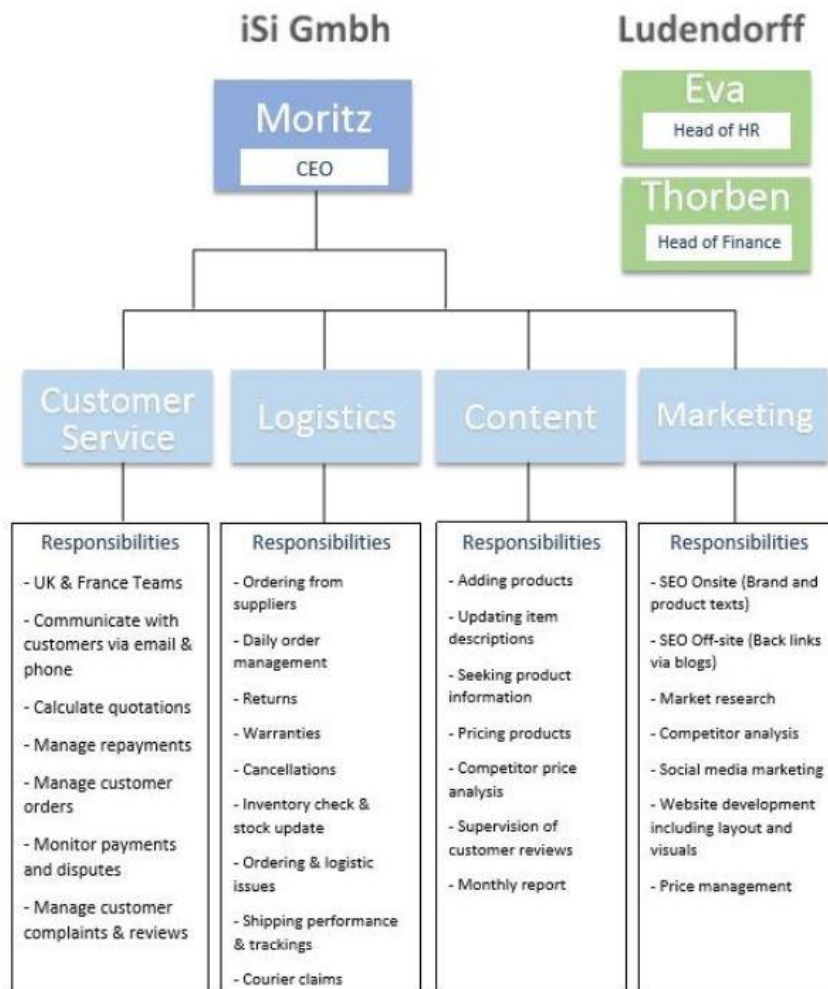


Figure 7: iSi. 2020. About iSi. iSi Intranet, sites.google.com/isi-sanitaire.fr/intranetisi/about-isi/business-model.

Since the company has grown also the team has grown and there are four main departments: customer service, logistics, content management and marketing. With a clear structure of the company, everyone knows who is taking care of what.

Customer service is responsible for communication through emails or phone with customers whenever they need help either before or after the purchase. It is a really important part for the company because it is the first contact that the customer has with the company and it creates a good link between them and the website. The main goal is to make buyers feel as they can get in touch whenever they have a problem.

Logistics department is in charge of everything that makes the company works and every other issue that happens after a customer has purchased something online. Hence, the ordering from suppliers, the returns of products, the relationship with courier companies,

making sure that the company has goods in stock, warehouse performance, and as a result reliable delivery times for the consumers.

The content department is responsible for finding and adding new items to the website. Moreover, they have the goal of making unique content in order to create a better user experience in order to attract the right customers. This is also the marketing department's job. They are in charge of social media, advertising and price management hence they have to find the correct strategies to reach the appropriate share of the market.

4.2 The research method

4.2.1 Research approach and methodology

At the beginning of a research, the selection of methodology and method for the investigation depends on the type of the research question or the objective of it (Saunders, 2009)⁹¹. In this case, empirical research will be conducted because by definition it is focused on observing and measuring a phenomenon that is directly experienced by the researcher (Emerald Publishing)⁹². The information obtained through the research may then be compared to a hypothesis, but most of the results are principally based on real-life experience. Furthermore, the analysis is an explanatory study because this type of research attempts to answer an enigmatic question and to investigate an event that had not been studied before through the collection of empirical data in order to formulate an hypothesis (Waterloo University, 2015)⁹³. The researcher gets a general idea and uses the studies of others as a tool to guide him and to have an understanding of the topic in order to find issues that might be addressed in the future (QuestionPro, 2021)⁹⁴. Moreover, during the investigation process,

⁹¹ Saunders, M., Lewis, P. & Thornhill, A. 2009. *Research methods for business students*. Harlow: Financial Times Prentice Hall.

⁹² Emerald Publishing. *Conduct Empirical Research*. Emerald Publishing, www.emeraldgrouppublishing.com/how-to/research-methods/conduct-empirical-research.

⁹³ Waterloo University. 13 August 2015. *Types of Research Approaches*. University of Waterloo. uwaterloo.ca/planning/current-undergraduate-students/undergraduate-program-manual-index/special-courses/types-research-approaches.

⁹⁴ QuestionPro. 10 June 2021. *Explanatory Research: Definition & characteristics*. QuestionPro. www.questionpro.com/blog/explanatory-research/.

there are different types of reasoning. A deductive approach is used to reach a logical true conclusion from a general statement or hypothesis. In simple words, it goes from “general to specific”. On the other hand, the inductive reasoning is the opposite of the deductive approach. Inductivism makes broad generalizations from specific observations, it is an empirical verification of a general conclusion. Basically, there is data and then conclusions are drawn from the data which is the case of this study (Adams et al., 2014)⁹⁵.

Moving forward, there are two main research methodologies: qualitative and quantitative. Qualitative research is focused on how an individual subjectively perceives and gives meaning to a particular event that took place. It revolves around the feelings, atmosphere, and personal touch of the researcher. The aim of this method is to gain a detailed understanding of individual thoughts or opinions, and trends. This method involves collecting and analyzing non-numerical data, thus it will be written or spoken (Bhandari, 2020)⁹⁶. The quantitative method, on the other hand, is applied for quantitative measurements, and therefore, statistical analysis is used. For the specific purpose of this thesis, a qualitative research method will be conducted since it is more suitable for the purpose of exploring and defining how external impacts can affect e-commerce firms and this method is also often used to explain a social phenomenon.

The study will aim to answer a research question through the usage of a particular methodology for collecting and analysing the data. In the case of this research, interview data was collected was collected by using a structured questionnaire with open questions. The researcher has interviewed some of the employees of the case company which answers would have been relevant for the purpose of the study. The questionnaire had the intention to help the researcher to conduct the study and to answer the research question based on the case company. The questions were conducted in person while the researcher was working there as an intern and there is also a personal perspective since she touched with first-hand the thesis in analysis. The respondents were three employees thus the limitation of the research. These are two of the managers of the company, the Manager of the UK

⁹⁵ Adams J., Hafiz TA. and Raeside, R. 2014. *Research Methods for Business and Social Science Students*, New Delhi: Sage Publications.

⁹⁶ Bhandari, Pritha. 30 July 2020. *An Introduction to Qualitative Research*. Scribbr. www.scribbr.com/methodology/qualitative-research/.

Customer Service and the Manager of the Logistics and Supply Chain department, and one intern in charge of the UK Customer Service. The people were chosen because of the relevance they have with respect to the topic of the research. The survey had 15 different types of questions and was focused on the experience of the employees and their thoughts regarding the Brexit agreement. The main objective was to indicate what the employees see as the main problem/s since the deal has been announced and then took place. The questionnaire is divided into 2 sections. The business environment part was needed to gain more general information about the company and to understand how they, as a digital business, reacted to Brexit with respect to a traditional business. The major consequences, which is the second section, were useful to understand the areas of the company which were more affected and how the changes in the company have happened. The last questions were inquiring about their predictions and expectations and if they match the reality.

4.2.2 Data Collection

Data is important when conducting research, especially for the aim of this specific study it will help to have a clear understanding of what has been investigated. To collect data in qualitative researches there are different methods (Adams et al., 2014)⁹⁷ but the common ones are interviews and surveys. The author of this research has also analyzed some of the company's internal databases and statistical databases to get some information about the firm's performance. The data gathered here is mostly primary data thus obtained from the researcher herself. In this case, it is also supported by some secondary data in order to give a theoretical background. Primary data is the type of data that the researchers collect themselves and it can be collected by observations, experimentation, surveys, and interviews. Observational data are captured through observation of a behavior or activity and they are a very important element for researches (Adams et al., 2014)⁹⁸. In this case, the interviews are the primary data collection. Other than this, there is also the access that the researcher had on some of the statistics of the company such as their number of orders and their total sales.

⁹⁷ Adams J., Hafiz TA. and Raeside, R. 2014. *Research Methods for Business and Social Science Students*, New Delhi: Sage Publications.

⁹⁸ Adams J., Hafiz TA. and Raeside, R. 2014. *Research Methods for Business and Social Science Students*, New Delhi: Sage Publications.

Secondary data consists of data collected previously by other researchers who have been studying a similar or close enough topic. Often, it 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 because the information might not match what is required for the research or might not cover all the subjects (Adams et al., 2014). The combined use of both types of data will help the study to reach the best outcome and to find the best explanation, as well as strengthening and enriching the research.

The writing process and collecting data of the thesis has started in March 2021, some months after Brexit started in order to assess the effects. At first, the research question and the structure of the thesis were to be found. Thus, since the researcher was working in the company which is been analyzed, the research question came up after a careful observation of the operations in the company. Subsequently, the researcher started to collect all the relevant information about Brexit and how it was affecting the operations and cross-trade relationship of the e-commerce businesses with the UK. Once the theoretical part started to come to the end, it was time to start to collect the data thanks to the questionnaire. As the researcher has been working in the company at the time of writing the thesis, having the interviews with the employees was not a problem and there was the possibility to have them face-to-face. Interviews were conducted in the middle of June 2021. Because iSi GmbH is a small company, there were not a lot of employees working (around 20 in total). Therefore, all in all, the researcher has gained the answers from 3 employees who were those dealing and most affected by the Brexit agreement. All the answers and findings of this data are used as a source of information in this study.

The table below is needed to develop a framework which shows how the hypothesis in this research has been operationalized. This operationalization task is fundamental in order to conduct a rigorous empirical data collection and analysis part. Hence, the table shows how the researcher has decided to observe and analyze the transaction costs, the uncertainty and the company performance all affected by the dynamic environment in which the company studied is performing.

In order to empirically observe the impact of external uncertainty caused by Brexit on iSi's transaction costs, while investigating and studying the theoretical background the researcher has decided to operationalized the theoretical constructs as follows.

The external uncertainty which is caused by the Brexit agreement causes vendor uncertainty, delivery uncertainty and compliance uncertainty which are some of the most common uncertainties (Giuffrida, 2021). The reason because these have been chosen is due to the fact that the deal have caused to develop uncertainty all over the market in the e-commerce world. The vendor uncertainty is caused by the non-transparency of companies, especially iSi GmbH, both regarding themselves and regarding the agreement. Moreover, the delivery uncertainty is then caused by the difficulty that the company has experienced in delivering the product. Because of the delays, customers were not confident that the orders would have gone through and the delivery would have been respected. In addition, the compliance uncertainty is due to the difficulties that the company have suffered because of the new check and regulations processes which were not clearly explained.

Furthermore, these uncertainties will impact the firm's transaction costs (Duan, 2007). Specifically, search and bargaining costs becomes more difficult because customers will have more difficult in looking for agents. Since Brexit will impose more controls and import fees, buyers will switch to UK based suppliers in order to have less complex transactions. The concept of import fees will impact also the policing and enforcement costs and the contract negotiations and adaptation costs. As a matter of fact, the company will have to pay more money due to the paperwork needed for custom checks and the refund they agreed to make to customers once they pay for the import fees.

Overall these costs are supposed to negatively affect the performance, such as sales, turnover and customer loyalty. Sales will surely decrease because customer will avoid to buy from this company for the drawbacks that the Brexit agreement will bring with it. This will also be affected by the buyers' reviews and it will discourage the purchase from iSi's website, thus customer loyalty is another factor to take into considerations. All of these will then be surely linked also to the turnover of the company and the number of orders they will be able to process. Since the customer are giving up on the company, the business will perform worse. The table below summarizes the operationalization of the theoretical constructs.

Table 1: Operationalization of the theoretical construct

Theoretical Construct	<u>Operationalization</u>
<i>Transaction costs</i>	1. Policing and Enforcement costs
	2. Contract negotiations and adaptation costs
	3. Search and bargaining costs
<i>Uncertainty</i>	1. Vendor uncertainty
	2. Delivery uncertainty
	3. Compliance uncertainty
	4. External uncertainty (Brexit)
<i>Performance</i>	1. Sales
	2. Turnover - number of orders completed
	3. Customer Loyalty

To conclude, the next paragraph represents and examines the answers of the employees which were collected during the empirical research.

4.3 Results

The findings which were available from the questionnaire are explained in the following paragraph. The main conclusion and that was also quite obvious is that the period immediately following Brexit was extremely challenging for iSi GmbH and that the departments in the company affected the most were: Logistics, Sales, and Customer Service.

“The UK decided to leave the EU four years ago, hence there was plenty of time to decide the rules and make everyone understand, but this was not done. The governments pretended that everyone adapted to the new rules in only a few days and that no disruptions or difficulties would have arisen.” said the Logistics Manager of iSi GmbH. They announced the agreement on the 24th December 2020 and the implementation was happening on the 1st January 2021. Due to only having 7 days’ notice from the announcement, iSi GmbH, along with many other companies, were taken unawares. Now, although many new processes have

now been established, the logistics and operations of the company in the UK looked very different. As the majority of products are dispatched from the main Warehouse in Germany, the company is now liable for import fees and things are taking significantly longer to arrive with customers.

The company does not have its own products, but they have definitely seen and felt production and logistics delays from suppliers. For example, “*The two UK-based manufacturers, Simplehuman and Heritage, required much longer lead times and postponed deliveries*” pointed out the UK Customer Service Manager. In simple words, they are impacted by the customs checks and extra time is taken to transport parts and full units around Europe. Also in Continental Europe, Grohe items have been severely delayed, which is, at least in part, due to the post-Brexit strain on couriers and transport companies.

Furthermore, it emerged from the survey that the company iSi GmbH started already with a clear advantage because they were able to reach many more potential customers because of their online stores. The respondents underlined that, as an eCommerce firm, Brexit did not impact them directly, like some non-digital ones, but more around getting their products to their customers. This is a general benefit for every company having an eCommerce platform in use. From the questionnaire, it came out that iSi was able to find out that people feel increasingly comfortable when buying online, so it will become more and more normal to purchase Bathroom and Kitchen products in the future through a digital platform. This is something which was already clear from how the economy was going thanks to the technology transformation which the world was witnessing because of the pandemic of Covid-19.

Moreover, in terms of Brexit specifically, the answers highlighted how the potential of the company is to have an advantage in sourcing the products from every brand or manufacturer and then be able to send things all together with the customer. With respect to iSi GmbH, the other businesses based in the UK do not have this luxury.

Furthermore, the company was preparing for Brexit since November/December 2020. They started to prepare ahead, during the third UK lockdown, and they were still able even if with some difficulties to send items over because no physical store was needed. However, even though the company was already adapting the information in its system, reprogramming everything, and forwarding the data to its partners, they were able to experience on their “skin” that theory does not work properly in practice because the rules were more

complicated than expected. To describe the situation one of the interviewed used the words “*everything was chaos, both for us and for our partners*”.

The firm iSi GmbH is doing business in many different markets all over Europe. Although, some adaptations were needed with respect to the UK market because of the situation that came in with the Brexit agreement. The Logistics Manager pointed out that they needed to change transport partners from Exact Couriers for pallets and DPD for packages to Anglia Delamont and UPS respectively. The main reason for this was that some companies opted not to transport across the UK border, due to the extra paperwork, costs, and time now required. “*Anglia Delamont and UPS were the most cost-effective, service-orientated options*”. Even though the process of delivery was not completely undisturbed. “*Anglia Delamont decided to split the country into north and south when making consignments*” complained the UK Customer Service intern. This meant that first, the parcel arrived in the main hub of the courier and then these were sorted by the location, then sent to another hub from where finally the delivery would have taken place. Thus, this was adding delays on delays on paperwork and on money, causing a completely justified and evident frustration in their clients.

Another key change that was also inducing dissatisfaction in the British customers and which the employees have described as an “unexpected outcome” has been the charging of import fees. It has taken some time and it has not been finalized yet, but “*the aim is to work with UPS to pre-pay import fees*” has stated the UK Customer Service Manager. At the moment, the customer must pay these charges, before iSi GmbH refunds them. Even this process was not completely clear, neither to the customers nor to the company. The reasons were that refunding was taking much more time than expected and also because the amount to be refunded was not specified and definite since the beginning.

The major issues that were pointed out through the questionnaire were i) the added delivery time due to customs checks and paperwork required and ii) the import fees and the resistance by customers regarding them. Firstly, delivery times were increased by around 1-3 weeks on average, depending on the type of items being sent. While trying to figure out the various paperwork and documents needed, deliveries needed to stop for some weeks to the UK in order to assess the situation. Thus, delays were out of control because the papers were either completely incorrect or had a detail missing causing then the parcel to be sent back. Moreover, all of these also caused disruption in sending out large and valuable items and this

was not mentioned on the website. Secondly, although it was the same for all businesses transporting products into the UK, there was a period where the Customer Service department needed to educate customers that this was the new normal. For this matter, one of the most difficult challenges was the fact that Customer Service was unable to explain the situation in detail and with clearance to the UK customers for two main reasons. The UK Customer Service Manager said *“First of all, our employees did not have enough information and clearness about what the situation was and what was happening in reality. Second, the British customers were not given accurate information from their own country about what really Brexit reality would have been from then on”*. While it would have been challenging for everyone regardless, as a company they should have done better with communication of this fact on their website. As a consequence, one of the main lessons learned was to be more open, transparent and clear with the terms of import fees and delays with customers because otherwise, this resulted in a lot of customers being frustrated. They were left in the dark and they were only able to understand everything about the company and what was about to happen after the point of sale. Thus, once some small changes were applied, it had managed to minimize customers who felt they were being deceived.

Furthermore, as previously mentioned, the most common direct consequence of Brexit was that customers, perhaps with their own time constraints, could not wait for the extra time needed for delivery, so canceled their orders. Data shows that from the period going from the 1st of January 2021 to the 30th of June 2021 the orders in total were around 13.800 and the total number of items shipped for this period was 18 thousand with respect to the last semester of 2020 where the total amount of orders was 26.914, so almost doubled. Hence, overall, due to many customers having to pay import fees and wait longer than before, the orders have decreased enormously and the total sales of the company went down significantly for the whole market. Also here some data can help clarify the situation: the sales of the first semester in 2021 were of 3.010.481,82 € with respect to the last semester of 2020 where they were 5.770. 881,30 €. In particular, for the UK market in 2021, the total sales were £805.952,07 which is downgrading with respect to the 2020 numbers which are £2.449.725,32. The reason for this circumstance was that once a customer knew the company was German-based, they were not willing to buy anymore because of all the consequences this would have led to. Also because of the inability to ship the goods for weeks while they were trying to figure out how the rules were applying to products, they lost many customers

and got many order cancellations once the customer acknowledge the huge delays. As a result, customer satisfaction has dropped enormously influencing the brand name also. Along these lines, there was also the huge threat of losing large customers, those who are buying large quantities and then reselling on site. These are the ones having business accounts and before Brexit, the company was able to offer the VAT-free prices but then no one in the company was aware and not sure on how to proceed regarding this argument. Also because no one at borders or dealing with the issue knew anything about it.

The main threat arising from the situation is clearly the downswing in customer behavior (i.e. customers being discouraged to buy products from outside the UK). This will become a long-term trend and sales will not bounce back. When the UK was a part of the EU, companies like iSi GmbH did not necessarily need to tell customers about where their products were coming from (i.e. Germany). The origin or starting location of products, if they are coming from continental Europe, must now be adequately communicated to clients at the time of ordering. Therefore, the number one threat is that British customers will buy more and more from UK-based competitors.

Other littler changes and consequences on the company that arose from the questionnaire are for example the fact that shipping costs went high due to the paperwork. People buying from the company in the past knew how much delivery was but then the prices increased both for small package items from £3.99 to £19.99 and for larger items going from £19.99 to £124.99 and as another consequence this understandably lost the firm some sales because consumers were not able to understand why this increase in prices.

In the end, it is clear that iSi GmbH has a limited plan with respect to risk and uncertainty and could certainly do a better job of preparing for potential risks. Although some products were shipped into the UK before Brexit, there was limited planning for the myriad of post-Brexit challenges. Some investment and pre-planning would have made things substantially easier, however as there was only 7 days notice this was very hard. A solution that the company tried to use to face the new challenges was to have meetings between the different departments in order to discuss issues to lessen risk and uncertainty but this was surely not enough to overcome all the challenges that Brexit brought. Moreover, the travel/transport restrictions have surely changed the game but they did not make it out of question to do business between the two forces. It is not impossible for firms, like iSi GmbH, to transport goods around Europe, but they need to be transparent and frank with their

customers regarding fees, location, and timeframes. Companies should invest more in UK facilities (and relationships with UK-based partners) to offset the obstacles linked to cross-border transportation.

CHAPTER 5 – Discussion and Conclusions

This chapter will discuss the findings of the research. The answers of the questionnaire will be analyzed. It will be compared and connected to the theoretical framework that has previously been presented in order to answer the research question. Then there will be the conclusion of the thesis including limitations of the study and some suggestions for future research.

5.1 Discussion of results and answer to the research question

This study has been conducted to answer the following research question: *How are (small) e-commerce businesses and their performance affected by the changes in the international environment in which they operate?*

The research was done by analyzing an e-commerce company located in the EU which is specifically iSi GmbH based in Germany and it was trading with the UK. This choice was made in order to see the effects the Brexit deal can have on the relationship between Britain and the Union using the company as an example. Also, this was done in order to prove if the trading for the company was actually affected by the agreement. To reach the objective, a questionnaire was conducted on some of the employees and members of the company in order to assess the consequences of Brexit on the company's performance. The purpose of the research was then reached because when reading the results of the survey and seeing the numbers from the company's statistics, it is clear that, due to the UK leaving the EU, the sales of the company decreased and many disruptions arise causing then the company to face many difficulties and challenges.

Moreover, hypothesis *H: E-commerce uncertainties due to a change in the international dynamic environment increase the transaction costs (decrease transaction efficiency) of e-commerce businesses, (and hence negatively impact the businesses' financial performance)* has also been accepted.

This is supported, other than by the results of the questionnaire, by the study of Duan, (2007), which links together the transaction cost theory and e-commerce uncertainties, explaining and proving how the two concepts are positively related. Under the bounded rationality hypothesis, people require time and high transaction costs to estimate the style in

which opportunism will occur during a deal and how to be precautionary regarding that. Transaction costs such as search and information costs or bargaining costs can be linked to the concept of vendor uncertainty and asymmetric information. This is clear from the results of the questionnaire because of lack of transparency and thus, customers were not certain about who they were dealing with and where their products were coming from. Moreover, in the specific case of iSi, bounded rationality has more effects on the transaction because most of the time customers are making some important investment and spending a huge amount of money when buying products from the company. The products they are purchasing are seen as something that has to be long-lasting. In such a circumstance, where asset specificity arises, continuity and harmony regarding the transaction are required and some mechanism that will ensure the performance is fundamental. Depending on the information specificity required for a product, each good requires a different level of product specificity. Here, transparency is crucial especially because the consumer has to make an informed decision due to the investment he/she is making, hence all the features of what is purchased need to be carefully explained and are more necessary than buying simplified and less expensive products. Consequently, it will be a key element to have everything clear on the table and this is not always possible. Since the transaction is all virtual, it creates a higher challenge of uncertainty both from the environment and the transaction itself, which increases the customers' requirements about the flexibility of the management of the company. This is actively demonstrated by the fact that the very nature of e-commerce precludes consumers from ascertaining the "true" identity of the seller or the "true" nature of "physical" products, therefore leading to consumer uncertainty surrounding e-commerce transactions (Chatterjee and Datta, 2008).

Brexit can surely be considered an external uncertainty that affects the way of doing business for companies dealing with the UK market and it is linked to the external context where companies are operating. As a matter of fact, it cannot be controlled by the firms performing in such a setting because disruptions are mostly caused by changes in regulations, political or global macroeconomic factors. As mentioned before, this agreement brings with it a lot of confusion and inconveniences especially around the topic of the costs that the deal will arise. Therefore, if one thinks about the policing and enforcement costs, they can be linked to what tariffs and customs checks are made for that. This type of transaction costs increased then with the Brexit agreement because when the companies have to ship to the

UK from the EU or vice versa, they will have to pay for the correct paperwork to make sure goods arrive in the country without any problem at borders. On the other hand, also the customers that want to buy from a company outside of the Union or outside of Britain will have to pay for import duties.

Moreover, what was already mentioned in Chapter 3 was the fact that the UK government has gone on and on about the reassurance that even if Britain was leaving the EU, the free trade would have been kept. Instead, this did not happen and is proved by the answer to the questions by employees and also by the data below which indicates how consumers, while buying from UK websites, were charged with import duties upon delivery. If customers refused to pay the package was sent back to the company and the company would have then been liable to pay for more import duties to send the item back. While the UK was in the EU, companies could buy and sell goods across EU borders without paying taxes and there were no limits on the number of things that could be traded. Under the terms of the deal, that was not supposed to change on the 1st of January 2021 (BBC,2020).

Regarding the import duties, what is highlighted in the research is also how Brexit has compromised many of the consumer rights that usually are taken for granted. For example, the fact that the company did not warn the customer about extra charges. The legislation of the EU regarding the consumer protection EU doesn't generally apply now that the UK has left the EU, according to James Kane of the Institute for Government (Tims, 2021)⁹⁹. This means that the seller doesn't necessarily have to publish a warning to customers outside the union but it would surely be the right move in order to be transparent. Indeed, this is a clear illustration of opportunism which is a factor impacting transaction costs. The company is simply not disclosing this information in order to not make the customer worried about the more money he/she will have to pay. This hiding the true identity of the company is common when dealing with the UK, also another customer stated "*I had no idea that I was not ordering from a UK company,*" she said. "*Only when I received the duties demand did I realise that the site was based in Germany. I wouldn't have done it if I'd known I would face 30% duties on top.*" (Brignall, 2021).

⁹⁹ Tims, Anna. 27 January 2021. *My 'Brexit BONUS' Proved to Be a Customs Duty Bill from DHL*. *The Guardian*, Guardian News and Media. www.theguardian.com/money/2021/jan/27/anna-customs-duty.

The tariff issue is also linked to the fact that the customer service department of the company was not able to explain and reassure the customers because they were not aware of what was happening either. Thus, this is linked to the *customer service experience expectation* which is a crucial e-commerce uncertainty. A client wants always to be followed and reassured and even if it is the mission of the company (see Chapter 4.1), they were not able to carry out their goal and deliver the right experience because every information around Brexit and the new regulations was doubtful.

Moreover, there are also compliance uncertainty and delivery uncertainty which are both bounded to the problem of delay. The compliance uncertainty regards the non-fulfillment of the requests at the border for custom checks. Most of the time, as declared by the employees of the company, packages were arriving at the frontier with the wrong documents or with no documents at all. This was causing delays which created delivery uncertainty and displeasure in the customer. Thus, the need to provide an excellent experience for the customer is crucial when dealing with e-commerce businesses in order to retain customers. Research indicated in the article by Mahadevan (2019)¹⁰⁰ shows the main barriers for regard the cross-border e-commerce: 29% are the shipping costs which in the case of Brexit and the company got higher thus this is a factor creating uncertainty, then 29% said the difficult return process and lastly 23% of customers were concerned about not receiving an item which due to the Brexit agreement and the long delays previously mentioned was a common fear among buyers.

The empirical results of the questionnaire and which were discussed in this paragraph are briefly summarized in the underlying table. This will give help the reader to have all the results at a glance and to understand where they were observed and how they are supported from the interview data or the statistics. This table is linked to the table in the paragraph 4.2.2 where the operationalization framework is outlined.

¹⁰⁰ Mahadevan, Dr Rohan. 6 Feb. 2019. *How to Grow e-Commerce Business Internationally in This Age of Uncertainty*. Entrepreneur, www.entrepreneur.com/article/327578.

Table 2: Summary of the empirical results

Theoretical construct	<u>Empirical Results</u>
<i>Transaction costs</i>	<p>1. <u>Policing and enforcement costs:</u></p> <p>iSi Gmbh – UK Customer Service Manager – answer to question 2: <i>“Another key change in the UK market since Brexit has been the charging of import fees and costly paperwork in order to ship the products.”</i></p> <p>iSi Gmbh – UK Customer Service Intern – answer to question 2: <i>“A good will gesture was that we refund our customers for the import fee if they send us sufficient proof of payment but this of course caused more costs to the company”</i></p>
	<p>2. <u>Contract negotiations and adaptation costs:</u></p> <p>iSi Gmbh – UK Customer Service Manager – answer to question 2: <i>“With respect to the UK market, we needed to change transport partners and the new ones even if more efficient were more expensive.”</i></p>
	<p>3. <u>Search and Bargaining costs:</u> <i>Not supported</i></p>
<i>Uncertainty</i>	<p>1. <u>Vendor Uncertainty:</u></p> <p>iSi Gmbh – UK Customer Service Manager – answer to question 11: <i>“The origin or starting location of products, if they are coming from Continental Europe, must now be adequately communicated to clients at</i></p>

	<p><i>the time of ordering. And the company is not completely transparent on this point.”</i></p>
	<p>2. <u>Delivery Uncertainty:</u></p> <p>iSi Gmbh – UK Customer Service Manager – answer to question 4: “ <i>One of the biggest challenges was the added delivery time due to customs checks and paperwork”</i></p> <p>iSi Gmbh – UK Customer Service Intern – answer to question 4: “<i>The biggest issues were delays there were out of our controls. Many times the paperwork was either completely incorrect or had a detail missing causing the parcel to be sent back and then having to wait even longer to send it back to the customer which was causing mistrust in the customer”</i></p>
	<p>3. <u>Compliance uncertainty:</u></p> <p>iSi Gmbh - Logistics Manager – answer to question 2 of the questionnaire: “<i>Although we thought we really well prepared for the Brexit and we reprogrammed our systems, the announced information did not work properly in practice”</i></p>
	<p>4. External Uncertainty:</p> <p>iSi Gmbh – UK Customer Service Manager – answer to question 14: “<i>I think that no company was 100% prepared for Brexit, although some companies did better than others.”</i></p>

<p>Performance</p>	<p>1. <u>Sales</u>:</p> <p>iSi Gmbh – Logistics manager – answer to question 8: <i>“The Sales department was hardly affected by the Brexit.”</i></p> <p>iSi Gmbh – UK Customer Service Manager – answer to question 4: <i>“Overall, due to many customers having to pay import fees and wait longer, our total sales went down significantly for the UK market because customers were asked to pay more than they agreed to due to the import fees and to wait longer than they agreed to because of delays at borders.”</i></p> <p>iSi Gmbh – UK Customer Intern – answer to question 7: iSi Gmbh – UK Customer Service Intern – answer to question 7: <i>“There were disruptions at the point of sales as many customers especially those had purchased from us in the past saw out shipping costs rising so this understandably lost us sales.”</i></p>
	<p>2. <u>Turnover</u> (number of orders):</p> <p>iSi Gmbh – Logistics Manager – answer to question 4: <i>“The orders have decreased enormously, We could not ship the goods for weeks.”</i></p>
	<p>3. <u>Customer Loyalty</u>:</p> <p>iSi Gmbh – Logistics Manager – answer to question 4: <i>“We lost huge customers and got many order cancellations.”</i></p>

	iSi Gmbh – UK Customer Service Manager – answer to question 11: <i>“The number one threat is that British customers will buy more and more from UK-based competitors.”</i>
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In conclusion, to answer the research question, the company’s performance did decrease as proven by the data shown in the table below.

Table 2: iSi Gmbh total sales for the first semester of 2021

January	692326,73
February	617681,59
March	498446,67
April	429717,72
May	368735,56
June	403573,55
Total Sales	€3 010 481,82
UK Sales	£ 805 952,07
EU Sales	€2 204 529,75

With the occurrence of Brexit and the customers understanding what was happening to the company and how they were dealing with regulations, the sales decreased drastically from the beginning of 2021 to the end of the semester. This was caused mostly by the *“word of mouth recommendations”* that the bad reviews were causing due to the delays and import fees consequences. Only at the end of the semester, in June 2021, iSi Gmbh managed to boost up again their sales because they understood how to handle these new ways of doing business.

Table 4: iSi GmbH total sales for the last semester of 2020

July	1000117,37
August	950134,75
September	899787,35
October	1058584,58
November	1100124,67
December	762132,58
Total Sales	5 770 881,30
UK sales	2449725,32
EU sales	3 321 155,98

Moreover, another interesting fact is shown by the table above which shows the total amount of sales from the year before, which is almost doubled with respect to 2021. This is due to the advent of Brexit mostly. But also, in the last month of the year, thus December 2020, it is possible to see a huge decrease in sales. The reason behind this was the coronavirus pandemic. During that month, because of border closure and lockdown due to the virus, the company experienced a collapse in its revenues.

5.2 Conclusions, limitations and suggestions for future research

The higher uncertainty due to bounded rationality and opportunism in transaction costs caused by the development in the usage of e-commerce platforms increase both before and after a transaction occurs. Thus, it is fundamental to ensure that the governance structure used works properly, in order to effectively manage and perform the activities needed while minimizing the costs. If this does not happen, instead of moving forward thanks to the technology progression, companies move backward. To overcome the problems companies will need a strong strategy which requires knowing the impacts of the agreement on regulations and laws.

In conclusion, it is possible to state that any e-commerce business and digital company, along with all firms, should focus on providing information to their customers about the changes of Brexit or more in general to any changes in the market that will affect

the relationship. This event made both iSi GmbH and any other company aware that doing business is continuous learning of new processes and stipulate new agreements. On one hand, punitive measures coming from governments can surely attempt to reduce inefficiencies but reduce consumer uncertainty will perhaps require more market transparency and institutional structures that can regulate the shortcomings of e-commerce. Only then can e-commerce be both efficient and effective.

Furthermore, a solution to this specific case is, where possible, to limit the impact on the customers through constructive collaboration with suppliers which are based in the UK. Hence, whether an e-commerce activity can perform at its best and bring value for the contracting parties depends on whether an effective set of laws and regulations can be built to coordinate the mutual economic relationships between them. Specifically, this research has the aim to outline how the relationship between UK and EU is damaged by the Brexit agreement. To counteract this, it will be possible, rather than follow one set of rules for every country in which businesses are trading, to simply negotiate new agreements and comply with the regulations of the country concerned.

Other than being ready and review any new regulation on products or any new requirement needed to ensure excellent cross-border trading, companies will then need to be ready to take actions in order to defeat the challenges that institutional changes force them to face such as check contracts and updating to manage risks. Moreover, they should identify any logistical pressure points which can derive from the physical flow of goods and supply chain responsibilities.

To ensure a good relationship with the customers, firms should also legalize any process and procedure needed to support the purchase on the website. For example, to meet customers' needs and boost their own commercial brand, companies can protect their clientele by taking charge of customs expenses so as not to discourage purchases. Also, it will be necessary to adapt the systems to the new regulations and to study a user experience that is as clear as possible, that doesn't give room for doubts or interpretations, but that clarifies the new delivery policies so as not to create inconveniences to the user.

In the end, the research offer also some recommendations on what managers can do in order to identify what satisfies their customers and meet their needs in the best way possible without too many difficulties that can arise from changes in the legislation

monitoring the relation. The main points which were highlighted are: being transparent as a must and adjourning in what any modification to the system could bring.

The current study is characterized by several limitations which might offer suggestions for future research. As a starting point, the research is focused on the effects of the Brexit agreement on the relationship between the UK and the EU. This means that it is bounded to what happens in Europe, specifically between Germany and the UK, while another point of view could be analyzed between other countries. Companies should be up to date with the evolution of regulations and laws when trading with other countries in order to develop new strategies to keep the cross-border relations ongoing without too many difficulties.

The study conducted has some limitations also due to the methods used, because it was a qualitative case study with a focus on the company iSi GmbH which is an e-commerce retailer dealing with bathroom and kitchen products. This means that the study cannot be generalized to every industry in the market. Hence, another interesting future investigation would be to see the different effects on other industries in the market or the regulations and laws affecting some other part of the world.

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APPENDIX

Questionnaire

- Company name:
- Name of the participant and position:

The business environment

1. How do you describe the firm's current working conditions due to Brexit as a digital firm?

(To gain more general information about them as a business)

2. How has your company reacted or taken new implementations into the firm due to the Brexit situation?

(To see which specific changes they have implemented)

3. Do you think your company has digital advantage compared to traditional businesses in terms of Brexit impact? If so, how? What advantages?

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

The major consequences

4. What were the biggest issues you think you faced due to the Brexit agreement? What were the direct consequences of the Brexit on your business?

(To understand which areas of the company were affected the most)

5. Have you identified any disruptions of the firm's production due to the Brexit agreement?

6. Have you identified any disruption in the distribution?

7. Have you identified any disruption in the sales and service activities? What kind of disruptions?

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

8. Which part of the business would you say have been affected the most by Brexit?

9. Does the firm have a general approach to risk and uncertainty?
 10. Have you seen any new business opportunities since Brexit?
 11. Have you identified any threats because of Brexit?
 12. To which degree have the changes affected the way to operate the firm?
 13. Lastly, is there anything you would like to add that might be interesting for us to know?
 14. Was Brexit how you were expecting it or have you faced more unexpected and unpredictable things?
- (To understand if predictions and expectations correspond to reality)*
15. What do you think has your company learned thanks to this Brexit and how you dealt with it?