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INTERNATIONALIZATION AND INTERNATIONAL MARKET SELECTION PROCESS OF BORN DIGITAL COMPANIES

Case: International Market Selection Process of a Finnish Software-as-a-Service SME

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Examiners: Researcher Gregory O'Shea

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ABSTRACT

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Digitalization has brought new ways for companies to internationalize, which has created a need to re-evaluate the fit of traditional internationalization theories in the new digital environment. Born digitals are companies that operate with a fully digital business model, which enables them to enter foreign markets through the internet. This thesis aims to study how born digital company internationalization is affected by the fully digital business model, and how the online market entry strategy affects born digitals' international market selection process.

The empirical study was conducted with a single case study on the international market selection of a Finnish Software-as-a-Service SME, which could be considered a born digital. The study used both qualitative and quantitative methods to collect data. Based on the literature review and the observations from the case company, an international market selection process, two market evaluation models were created for born digital companies. The models were tested in the case company's initial international market selection. The findings showed that born digital companies are able to internationalize faster, cheaper, and more flexible. The importance of competition and the technological level of the target country in the international market selection, were highlighted in the case study results.

TIIVISTELMÄ

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Digitalisaatio on tuonut yrityksille uusia tapoja kansainvälistyä, mikä on luonut tarpeen arvioida perinteisten kansainvälistymisteorioiden sopivuutta uudessa digitaalisessa ympäristössä. Born digital -yritykset operoivat täysin digitaalisella business mallilla, joka mahdollistaa ulkomaisille markkinoille siirtymisen internetin kautta. Tämä tutkimus pyrkii selvittämään, miten digitaalinen business malli vaikuttaa born digital -yritysten kansainvälistymiseen, ja miten internetin kautta markkinoille siirtyminen vaikuttaa kansainvälisen markkinan valintaprosessiin.

Tutkimuksen empiirinen osuus suoritettiin case-tutkimuksena suomalaisen pienen- tai keskisuuren Software-as-a-Service yrityksen kansainvälisestä markkinavalinnasta, jonka voi luokitella born digital -yritykseksi. Tutkimuksessa käytettiin laadullisia sekä määrällisiä tutkimusmenetelmiä. Kirjallisuuskatsauksen sekä case-yrityksen toiminnasta tehtyjen havaintojen perusteella luotiin born digital -yrityksille sopiva kansainvälinen markkinavalintaprosessi sekä kaksi markkina-arviointi mallia. Mallit testattiin case-yrityksen ensimmäisen kansainvälisen markkinan valinnassa. Tutkimuksen löydökset osoittivat, että born digital -yritykset pystyvät kansainvälistymään nopeammin, halvemmalla ja joustavammin. Tulokset osoittivat markkinavalintaprosessissa tärkeiksi alueiksi kilpailun ja teknologisen tason kohdemarkkinoilla.

TABLE OF CONTENTS

1	INTRODUCTION.....	1
1.1	Research gap	2
1.2	Research questions and objectives	3
1.3	Theoretical framework	5
1.4	Definitions.....	6
1.5	Research methodology and delimitations	7
1.6	Structure of the study	8
2	DIGITAL COMPANY AND INTERNATIONALIZATION THEORIES.....	9
2.1	Defining digital companies	9
2.2	Born Digitals	11
2.3	Internationalization theories and the effects of digitalization	12
2.3.1	Traditional theories: economic, behavioral, and network.....	13
2.3.2	Internationalization theories in the digital environment	14
2.3.3	Born Digital internationalization	16
3	THE INTERNATIONAL MARKET SELECTION PROCESS OF DIGITAL COMPANIES	18
3.1	The dimensions of country and market evaluation	18
3.2	The International Market Selection process.....	19
3.2.1	First Screening phase and knock-out elimination.....	20
3.2.2	The second screening phase and MACS-model	20
3.3	Effects of digitalization on the IMS process	23
4	RESEARCH METHODOLOGY.....	24
4.1	Research method	25
4.2	Data collection and analysis.....	25
4.3	Validity and reliability of the study.....	26
5	FINDINGS AND ANALYSIS: THE CASE	27

5.1	Introduction of the case company (and the market entry).....	27
5.2	IMS process of a BD company	28
5.3	Phase 1 – Knock-Out Criteria	28
5.3.1	Choosing the criteria.....	29
5.3.2	Collecting data	31
5.3.3	Results.....	32
5.4	Phase 2 – BD Market Evaluation -matrix	33
5.4.1	Market Attractiveness variables.....	34
5.4.2	Competitive strength variables	35
5.4.3	Data collection	37
5.4.4	The results of the BD Market Evaluation -matrix	39
6	DISCUSSION AND CONCLUSIONS	41
6.1	Discussion	41
6.2	Theoretical contributions and managerial implications	44
6.3	Limitations and future research.....	45
	REFERENCES	47
	APPENDICES	51

LIST OF FIGURES

Figure 1.	Theoretical Framework.....	5
Figure 2.	The digital business classification. Adapted from (Unctad 2017).....	10
Figure 3.	Digital company categorization (Vadana 2019)	11
Figure 4.	Hollensen's IMS process funnel. Adapted from Hollensen (2019)	20
Figure 5.	The MACS questionnaire example. Adapted from Hollensen (2019).....	22
Figure 6.	MACS -Matrix. Adapted from Hollensen (2019).....	22
Figure 7.	The systematic combining framework (Gadde 2002).....	24
Figure 8.	Example Google Analytics keyword search results from Poland.....	32
Figure 9.	BD market evaluation -matrix results.....	39

LIST OF TABLES

Table 1. Example MACS model variables (Hollensen 2019).....	21
Table 2. The knock-out criteria variables.....	30
Table 3. Market attractiveness variables and weights.....	35
Table 4. Competitive strength variables and weights	36
Table 5. Market attractiveness variable thresholds [Data sources in Appendix 2]	37
Table 6. Competitive strength variable thresholds.....	38
Table 7. Market attractiveness scores	38
Table 8. Competitive strength scores	38

LIST OF APPENDICES

Appendix 1. The knock-out results table	51
Appendix 2. BD market evaluation data sources	52
Appendix 3. Bus number trends in Europe	53
Appendix 4. Percentage of busses in passenger transportation in Europe.....	54
Appendix 5. DESI use of internet services in EU	54
Appendix 6. DESI use of internet services in Norway	55

LIST OF ABBREVIATIONS

BD	– Born Digital
DoD	– Degree of Digitalization
FDI	– Foreign Direct Investment
GDP	– Gross Domestic Product
IE	– International Entrepreneurship
IME	– International Market Entry
IMS	– International Market Selection
MNE	– Multinational Enterprise
SaaS	– Software as a Service
SME	– Small and Medium-Sized Enterprise

1 INTRODUCTION

The development of digital technologies has changed the rules of company internationalization (Vadana, Torkkeli et al. 2019a). The new digital era, often called as “the fourth industrial revolution” or as “the digital economy” (Eden 2018, Schwab 2017) is creating new opportunities for businesses to expand successfully to new markets abroad (Annaële Hervé, Schmitt et al. 2020, Unctad 2017). This development has led to the emergence of a new type of firm that is utilizing digital resources in its internationalization from its inception and thus putting traditional internationalization theories in question. These digitally operating companies have been called and categorized in many ways, but this thesis will focus on companies described as born digitals.

Born digital (BD) companies rely on the internet to deliver their products, which allows them to enter foreign markets with little or no physical presence in the target market (Eden 2016). This intangible nature of doing business has been said to move the international markets in a borderless direction (Unctad 2017). It is especially beneficial to small companies, as the costs of initial international expansion are lowered. On the other hand, the increased availability of information, enabled by the growth of the internet, has affected the first international steps that born digitals are taking. With this rather inexpensive access to data of foreign markets, opportunities to internationalize successfully have opened even further. (Katsikeas, Leonidou et al. 2020)

With the new possibilities of utilizing the internet, the question arises, how the BD companies should select their first markets and how the digital markets in foreign countries can be evaluated? The current market selection process models have been created for traditional companies that sell physical products and their fit for evaluating digital product selling companies can be questioned. This thesis will tackle this problem by building on existing research on digital company internationalization and combining it with empirical findings from a case BD company. The subject of this case study is a Finnish software-as-a-service (SaaS) SME that can be identified as a BD company, as it operates and delivers its product through the internet. Currently lacking literature on digital companies’ international market selection, has created a need for new research, to which this thesis aims to add contributions.

1.1 Research gap

Despite the significance of the subject in modern business, the effects and the role of digital technologies are still not fully understood and even neglected in the research fields of international business and entrepreneurship (Nambisan 2017, Vadana, Torkkeli et al. 2019). The research on digital companies has been growing in recent years, but because of the novelty and lack of information, a lot is yet to be researched (Vadana, Torkkeli et al. 2019, Wentrup 2016). It is clear, that digitalization is changing internationalization strategies and is a fundamental question for research and policy analysis in the coming years (Unctad 2017) and therefore should be a focal point for academic research on international business.

Because digital companies are shifting the way multinational companies operate, the theories and models that have been made for traditional MNEs, are not applicable to every situation anymore (Coviello, Nicole, Kano et al. 2017). The Internet has become an alternative to international market entry and physical presence in the target market is no more necessary for expansion (Sinkovics, Sinkovics et al. 2013). The question has been raised if new internationalization concepts are needed because the effects of digitalization are moving international business in a new borderless direction (Monaghan, Tippmann et al. 2019, Schmitt, Baldegger 2020). An entirely new theory might not be needed, but it could be possible to explain using existing theoretical frameworks (Coviello, Kano et al. 2017).

For SMEs, the selection of the first international markets is crucial for the success of the company (Gaston-Breton, Martin 2011). Despite the importance, the decision-making in the market selection process of digital companies has been getting little attention and it has been mainly focused on manufacturing companies. Also, the general frameworks and models that have been created for foreign market selection, have been too complex to apply in practice. (Schu, Morschett et al. 2016) This has created a gap in research and young digital SMEs that are expanding to their first international markets have no theoretical framework or models, on which to base their decisions. To gain an advantage in the new digital era, companies need to add new techniques and approaches to their international marketing skills and tools (Katsikeas, Leonidou et al. 2020) and a practical IMS model for digital companies would certainly be one of them.

1.2 Research questions and objectives

To address the gaps identified in the existing literature on digital company internationalization and international market selection, this study aims to find out which opportunities and threats affect the internationalization and international market selection process of born digital companies and how it differs from traditional views of internationalization of companies that sell physical products and services. Furthermore, the objective is to use the findings from the previous research and the empirical study and to produce a model for evaluating foreign target markets for digital companies' initial international market selection. The model will be tested in the case setting of the empirical study of the thesis. There are two main research questions with one refining sub-question for each of the two, covering the BD internationalization and BD international market selection process.

With multiple studies already suggesting the different types of internationalization paths of digital companies (Monaghan, Tippmann et al. 2019, Schmitt, Baldegger 2020), the first research question of this thesis aims to contribute to that by exploring how the born digital company internationalization is affected by the digital business model. Differences between born digital internationalization and traditional international manufacturing or exporting are attempted to discover with the comparison of the previous literature on traditional internationalization theories and the new studies of BD companies. The sub-question will focus more closely on identifying the specific opportunities and threats that digital companies in the early expansion to the international markets. Analyzing the opportunities and threats are key findings to understanding the factors that must be considered when entering and selecting a target market through online market entry. The first two questions are formed as follows:

Research question 1: How the fully digital business model affects born digital company internationalization?

Sub-question 1: What opportunities and threats born digital companies face when expanding to international markets?

Using and building on to the findings from the first research question and sub-question, the second research question aims to search the effects of the digital business model on the market selection process. To address the gap in the IMS literature, the second research question is formed to study which factors and dimensions affect the choice of the international market when entering through online channels. The second sub-question will focus on how the online market entry will affect the evaluation and ranking of the target markets. The previous findings are used, and the digital context is added to the IMS process. The market evaluation models for BD companies will be created and tested to fulfill the objective of the thesis. The questions are formed as follows:

Research question 2: How the online market entry strategy of BD companies affects the international market selection process?

Sub-question 2: How the target markets can be evaluated and ranked in BD company's initial international market selection?

These research questions form an overviewing frame that explains the BD internationalization and the initial international market selection process of BD companies. It brings understanding to the BD phenomenon and how their internationalization strategies differ from traditional companies. It also contributes to born digital SME's management decision making by answering questions about how these companies can evaluate target markets in their initial international expansion.

1.3 Theoretical framework

The theoretical framework of this thesis is built on two main themes: internationalization theories and the international market selection process. The framework is formed to represent the theoretical side of the process that is used to fulfill the research objectives and questions.

Figure 1 shows how these two concepts are linked together forming the theoretical basis for the empirical research. The upper part of the framework represents the comparison of the more traditional internationalization theories to novel theories of digital company internationalization. From this comparison opportunities and threats that specifically digital companies face in their internationalization, are recognized. The lower part of the framework links the traditional IMS process model with the findings of digital company internationalization. Then by analyzing and adding the effects that digital internationalization and market entry to the IMS process, the framework concludes with the digital company version of the IMS process.

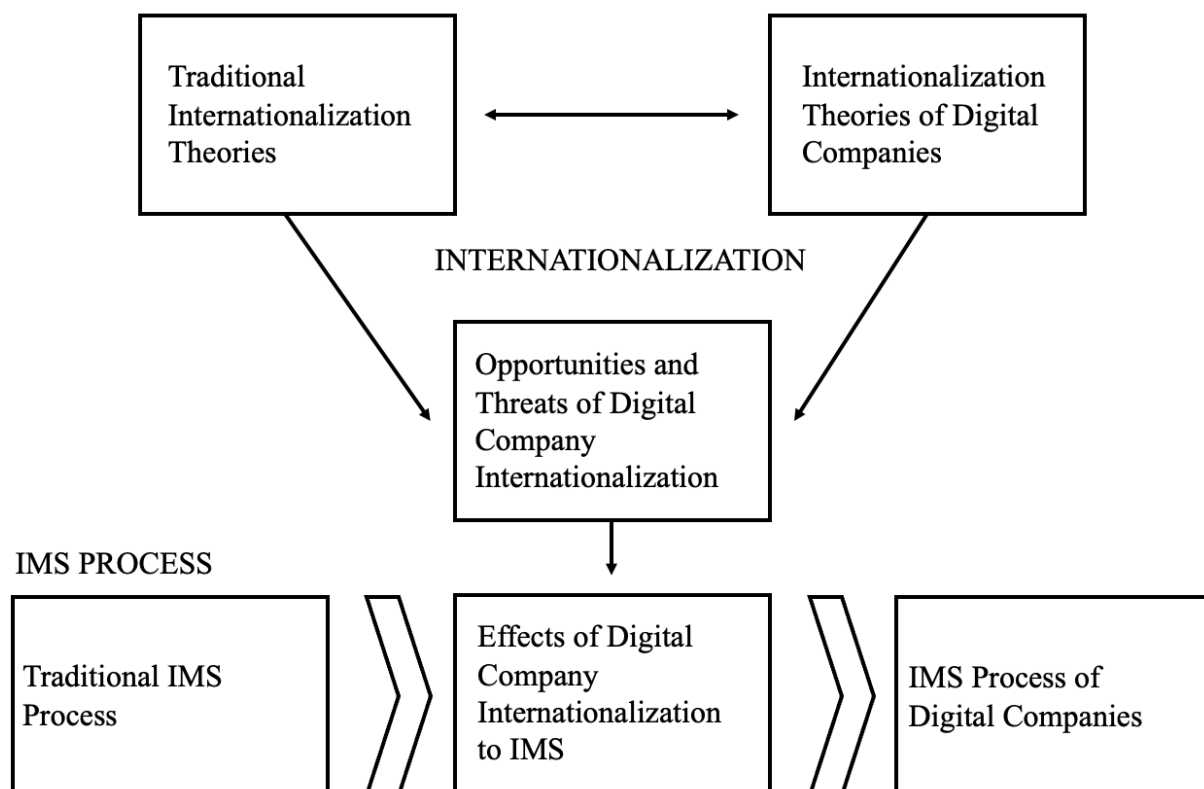


Figure 1. Theoretical Framework

1.4 Definitions

This chapter introduces the definitions of the most important concepts and terms that are used in this research. The most central concepts, digital company, born digital, and IMS, will be more accurately defined in the theory chapters.

Born digital

One of the focal points of this thesis is the concept of born digital company. As research on digital companies has moved forward in recent years, many different terms have been used to describe these internet-related companies (Wentrup 2016). This thesis uses the most recent term, born digital, which can be defined as a digital business that relies on the internet in its operation, production, and delivery of products, and has been wholly digital from inception. (Eden 2018, Monaghan, Tippmann et al. 2019, Vadana, Torkkeli et al. 2019)

Digitalization and Digitization

Digitalization is the application of digital technologies to transform an organization's business model (Ritter, Pedersen 2020). It is enabled by digitization, which means processing analog data to digital form, which then can be created, stored, transferred, and analyzed (Brennen, Kreiss 2016). The firm's ability to utilize its digitization capabilities to improve its business model, determines when digitalization happens and does it make return on investment (Ritter, Pedersen 2020)

Digital company

Digital company can be described as a company that provides its products and services to customers through the internet or by using other technologies (Vadana, Torkkeli et al. 2019). Digital company is a wider concept than BD company. It includes purely digital companies as well as companies that have mixed digital and physical. (Unctad 2017) It also can be a company that has started fully digital, like BD companies, or a company that has digitalized its value chain at a later stage (Vadana, Torkkeli et al. 2019).

International market selection

International market selection (also, foreign market selection) is the choice of the country or countries to enter. It is a strategic decision of high importance and should be made with proper

care and effort. (Douglas, Samuel Craig 2011) IMS process consists of screening phases in which target markets are evaluated and then dropped out until the most attractive markets are found (Hollensen 2019). **GOOD**

Software-as-a-Service (SaaS)

SaaS is a software delivery model, where the software application is used as a service and provisioned over internet Cloud systems to a wide variety of users. The services are often standardized, used through a web browser, and do not require installation to operate. (Mäkilä, Järvi et al. 2010, Vaquero, Rodero-Merino et al. 2008)

1.5 Research methodology and delimitations

This research uses an abductive research approach, which is a non-linear research process. By following Dubois & Gaddes's (2002) systematic combining approach, this study uses theoretical models to direct the empirical research, and in turn, the findings of the empirical study can lead to the redirection of the theoretical framework. The research method is a single case study, which is conducted collaboratively with the case company. The case study is a proven effective method for studying novel real-life phenomena (Yin 2009), such as the IMS process of BD companies. Both qualitative and quantitative methods are used to collect and analyze the data. The empirical research uses data that is collected from multiple European countries, which brings a qualitative nature to the research. The qualitative method is used to perform an in-depth analysis of the target markets. The data is analyzed by using the models created for the empirical study and by collaborating with the case company management.

There are some delimitations regarding this research. As the study was made collaboratively with a single case company, the study has been modified to match the case company's needs. This arrangement as well as the limited resources in use, create some delimitations which should be recognized when reviewing this thesis. The case company of the study is from the Finnish markets, which narrows the geographical setting of the research. The target markets that will be used for data collection and the basis of building the market evaluation models are all European countries or are located close to Finland. Furthermore, the single case setting will delimit the research to only one industry, transportation. Industry delimitations, however, will not affect the aim of researching the internationalization of digitally operating SMEs, as the

SaaS business modeled case company fits the BD definition. Additionally, the lack of resources delimits the extent and the accuracy of the market research and some of the research methods used.

1.6 Structure of the study

This thesis consists of four parts: introduction, theory, empirical, and discussion and conclusions. The introduction part presents the background of the thesis and sets up the rest of the thesis by presenting the research questions and theoretical framework. The second part is divided into two chapters, each covering the theoretical perspective of the two main themes. The first theory chapter gives a thorough overview of the concept of digital companies, as well as how the traditional internationalization theories link to the more novel research of digital company internationalization. The second theory chapter reviews the literature on the international market selection process, also linking it to the digital company perspective.

The third part is also divided into two chapters, which cover the research methodology and the findings and analysis of the empirical case study of this thesis. The fourth chapter explains in detail the used research methods, data collection, and validity and reliability of the study. The findings and analysis of the case study are presented in the fifth chapter. It begins by introducing the case company and its business model. Next, the IMS process and the models created for the case company are introduced. Each step of the case company IMS is explained and finally, a concluding analysis of the case study is provided.

The final part summarizes the thesis with the discussion and conclusions of the research. The findings of the research are linked to the research questions presented in the discussion part of the chapter. The theoretical contributions and managerial implications are presented along with the limitations and suggestions for future research completing the chapter and the thesis. The reference list and appendices can be found at the end of the paper.

2 DIGITAL COMPANY AND INTERNATIONALIZATION THEORIES

To understand the nature of digital companies and their internationalization, the theoretical part of this thesis begins by defining the digital company concept. After that, an overview of the most prominent internationalization theories is provided. Finally, more recent literature on digital company internationalization is introduced and compared to the previous theories. This chapter along with the following chapter will serve as a literature review of the main themes of the study. They will link together novel research on digital companies to the more traditional theories of internationalization and international market selection. These chapters will also contribute as a theoretical background towards forming the models for the research's empirical part.

2.1 Defining digital companies

Companies that use the internet in their operations have been described by several different terms in IB studies (Brouthers, Geisser et al. 2016). Vadana, Torkkeli, Kuivalainen and Saarenketo (2019) identified 35 different terms that have been used in previous literature to define digitalized or digitalizing companies, such as ibusiness companies, e-commerce companies, eINVs, online service providers, and digital platform companies. These terms have substantial overlapping, and it has created common confusion when researching the subject (Eden 2018, Wentrup 2016). Categorizing and defining different types of digitally operating firms has been seen as necessary so that it can be understood how these companies internationalize and what factors are in the success of these ventures (Schmitt, Baldegger 2020).

In recent years, efforts have been made to categorize the constantly growing landscape of digital companies. The United Nations Conference of Trade and Development in its 2017 World Investment Report (Unctad 2017), was one of the first authorities that attempted to form a classification of digital businesses. By their classification (Figure 2), digital MNEs can be divided into purely digital companies and mixed companies based on the digital intensity of their production and operations, and commercialization and sales. The purely digital companies were further divided into internet platforms and digital solution creators. The mixed companies were further divided into e-commerce and digital content creators. ICT companies, such as IT hardware and software, and telecom providers, are not included in either of the two categories

of digital companies. However, they create the digital infrastructure that enables the online operations of digital MNEs. (Unctad 2017)

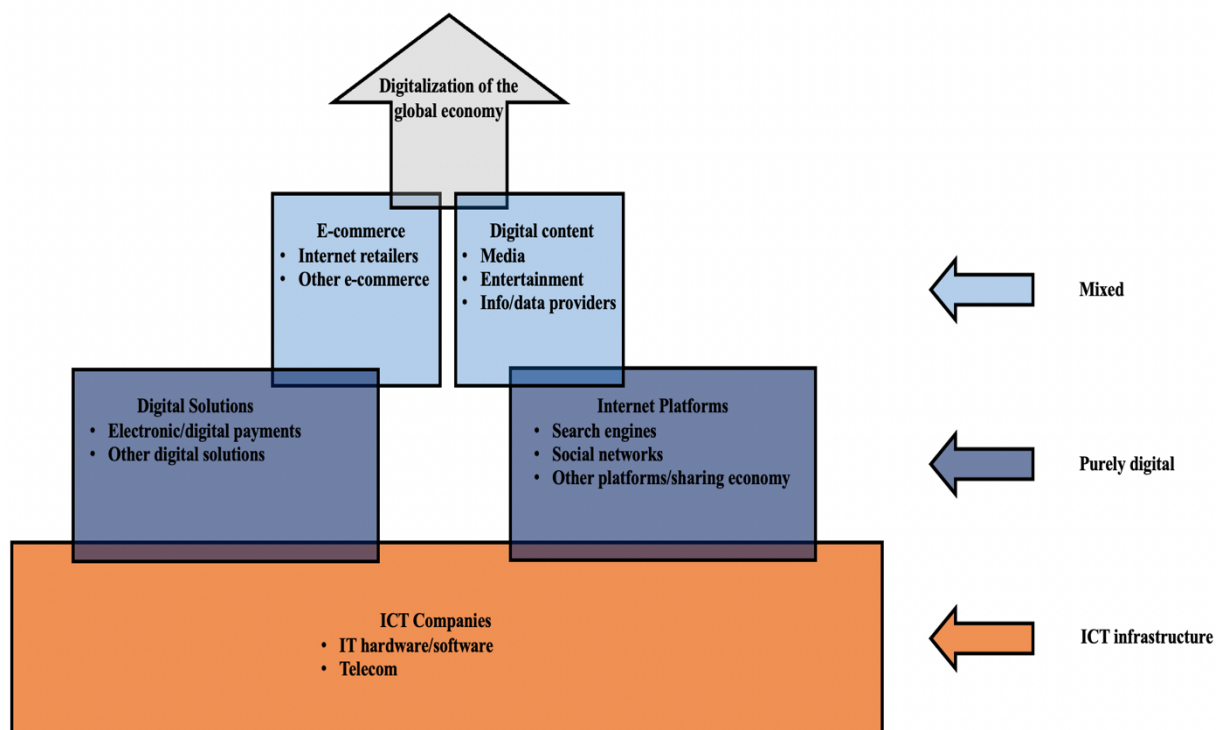


Figure 2. The digital business classification. Adapted from (Unctad 2017).

Another way to categorize digital companies is their global value chain. The company's digitalization can occur in different parts of the value chain (Unctad 2017). In their article, Vadana et al. (2019) presented a framework, that uses the degree of digitalization (DOD) of the global value chain with the degree of internationalization (DOI) and company age, to classify digitalizing companies. The framework (Figure 3) indicates, at which point of company age and internationalization its operations move from low to high DOD, and thus classified based on the point. This separates companies that have digitalized in the later age and stage of internationalization from the companies that have had highly digitalized value chains straight from the company's inception. (Vadana, Torkkeli et al. 2019) Digitalized companies that have started from low DOD and increased it later, are called "mature high digital" companies. The companies that have had the high DOD from inception are called "born digital" (BD) companies.

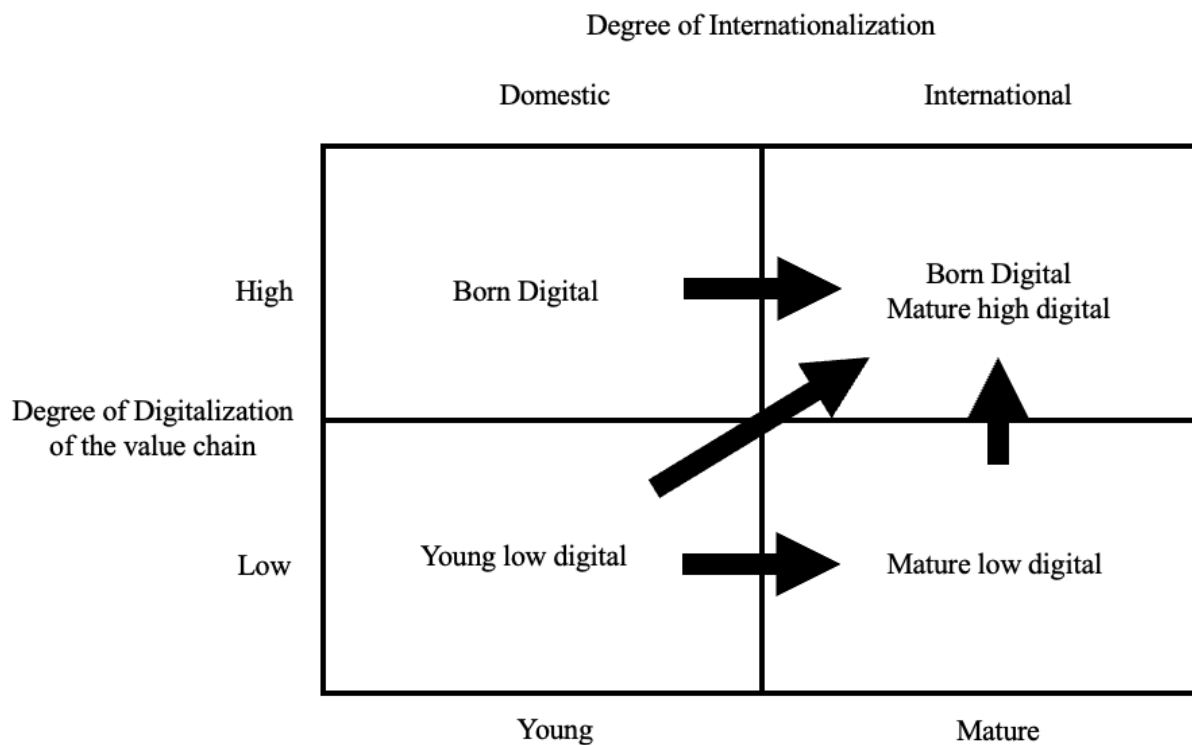


Figure 3. Digital company categorization (Vadana, Torkkeli et al. 2019)

2.2 Born Digitals

Born Digital is a digital company that operates fully digitally by delivering its products and services in digital form through online channels. It has been operating online since its inception, hence called “born” digital. This separates it from other types of companies that have transformed their businesses to digital format at a later stage or use a mixed approach in their operations. (Eden 2018, Vadana, Torkkeli et al. 2019, Unctad 2017) The term born digital is relatively new in the IB and IE literature and only a few studies have been specifically focused on BDs. One of the first academic articles to use the term was Eden (2018) who along the lines of the World Investment Report (Unctad 2017) suggested the classification of wholly digital companies and companies that are partly digital or going from physical to digital. Continuing from the findings of these articles, Vadana et al. (2019) created the classification framework (Figure 3) for categorizing companies based on their age, digitalization degree, and internationalization degree, thus establishing BD companies as unique company-type.

There are characteristics that make BD companies fundamentally different from traditional “bricks-and-mortar” firms. Firstly, the footprint of BDs is different because of the digital infrastructure they have built and leveraged. BDs have an identifiable online presence, and their physical “place” is limited to offices, warehouses, and data centers, which makes them less bounded and more flexible (Monaghan, Tippmann et al. 2019, Nambisan 2017). The lack of need for FDIs makes BD companies' internationalization less expensive and the international markets more easily accessible (Eden 2016). By using the internet to deliver their products, BD companies have nearly instant access to markets around the world (Monaghan, Tippmann et al. 2019). Even though this enables rapid expansion for BDs, sometimes their international expansion might become unintentional or accidental, which might slow the speed (Hennart 2014, Monaghan, Tippmann et al. 2019).

Another characteristic is that separates BDs from some even highly digitalized companies, is that BDs' digital business model relies on digital infrastructure to both create and sell their product online. Even if a company's business processes are highly digitized, they are not digital companies if their market offer is physical. (Monaghan, Tippmann et al. 2019) On the other hand, some BDs seemingly have a physical product that they sell (e.g., the case company of this thesis, which operates in the charter transportation business), but their process is still digitalized, which enables them to digitally produce their product globally (Vadana, Kuivalainen et al. 2021).

With the digitalized business models, BD companies have also different challenges and things to consider in their internationalization process. Without a physical presence in the target market, the legal side of the business might become an issue and the permissions to operate may vary from country to country (Wentrup 2016). Easy access to markets from all over the world, increases the competition (Katsikeas, Leonidou et al. 2020). BD companies need a new type of skills and knowledge to generate value and advantage in their internationalization strategies (Katsikeas, Leonidou et al. 2020, Vadana, Kuivalainen et al. 2021).

2.3 Internationalization theories and the effects of digitalization

Internationalization theories are a central piece of IB literature, as they provide a way to explain and predict firms' expansion outside of their home markets (Buckley, Casson 1976). In recent years companies have drastically changed their internationalization strategies, because of the

increasing influence of digitalization (Unctad 2017). Digitalization has reduced the distances between countries by greatly improving communication (Schmitt, Baldegger 2020). Because of the changes brought by digitalization, scholars have doubted the fit of the “traditional” theories to digital company internationalization and suggested that new approaches might be needed. (Nambisan 2017, Wentrup 2016). This chapter first gives a brief review of the history of known internationalization theories. That is followed by a review of how academic literature has seen digitalization’s effects on company internationalization in general. The final sub-chapter draws together traditional views and digitalized views to form concluding remarks on BD internationalization.

2.3.1 Traditional theories: economic, behavioral, and network

In the history of IB literature, several theories have been created to explain company internationalization. Notably, these theories have three main perspectives, from which they look at the internationalization of firms: economic, behavioral, and network. (Brouthers, Geisser et al. 2016, Wentrup 2016) The economic approach has been used in theories such as internationalization theory (Buckley, Casson 1976), transaction cost analysis (Williamson 1986), and resource-based-view (Barney 1991). Dunning’s eclectic paradigm uses the other economic theories as its basis to explain FDI and foreign expansion of MNEs. It describes firms’ international activities through ownership, location, and internalization (OLI) advantages. (Dunning 2000)

In contrast to the economic point of view, behavioral theories focus on the behavioral process in company internationalization. The most known behavioral theory is the internationalization process theory, also known as the Uppsala Model (Vahlne, Johanson 1977). It presents the company internationalization as a sequential learning process, in which companies take steps towards committing to international markets by increasing their knowledge through experience, which then leads to more commitment. Uppsala model also presented the concept of psychic distance to measure the factors of cultural differences between two countries, which has become widely used in IB studies. In the original studies, Johanson & Vahlne (1977) discovered that companies enter first the markets, that were close in psychic distance, and then gradually moved further markets.

Another well-known behavioral theory is the born global theory (BG) (Knight, Cavusgil 2004). It is based on the international new venture (INV) theory, which presented a different, more rapid view of the internationalization process of SMEs (McDougall, Oviatt 1994). The born global theory states that some companies have a shorter time frame to internationalization than the Uppsala model suggests, as they can pursue international markets straight from inception. BG companies use knowledge-intensive resources to seek multiple foreign markets near their inception. To achieve this rapid expansion, BGs are typically led by internationally oriented entrepreneurs, who tend to leverage technological advantage, unique products, and focus on quality with strong distribution and marketing skills. (Knight, Cavusgil 2004)

More recently networks have increasingly been used to explain the internationalization process of companies. The network perspective sees international markets only as networks between companies, their suppliers, distributors, and competitors. Companies internationalize with the help of these network relationships and can reduce risks and overcome the barriers of entry. (Wentrup 2016) Based on the network model created by Johanson & Mattson (1988), multiple studies have researched the area of internationalization through networks (Coviello, Nicole E., Munro 1995, Ellis 2000, Knight, Cavusgil 2004, Oviatt, McDougall 1995). The Uppsala model was updated to a more modern version with additional views from the network theory (Johanson, Vahlne 2009). While the structure of the Uppsala model stayed the same, it added the recognition of trust-building and knowledge creation in the relationships of networks. The revised version also stated that companies that are not engaging in the foreign network of the target country, will suffer from the liability of outsidership (LoO) and foreignness. To overcome this and gain insidership to the foreign networks, companies must develop their commitment, and build trust and knowledge. (Johanson, Vahlne 2009)

2.3.2 Internationalization theories in the digital environment

Since the 1990s, the effects of information technologies have caused discussion in the field of IB (Eden 2016). However, a limited number of research has compared the internationalization of physical product-based high-tech ventures to the companies that are doing business through the internet (Cahen, Borini 2018). All the major traditional internationalization theories were already created before that time or during the early days of the internet, which is why they are mainly created to describe the manufacturing company's internationalization through physical expansion. Some articles have explained digital company internationalization through the

existing theories; however, other scholars think that novel approaches are maybe needed (Nambisan 2017). To address this, some academic articles have started by comparing digital company internationalization to the traditional internationalization theories.

The fit of FDI based approach of the Eclectic paradigm (OLI) to the digital companies, has been questioned in multiple studies. Cahen & Borini (2018) provided empirical evidence that digital companies' internationalization is not based on exports or FDI, rather their internationalization is characterized by online international expansion. Digital companies are able to overcome barriers of geographical distance, because of the ability to reach customers in any part of the world through digital sales and users, without having to make a physical investment in the foreign target market (Cahen, Borini 2018, Katsikeas, Leonidou et al. 2020, Sinkovics, Sinkovics et al. 2013). The entry can be done by rental offices or international partnerships, which do not require FDI (Unctad 2017), and instead of physical assets, the investments are made in highly educated human capital (Coviello, Kano et al. 2017). Also, transferring digital products from one country to another is cost-efficient (Brouthers, Geisser et al. 2016, Cahen, Borini 2018). In a recent article, Luo (2021) suggests a new updated OLI model made from the digital company perspective. The new model presents three new internationalization advantages: (O) open resource advantage, (L) linkage advantage, and (I) integration advantage. (Luo 2021)

Born Global theory could be said to be the most closely related predecessor to the BD concept, with born global companies aiming to expand at inception and born digital companies having the ability to expand from inception. Similarly, born global companies and digital companies are both certainly operating in knowledge-intensive industries but as Wentrup (2016) states, the grouping of knowledge-intensive service firms (i.e., digital service providers) and manufacturing companies (i.e., pharmaceutical companies) together, makes the identification of the internationalization characteristics of different types of firms difficult.

Digital company internationalization has been researched from the perspective of the network theory (Vadana, Torkkeli et al. 2019b). Brouthers, Geisser, and Rothlauf state (2016) that having a large and diverse network helps digital companies to successfully expand and a lack of direct access to foreign network users causes risk of suffering from outsidership. Monaghan, Tippman, and Coviello (2019) wrote an article on BD companies' fit to the network perspective of the updated Uppsala model by Johanson & Vahlne (2009). They evaluate the Uppsala models fit by five different characteristics of digital business models: direct engagement with

stakeholders, automation, network effects, flexibility, and scalability. According to Monaghan et al. (2019), BD companies need traditional network relationship building in their internationalization, especially network effects are included. However, the pace of BD internationalization, enabled by automation, flexibility, and scalability, makes the network relations less relevant in their internationalization strategy. (Monaghan, Tippmann et al. 2019)

2.3.3 Born Digital internationalization

BD company internationalization is not based on FDI or exports, as compared to product and service providing companies (Cahen, Borini 2018). Consequently, several studies have pointed out the unfit of traditional theories for the internationalization of digital companies and the need for new approaches (Brouthers, Geisser et al. 2016, Luo 2021, Nambisan 2017, Vadana, Torkkeli et al. 2019, Wentrup 2016), but no single theory has emerged. Some of the key characteristics of BD internationalization are the ability to internationalize faster, more cost-efficiently with low investments, and with fewer existing networks in the target market (Annaële Hervé, Schmitt et al. 2020, Coviello, Kano et al. 2017, Monaghan, Tippmann et al. 2019, Vadana, Torkkeli et al. 2019). Flexibility and adaptability enable BDs to learn quickly, experiment, and change direction if needed (Monaghan, Tippmann et al. 2019). Digital companies are able to leverage their flexibility and reduced location specificity avoid traditional inhibitors of early internationalization (Autio, Zander 2016). However, research has shown that not all BDs pursue rapid international expansion, expansion can be controlled and slower (Hennart 2014).

By gathering online website data, they can identify attractive markets (Coviello, Kano et al. 2017), which are cheaper and more easily accessible (Katsikeas, Leonidou et al. 2020). BD companies are able to start their expansion with online entry, without any physical investments. (Wentrup 2016) For BD companies, entering a new country can be possible by only adjusting the language and getting a local web address (Autio 2016). Online entry is later followed by possible offline entry, which includes offices for customer service and legal functions. National entry can be replaced with regional headquarters. (Wentrup 2016)

Despite the possibility of rapid online market entry, digital companies still face barriers of entry. Scholars have shown that with low user contact, BDs still face the risks of the liability of outsidership, and foreignness (Brouthers, Geisser et al. 2016, Eden 2018). BD companies can

alleviate these liabilities by growing and diversifying their network, and building digital trust (Brouthers, Geisser et al. 2016, Monaghan, Tippmann et al. 2019). Establishing trust with customers and other stakeholders is essential, especially in digital platform internationalization (Jacobides, Sundararajan et al. 2019). New technologies have also brought about more vulnerabilities, such as security breaches, fraud, disruption of services, and failure of meeting service levels, which increase when entering international markets (Luo 2021). According to the findings of Ojala, Evers, and Rialp (2018), technological bottlenecks bring new barriers of entry for digital platforms, especially in the early internationalization phase.

3 THE INTERNATIONAL MARKET SELECTION PROCESS OF DIGITAL COMPANIES

This chapter presents the second of the two theoretical main themes of this thesis, International Market Selection. It explains the concept of IMS, the dimensions of country and market evaluation, and the typical process that companies use when selecting the country for expanding to foreign markets. The step-by-step screening and evaluation models, which will be at the center of the empirical part, are explained thoroughly. Lastly, the literature that has been written on digital companies' IMS processes is reviewed and compared to the traditional IMS process.

International Market Selection is the strategic decision companies make when deciding which markets to enter (Douglas, Samuel Craig 2011). Identifying the promising target markets and choosing the right one can be the determining factor between failure and success, especially in the early stages of SME internationalization (Gaston-Breton, Martin 2011, Hollensen 2019). The typical approach in assessing international markets for initial market entry is gradual and sequential (Douglas, Samuel Craig 2011, Rahman 2003). In this approach, the international markets are assessed by starting from macro-level data analysis, reducing the countries based on its results, and then assessing the remaining countries on micro-level data (Douglas, Samuel Craig 2011, Gaston-Breton, Martin 2011). The data that is analyzed is from diverse sets of variables, such as economic, geographical, political, and cultural (Gaston-Breton, Martin 2011). The assessments are usually done with markets segmented to country. The reason for this is that international statistical data is more easily and sometimes exclusively found on a country level and distribution management, as well as media, tends to be organized on a single country basis. (Hollensen 2019)

3.1 The dimensions of country and market evaluation

As established, the sequential IMS approach uses two types of data: macro-level data to form a broader perspective evaluation of target countries and micro-level data to evaluate the market more accurately within the target country (Douglas, Samuel Craig 2011, Gaston-Breton, Martin 2011, Rahman 2003).

Macro-level data has been widely used in cross-cultural research (Douglas, Samuel Craig 2011). Because of the low costs, comparability, and wide availability from secondary sources,

macro-level data is also used in most of the IMS models in the initial screening stage (Gaston-Breton, Martin 2011). Previous research has regarded market attractiveness in terms of market size and market development, as the starting point of the IMS process and a critical dimension to identifying potential opportunities (Gaston-Breton, Martin 2011, Rahman 2003, Russow, Okoroafo 1996). Rahman (2003) names macro-economic variables, such as GPD, GPD growth rate, inflation rate, population size, size of the middle class, literacy rate, currency reserve, and stability of exchange rate, as a common starting place for assessing market attractiveness and growth. In addition to the economic dimension, according to Rahman (2003), other common dimensions of macro-level data are product-related variables and cultural variables, such as religion and psychic distance. Douglas & Craig (2011) name economic, demographic, socio-cultural, and geographic factors as typical in macro-level market evaluation.

After the first screening is completed, micro-level data is used to get a more accurate estimation of the market potential and to rank the remaining countries. The selected variables in this phase are more product and market specified (Gaston-Breton, Martin 2011, Hollensen 2019). In many smaller industries, macro-level data of market demand is not accurate enough or unavailable, so to assess further, micro-level data can be used to project estimations of it. In addition to assessing demand and potential, in this stage companies should map the competition in the market and the intensity of it. (Rahman 2003)

3.2 The International Market Selection process

The gradual IMS process contains screening phases, where countries are eliminated, and the remaining countries are then evaluated more closely. Hollensen (2019) uses a funnel model to picture a typical IMS process with two screening phases and it ranks the remaining countries at the end (Gaston-Breton, Martin 2011, Hollensen 2019). This can be seen in Figure 4.

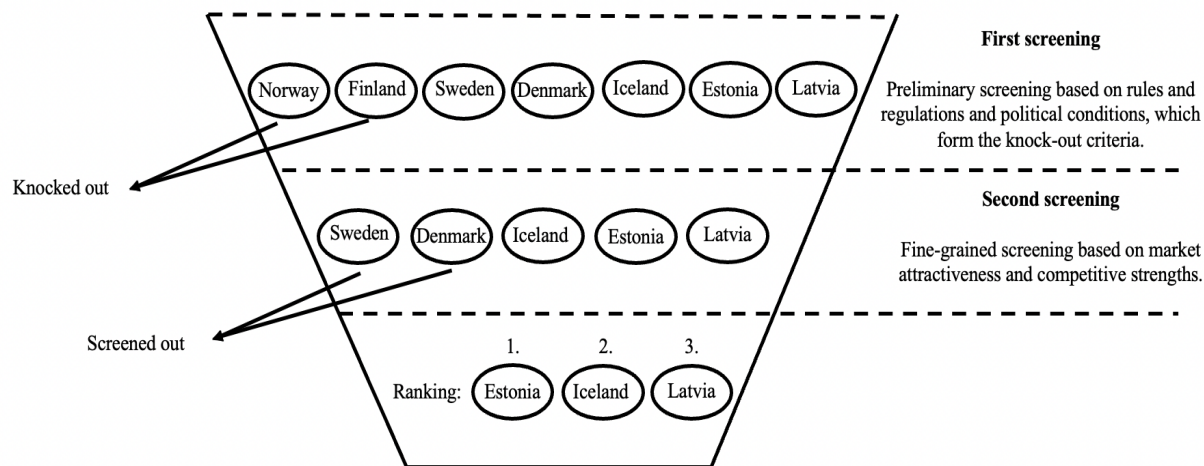


Figure 4. IMS process funnel. Adapted from Hollensen (2019)

3.2.1 First Screening phase and knock-out elimination

The first screening phase uses primarily external macro-level criteria to measure market attractiveness, potential, and risks. Macro-level criteria can include variables from the economic dimension (i.e., size of the domestic product, market growth), demographic dimension (i.e., population, education level) cultural dimension (i.e., psychic distance, religion) as well as variables from the country's regulations, political risk, or technological readiness. (Douglas, Samuel Craig 2011, Gaston-Breton, Martin 2011, Hollensen 2019) The screening in this phase can be performed by using so-called “knock-out-criteria” (as seen in the upper part of Figure 4) to eliminate unattractive countries. This means that certain criteria, e. g. political stability or market size, are set and if a country doesn't meet them, it is eliminated. The remaining countries move on to the next phase's more accurate evaluation. (Hollensen 2019)

3.2.2 The second screening phase and MACS-model

The second screening phase uses a more fine-tuned approach with micro-level data to find the markets that would offer the best opportunities for expansion and rank them in order (Hollensen 2019). Models, that evaluate different dimensions of market attractiveness and business attractiveness or competitive strength, have been created for executing this screening. The basis

of these models is the GE/McKinsey -matrix, which is a 3x3 matrix with market attractiveness and business attractiveness as its axis (Sarfaraz, Ali et al. 2021). This thesis concentrates on Hollensen's (2019) MACS matrix, which is similar to the GE/McKinsey matrix but differs by having the company's competitive strength as the x-axis instead of business attractiveness.

Table 1. Example MACS model variables (Hollensen 2019).

Market/country attractiveness	Competitive strength
Market size	Market share
Market Growth	Marketing ability
Buying power of customers	Products fit to market demand
Average industry margin	Contribution margin
Competitive conditions	Image
Infrastructure	Technology position
Psychic distance	Product quality

MACS model evaluates the countries by their market attractiveness and competitive strength. Both these dimensions consist of a large number of variables that enable measuring them, examples of which can be seen in Table 1 (Hollensen 2019) To start the MACS model evaluation process, variables are chosen, and a questionnaire (Figure 5) is used to determine the scores of each variable. Each variable will be scored on a 1-5 scale. The process continues by giving each variable a weighting (weights add up to 100% or 1.0) to represent their importance to attractiveness and strength. (Hollensen 2019) Scholars do not have a consensus on how the weights should be assigned (Sarfaraz, Ali et al. 2021). The variables and their weights are chosen and adjusted to match the industry settings and market conditions. Then market research is conducted on each country to fill out the questionnaire and score them (Hollensen 2019).

Market Attractiveness							
	1 Very Poor	2 Poor	3 Medium	4 Good	5 Very Good	% Weight factor	Result (grading x weight)
Market size							
Market growth							
Buying structure							
Political risk							
Market access							
Etc.							
Market attractiveness = Result : 100 =						100	

Competitive strength (relative to the competitors)							
	1 Very Poor	2 Poor	3 Medium	4 Good	5 Very Good	% Weight factor	Result (grading x weight)
Products fit to market demands							
Prices and conditions							
Market presence							
Obtainable market share							
Financial results							
Etc.							
Competitive strength = Result : 100 =						100	

Figure 5. The MACS questionnaire example. Adapted from Hollensen (2019).

The MACS model results are presented in matrix form, as seen in Figure 6. Based on the calculated scores of the questionnaires, countries are positioned in the matrix. Countries can fall into three categories: A, B, and C. The A category countries are the primary targets, offering the opportunities and possibilities for expanding and investing. The B category countries are the secondary markets. The countries have some opportunities for development but will have more risk, making them less favorable for expansion and investing. The C category countries are the least attractive. They provide low opportunities and high risk; thus, they should be evaded. (Hollensen 2019)

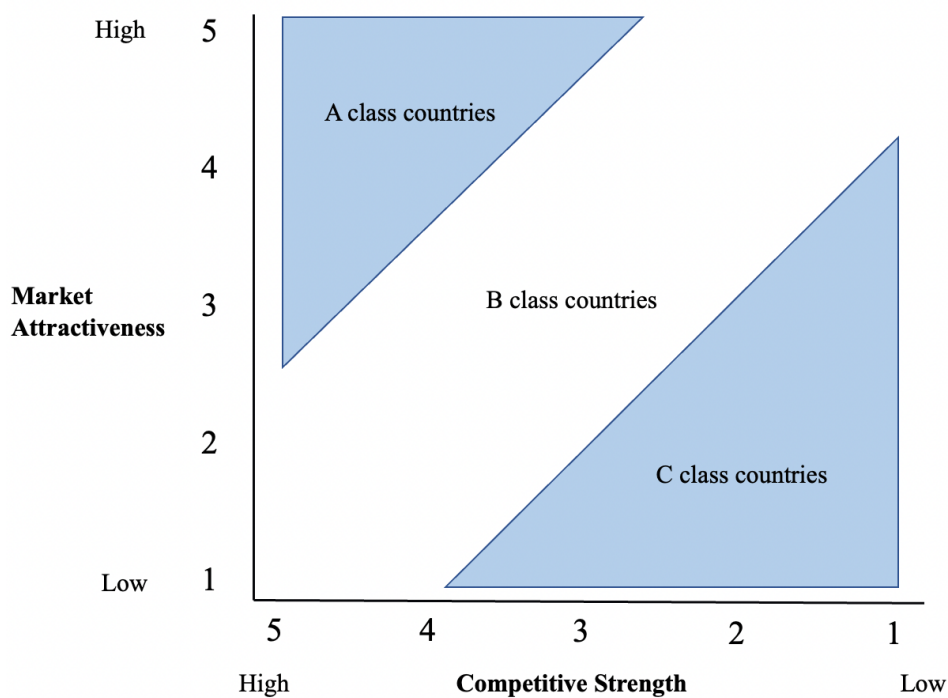


Figure 6. MACS -Matrix. Adapted from Hollensen (2019)

3.3 Effects of digitalization on the IMS process

The effects of digitalization on the IMS process is a scarcely researched subject in IB and IE literature. The fragmentation and the lack of representative empirical studies have slowed the development of new theories that explain the firms' choice of international markets (Schu, Morschett et al. 2016). Only a few research has studied how the digital companies' market selection process differs from the traditional manufacturing companies, which is why the effects of digitalization on the IMS process have to be formed from theoretical findings of the digital company internationalization literature.

Some scholars have studied what digital factors affect the BDs' market choice. Schu, Morschett, and Swoboda (2016) found that the size of the internet market was a better predictor of online retailers' target country than the size of the country's GDP, which indicates the use of different measures to estimate digital company market potential. Similar findings were found by Vadana, Kuivalainen, Torkkeli, and Saarenketo (2021) who wrote that BDs target countries with considerable market size and working internet infrastructure. Afterward, these types of large and technologically advanced markets can become hubs for the company's core activities (Vadana, Kuivalainen et al. 2021). The role of technological bottlenecks in digital companies' early internationalization studied by Ojala et al. (2018) suggests an increased need for emphasis on technological aspects, which have been left with less focus in earlier IMS models.

Digitalization has also affected the evaluation dimensions used in the IMS process. In online markets, digitalization enhances the competitive forces as the possibility of competitors from multiple countries around the world (Katsikeas, Leonidou et al. 2020). Gaston-Breton, Martin, and Martin (2011) recommend that in future studies their IMS model could be combined with models including type and level of competition. Despite the less needed physical presence in the target market, cultural factors are still considered relevant in BD market selection. Eden (2018) states that digital companies are still likely to suffer from unfamiliarity and liability of foreignness when institutional distances are large. This suggests that the cultural dimension is still relevant in digital companies' IMS.

4 RESEARCH METHODOLOGY

The aim of this study is to increase understanding of this relatively new phenomenon of born digital internationalization. Furthermore, the objective is to use the theoretical findings of BD internationalization and the empirical findings of the study to form IMS models for BD companies. This type of back-and-forth non-linear research process is called an abductive approach (Dubois, Gadde 2002), which can be identified as this study's research approach. There has been a small but growing trend among academic market researchers to seek a greater balance between research activities and businesses. With solid theoretical grounding and quality research practices geared to collaboration, this type of research can advance both theoretical and practical knowledge. (Freytag, Young 2018) This study is done in collaboration with a case company; thus, it can be identified as a collaboration between businesses and academic research, with the aim of providing new theoretical and practical knowledge.

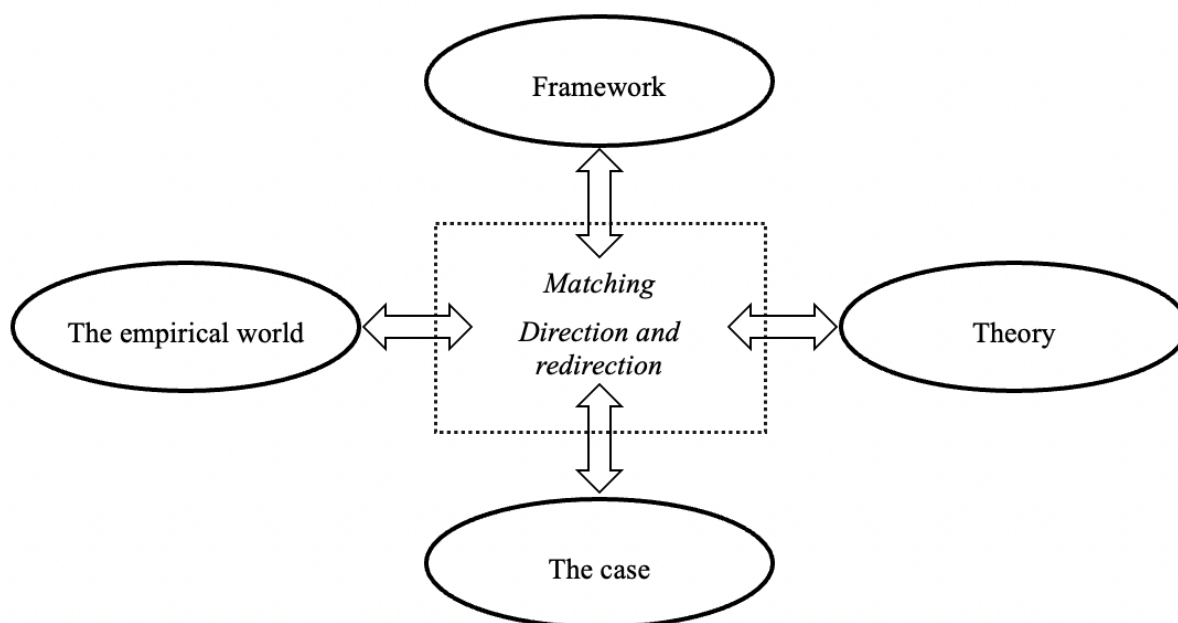


Figure 7. The systematic combining framework (Dubois, Gadde 2002).

This study follows Dubois & Gadde's (2002) systematic combining, which is an abductive approach for case study research. The systematic combining can be used for theory development by using the findings of the empirical study. Figure 7 presents four ingredients of the systemic combining, which all affect each other when conducting the research. If the process

starts from a preliminary theoretical framework, later empirical findings can cause reason to develop the framework. The evolved framework then needs further empirical data search, which then might discover yet again new issues and redirect the current theoretical model. (Dubois, Gadde 2002) The research of this thesis follows a similar process of direction and redirection.

4.1 Research method

The empirical study of this study was conducted via a single case approach, which has proven to be an efficient method for studying real-world phenomena. The case study is the favored research method for explanatory “how” research questions, which are used in this study. (Yin 2009) The collaborative manner of the case study is enabled by the single case study method. Case studies can include both qualitative and quantitative methods (Yin 2003).

This thesis uses both qualitative and quantitative methods. The qualitative methods were used in the in-depth micro-level data analysis of the target markets by combining the data from the competitor analysis, keyword searches, and industry-specific data. Quantitative methods were used in the macro-level data analysis, where multiple indicators were collected from a large number of European countries.

4.2 Data collection and analysis

The data collected in this study, is from secondary sources, mainly through online searches from internet sites, databases, and analytics services. The collection was made systematically in every country by using the same keywords and databases. The first phase of the IMS process collected the macro-level data to the knockout criteria.

The data were analyzed by using the models that were created, and by analyzing the results. The data collected were inserted into the questionnaires and tables of the knock-out model and the BD market evaluation matrix. In the first phase of the IMS study, country profiles were made for every country for the competitor analysis and keyword search statistics. In IMS process variables, such as the company’s knowledge of the market and relative competitive strength, company managements analysis is required.

4.3 Validity and reliability of the study

Validity and generalization can be challenging aspects in designing and conducting single case study evaluations. One way to address this challenge and seek generalization in a single case setting is by using theory and analytic generalization. (Yin 2013) This study attempts to use relevant literature and theory, as well as an analytic generalization, to improve the validity of the study. The reliability is attempted to increase by using source criticism when selecting the secondary sources data, which are mainly collected from databases that are either upheld by governmental or globally recognized organizations.

5 FINDINGS AND ANALYSIS: THE CASE

The fifth chapter of this thesis presents the findings and analysis of the case study. The main objective of the case study was to create an IMS process with market evaluation models that are specifically tailored for BD company purposes and for online market entry. This is done by combining the theoretical parts findings of digital company internationalization and digital company IMS process, with the findings from the data collection and analysis, as well as collaborating with the case company. The chapter begins with a case company introduction, then explains the IMS process that is used in the case. Finally, the findings and the analysis from both screening phases of the process and the models used in them are thoroughly explained. Additional and more detailed information on the models and data used in the case research can be found in the appendix.

5.1 Introduction of the case company

The case company of this thesis is a Finnish SME operating with a SaaS business model in the private transportation industry. As the company is the only one in the single case research method, it is referenced as “the case company” or as “the company”. The company’s name and some of the further details about the case’s market research are kept anonymous. The company operates through online channels as its products are fully digital services that are produced and delivered digitally. A digital and online business model has been the core of the company from its inception, thus fulfilling the description of a BD company. The business model does not require any physical presence or direct investments in the target markets. Therefore, the market entry mode is an online market entry. Despite operations being done online, it is crucial to have knowledge of the industry situation in the target markets, so that the profitability and success possibility can be estimated.

The main product, and the product that is being exported, is a SaaS platform of online price comparison for private and chauffeured road transportation (coaches, busses, and minibusses). The product is a fully online platform, which brings together people needing and companies offering private transportation. The main customers of the case company are the private transportation firms who buy the service to gain access to customers who, in turn, seek the best prices by comparing the prices of multiple offers from the transportation companies on the

platform. The company has a leading market position in its home market and needs expansion to foreign markets to keep growing. The case company names the European markets that are approximately as big or bigger than Finnish markets (25 countries) as their targeted next markets, which will give the scope to the IMS process.

5.2 IMS process of a BD company

The structure of the market selection process of this empirical case study is based on Hollensen's (2019) IMS process (Figure 4), which was presented in detail in chapter 3. The process is divided into two screening phases: Phase 1 – Knock-out criteria and Phase 2 – MACS -model. For clarification, the matrix model created for this thesis' case study is called as BD market evaluation -matrix. While the IMS process structure remains the same, this study modifies the dimensions and variables used in the two phases to fit the digital aspects of BD company.

As identified in the theory chapters, digitalization has made the availability of information cheaper and more easily accessible (Katsikeas, Leonidou et al. 2020). BD companies are able to start their internationalization by assessing online website data (Coviello, Kano et al. 2017). These findings of the effects of digitalization have been incorporated into this case study's IMS models. All the available relevant and measurable online data has been collected to provide diverse variables that are able to evaluate the markets in the most meaningful matter.

Despite the easier accessibility of information online, some useful statistics are still unavailable or incomplete, especially in data from smaller industries like private transportation, and would need surveys or qualitative research to acquire. That affects the choices of individual variables, but it does not affect the selection of overall variable categories of the measured dimensions. The relevance of each variable for the specific product or service should be assessed (Gaston-Breton, Martin 2011) Also, weighting is used to estimate the reliability of the variable, thus balancing the scores.

5.3 Phase 1 – Knock-Out criteria

The first screening phase uses the macro-level data to screen out the countries with the least success potential due to risks and lack of opportunities. The criteria categories and the variables

were chosen based on the Hollensen (2019) knock-out model and previous research on ISM evaluation dimensions (Douglas, Samuel Craig 2011, Gaston-Breton, Martin 2011, Rahman 2003), as well as added variables to include the digital company perspective. This model covers variables from market attractiveness, socio-cultural and political dimensions, which are typical in macro-level evaluation.

To adjust the model for digital companies, technological and competitive dimensions are added. The technological dimension is a top priority to digital companies, as lacking technological infrastructure or readiness of customers can prove to be a bottleneck that prevents the success of the early internationalization of a digital platform (Ojala, Evers et al. 2018). Competition is also added to this first screening phase, although it can be regarded as more of a micro-level dimension (Rahman 2003). In the digital company context, it can be considered a critical barrier of entry, which was also the case in company management's view.

5.3.1 Choosing the criteria

The criteria and variable selection were made based on the findings of the early screening phase and on conversations with the company. Data availability affected the selection of single indicators of a variable. The knock-out criteria (Table 2) were divided into four categories: competitors, market challenges, profitability, and technological level. Each category has 1 to 3 variables, which were used to measure the fulfillment of the knock-out criteria.

Table 2. The knock-out criteria variables

Category	Variable
<i>Profitability</i>	Market size
	Economic situation
	Industry potential (demand)
<i>Challenges in the markets</i>	Cultural differences
	Political risk (instability)
	Knowledge about the markets
<i>Technological level</i>	Usage of digital services (DESI ranking)
	Digital competitiveness ranking
	Level of online services
<i>Number of competitors</i>	Number of competitors

Profitability category, which combines the countries' economic and demographic factors, is an important category that measures the attractiveness of the target market. Previous research regards market attractiveness as the basis of macro-level evaluations (Rahman 2003, Russow, Okoroafo 1996). Chosen variables for this model include the market size, economic situation, and industry potential. In market size, the economical size in GDP and demographical size in population were considered. The economic situation takes look at the country's growth and inflation rates. If the size of the market economic situation is not seen to be sufficient, the success probability falls, especially when the product is in a niche market. Industry potential variable was selected to estimate the level of online transportation suppliers and demand. These were measured by keyword search of local businesses and analytics data of keyword search results.

Challenges in the markets criteria category include cultural differences, political risk, and the knowledge of the markets. Hollensen (2019) described political risk as a critical knock-out criterion in the original model. Cultural variables are typical in IMS (Rahman 2003), therefore

psychical distance and the company's knowledge of the markets were chosen to complete the category. In this model, based on the research of target market customers and competitors, and from the discussions with the case company, estimations of all three variables were used to measure the fulfillment of the criteria.

The technological level of the target country is an important factor in the BD target market. This category is chosen to screen out the countries with insufficient readiness and demand to use digital services. It is a company and product specific to the SaaS business model of a BD company. This is measured by three indicators: digital service usage (DESI ranking), digital competitiveness (digital competitiveness ranking), and the overall level of online transportation rental services in the market. The DESI ranking and the digital competitiveness ranking were both available from online sources.

The number of competitors was added to address digital companies' highly competitive environment. In online markets, where market entry is made easier by digital technologies, the threat of competition can be coming from multiple countries, not just from inside the targeted market (Katsikeas, Leonidou et al. 2020). In discussions with the case company, already highly competed markets were wanted to be avoided in its initial market expansion. This criterion is used to measure the saturation of the target market by counting the direct and indirect competitors. In this case, direct competitors are described as competitors that have a similar business model to the case company (i.e., other private transportation price comparison sites). Indirect competitors are described as other private transportation offering companies, with significant competitive strength (i.e., larger size companies offering private transportation, but not price comparison).

5.3.2 Collecting data

Data for this phase was collected from secondary sources of online databases and by performing keyword searches in Google and Google Analytics. First, countries' economic and demographic data were collected and listed. Databases that were used were, The World Bank and Eurostat. Then competitor data was searched and collected country-by-country, using keywords in English, and translated to the local language. The keywords were selected to emulate the search words that customers would use to find private bus rental services and price comparison of these services, as in the case company's product. From these results, the most prominent

competitors were identified. The same keywords were used in the Google Analytics tool, which shows how frequently each keyword was searched in the country. In Figure 8 the upper part shows a table of the number of monthly searches, and the lower part shows a graph of each keyword's searches from a year. Finally, the keyword search and analytics data were gathered to a market profile of each country.

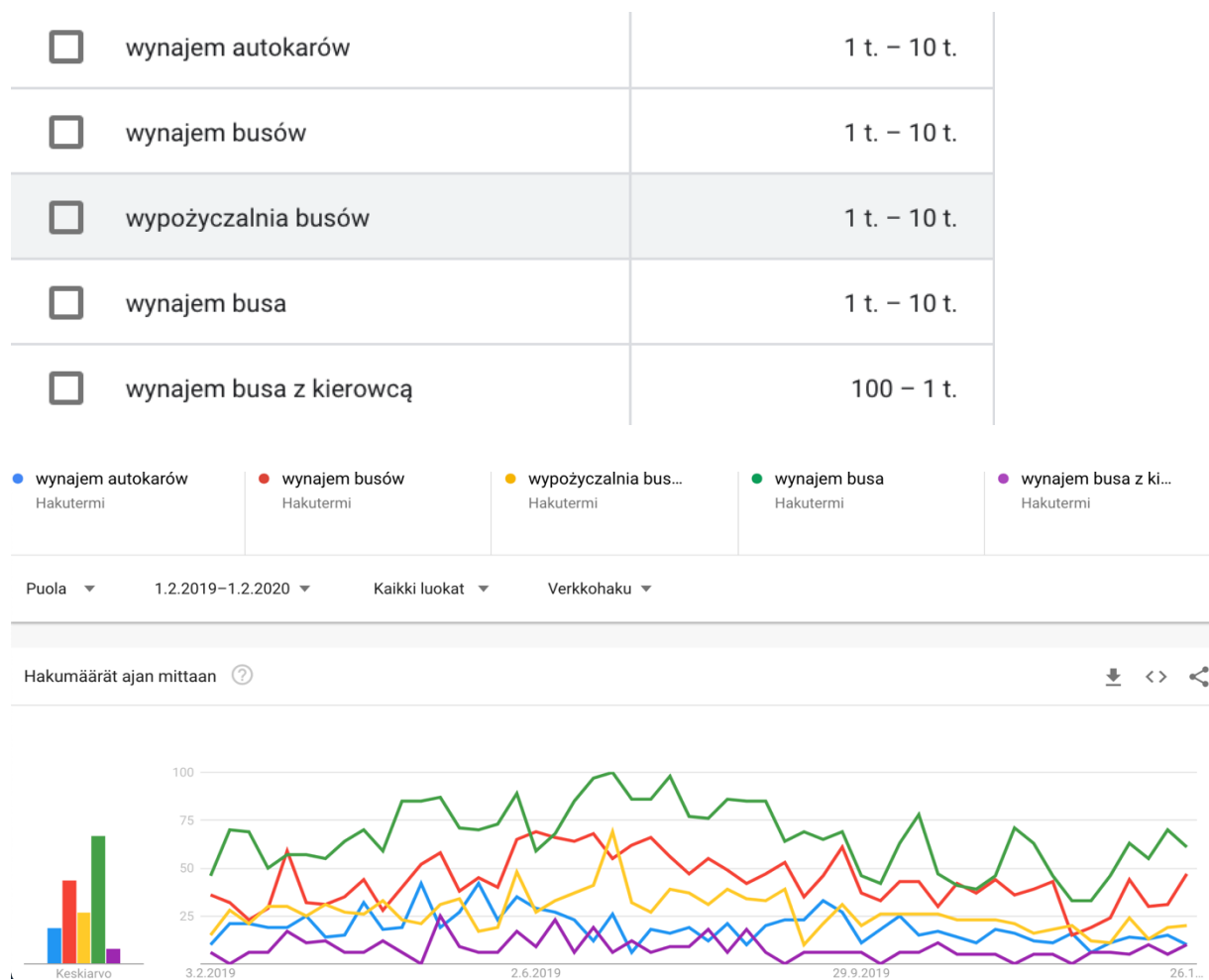


Figure 8. Example Google Analytics keyword search results from Poland.

5.3.3 Results

The results of the knock-out phase can be seen in Appendix 1. The model was a bit adjusted from the original model to include two color-coded categories to increase the possibility of screening. Rules were set, and the red color in any of the categories meant that knock-out

criteria were met, and the yellow color meant that the category was challenging in the country but not enough for the straight knock-out. However, three of the yellow categories resulted in a knock-out. The evaluation and choosing of the colors were done in collaboration with the case company management. Model screened out 20 countries out of 25 (15 red and 5 with three yellows), leaving 5 countries to be evaluated in the second screening phase.

The most dividing category was the number of competitors, which screened out 8 countries, including some of the bigger markets. The red color knock-out criterion was set to range from 4 to 8 competitors already in the country. These markets were deemed too saturated to be attractive for the first international market entry. The yellow color was given to countries with 2 or 3 direct competitors. Three countries were knocked out due to challenges in the markets. These were mainly due to the political risk or lack of knowledge about the market. No countries were knocked out of the profitability category. However, some countries were given yellow color due to low market size or potential. Technological level knocked out 5 countries with the red color. These were due to low positions in the digital index indicators, but mostly due to the low level of the market's online bus rental sites, which suggests low readiness to use the case company's product.

5.4 Phase 2 – BD Market Evaluation -matrix

The final phase of the IMS process evaluates and ranks the remaining countries with the BD market evaluation -matrix. It is built on the MACS model (also, GE-McKinsey -matrix) that was introduced in the third chapter. The modifications to it, are based on the theory chapters' findings and findings from the previous phase. The adjustments were made to enable a better evaluation of the BD company's online market entry. Also, the case company is making its initial market entry, which requires adjustments to the model. As in Hollensen's (2019) MACS model, this screening phase includes the questionnaire that determines the scores of the dimensions and the matrix that portrays the results in an easily observable way and categorizes the countries into classes.

The scoring in the questionnaire is based on several variables in market attractiveness and competitiveness dimensions. Variables were chosen to represent general, BD-specific, and industry-specific factors. Each of the variables was given a weighting based on the importance and quality of the information available. The scoring thresholds were established by fitting the

highest and lowest values to the 1,3,5 -scale, with 1 being the lowest and 5 the highest value. Using a scale of 1,3,5 instead of 1,2,3,4,5 will spread the result more evenly and make the matrix more perceivable (Hollensen 2019). The results are shown in the matrix as shown in Figure X. The model positions the countries in the matrix to A, B, and C classes based on their market attractiveness and competitiveness scoring.

5.4.1 Market Attractiveness variables

The market attractiveness variables (Table 3) are divided into three categories: *profitability*, *level of digitalization*, and *cultural distance*. The weighting is set to all 10 variables, based on the estimated importance and reliability. Neutral weight is 0,1 and together all weights add up to 1,0. All choices of the categories, variables, and weights are explained in the following:

Profitability category variables can be further divided into variables that measure a country's economy's size and the transportation industry's size. The size of the economy is measured by the country's GDP, GDP growth, and population. The industry size is measured by the usage of busses as a transportation method. The statistics found, were the number of busses in proportion to population and the development in the number of busses. GDP and population size variables were given higher weight as they are reliable data and indicate the size of the market. Because of the nature of the case company's product, it benefits from the more sizeable market. Industry size variables were given lower weights, because of their lesser relevance and reliability to represent the industry size. However, if more reliable industry size variables would be available, their weight should be increased. In small industries, such as private transportation, these types of data are not typically recorded or available in all countries.

The level of digitalization category includes similar measures to in Phase 1 technological level, which is for measuring customer technological readiness to use the case company services and the overall level of the country's digitalization. It includes the digital competitiveness ranking, enabling digitalization index, and digital service usage. The digital competitiveness ranking and enabling digitalization index were given neutral weights as they represent more of the overall digitalization. The digital service usage was given a bit higher weight, 0,15 because it is a more relevant indicator for the case company's products success in the market.

The cultural distance category measures the likelihood of an increase in uncertainty and unexpected cost due to cultural differences and psychic distance. It is measured by the ease of

doing business index and with the estimation of psychic distance. The psychic distance was estimated as the differences in language and cultures. Both of these were given lower weights, ease of doing business being a less accurate indicator and psychic distance not as reliable being only an estimation.

Table 3. Market attractiveness variables and weights

Category	Variable	Weight (1,0)	
<i>Profitability</i>	Economy size	Gross Domestic Product	0,15
		GDP Growth	0,1
		Population	0,2
	Industry size	Population to Number of Busses	0,05
		Growth in the Number of Busses	0,05
<i>Level of Digitalization</i>	Digital Competitiveness		0,1
	Enabling digitalization index		0,1
	Digital Service Usage		0,15
<i>Cultural Distance</i>	Ease of doing business		0,05
	Psychic distance		0,05

5.4.2 Competitive strength variables

The competitive strength indicators were chosen to measure the strength of the case company in comparison to the strength of competitors in the target market. In Hollensen's (2019) MACS model, the company is expected to already have a presence in some international markets. Because of the different starting point, the case company is making the initial market entry, variables are adjusted accordingly for the absence of previous experience, and some estimations are required to be made.

The competitive strength dimension (Table 4) has three variable categories: *direct competitors*, *indirect competition*, and *market demand*. Same as in the market attractiveness variables, the weighting is set to all 5 variables, based on the estimated importance and reliability. Neutral weight is 0,2 and together all weights add up to 1,0. All choices of the categories, variables, and weights are explained in the following:

Table 4. Competitive strength variables and weights

Category	Variable	Weight (1,0)
<i>Direct competition</i>	Number of direct competitors	0,4
	The level of direct competitors	0,2
<i>Indirect competition</i>	The level of competing bus services	0,1
	Usage of busses compared to other transport methods	0,1
<i>Fit to Market</i>	Product fit to market demand	0,2

Direct competition is the most important category of the three. It indicates how much competition there is in the market and is there any competitive advantage against them. Also, the case company management's preference was not to enter to highly competed market as their first foreign market. The first variable is the number of direct competitors. These competitors offered comparable services to the case company's product and were already operating in the market. This was the most weighted with 0,4. The second variable was chosen to indicate the level of competition that these competitors provided. This was measured by comparing competitors' products to the case company's, the level of service quality, and the usefulness of the service (i.e., how many offers the service provided for the customer or was the number of transport companies limited). This variable was assigned with a neutral 0,2 weight.

The indirect competition was measured with two different types of variables: competition from bus companies that offer online booking services and the strength of other methods of transportation. The first one was chosen to measure the competitive strength of larger bus transportation companies. These companies usually run scheduled bus lines, but sometimes offer chartered booking services, although without the possibility to price comparison. The

second variable measures bus usage in comparison to other transportation methods in the country and estimates the competitive strength and demand for bus services against them in the country. As both of these are indirect competition indicators and their effects are not as verifiable, weighting is a bit lower at 0,1.

Market demand is the estimation of the applicability of the product to the markets and its consumers. This is measured by estimating the overall level of bus transportation sites and to the search engine keyword statistics in Google Ads and Trends. In some countries, especially in Phase 1, it was evident that the private transportation companies' websites were outdated and of low quality. This indicates the low demand for online booking for these types of services. Statistics from Google keyword searches were also included as a factor. Together an estimation was made of the market fit and the overall demand for the online price comparison service. The weight was set to neutral 0,2.

5.4.3 Data collection

The data collection started by collecting the data from the secondary source databases that were chosen as variables for the dimensions. The data required to measure and estimate the competitive strength variables were collected by closely analyzing all of the websites of direct and indirect competitors. After all the data was gathered, the thresholds for the scoring were set for each variable of both dimensions, as can be seen in Table 5 for market attractiveness and in Table 6 for competitive strength. The thresholds were set by proportioning the lowest highest country scoring values to the 1,3,5-scale evenly.

Table 5. Market attractiveness variable thresholds [Data sources in Appendix 2]

Indicator explanation	1	3	5
GDP per capita ppp (thousand \$) (2018) [1]	≤ 35 000	35 000 – 55 000	≥ 55 000
GDP ppp average yearly growth -% (2015-2019) [1]	≤ 0 %	0 – 3 %	≥ 3 %
Population (2018, millions) [2]	≤ 10	10 – 20	≥ 20
Population / number of busses (2017) [3] Appendix 3	> 500	500 – 400	< 400
Bus number trend % (2010-2017) [3] Appendix 4	Down	No change	Up
World digital competitiveness -index (2019) [4]	≤ 70	70 – 90	≥ 90
Enabling digitalization -index (2018) [5]	≤ 50	50 – 80	≥ 80
Digital Economy and Society -index, digital service usage (2020) [6] Appendixes 3 & 4	≤ 50	60 – 80	≥ 80
Ease of Doing Business -index (2019) [7]	≤ 60	60 – 80	≥ 80
Estimation of psychic distance	Large	Medium	Small

Table 6. Competitive strength variable thresholds

Indicator explanation	1	3	5
Number of price comparison sites	≥ 2	1	0
Direct competitor level compared to case company's product	Stronger	Equal	Weaker
Level of competition from other bus service providers	Strong	Medium	Weak
Number of busses of all transportation -% (Car, Bus, Train, Subway & Tram) (2017) [3] Appendix 4	≤ 6%	6 – 10%	≥ 10%
Products fit to observed market demand	Weak	Medium	Good

After the scoring thresholds were set, the variable scores for each country were calculated and then inserted into the table with the weights. Adding together the weighted scores of each variable, overall scores for market attractiveness (Table 7) and competitive strength (Table 8) were obtained.

Table 7. Market attractiveness scores

Variable	Weight	PL	CZ	SE	DK	NO
GDP per capita	0,15	1	3	5	5	5
GDP Growth	0,1	5	5	3	5	3
Population	0,2	5	3	3	1	1
Number of busses to population	0,05	5	3	3	3	5
Growth in the number of Busses	0,05	5	5	3	3	1
Digital competitiveness index	0,1	3	3	5	5	5
Enabling digitalization index	0,1	3	3	5	5	5
Digital service usage	0,15	1	3	5	5	5
Ease of doing business	0,05	3	3	5	5	5
Psychic distance	0,05	3	3	5	5	5
SUM	1,00	3,2	3,3	4,2	4	3,8

Table 8. Competitive strength scores

Variable	Weight	PL	CZ	SE	DK	NO
Number of direct competitors	0,4	3	5	3	1	5
Level of direct competitors	0,2	5	5	3	3	5
Level of competing bus services	0,1	3	5	3	5	3
Busses compared to other transport	0,1	5	5	3	3	1
Product fit to market demand	0,2	5	1	5	5	3
SUM	1,00	4	4,2	3,4	2,8	4

5.4.4 The results of the BD Market Evaluation -matrix

By combining the scores of market attractiveness and competitive strength, the remaining five countries were positioned on the matrix (Figure 9). The results show that two countries (Norway and Sweden) are in the A category and three countries (Czech, Poland, and Denmark) are in the B category.

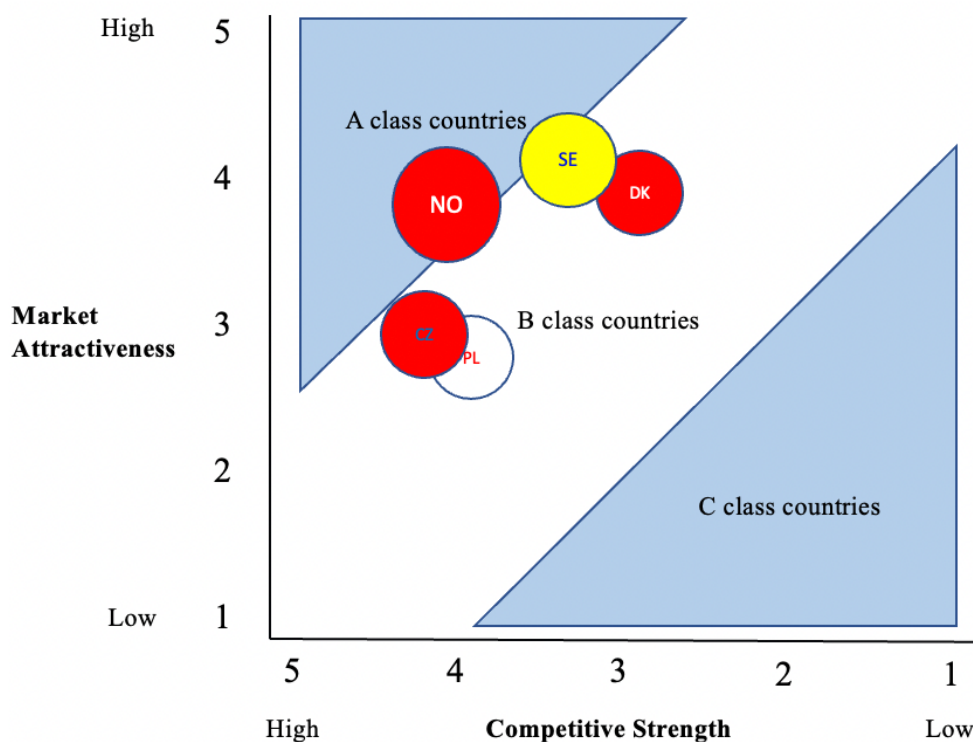


Figure 9. BD market evaluation -matrix results

Norway is the closest to the top corner of the A-class and places first in the ranking. While Norway has the smallest population of the remaining countries, scores show that it has economical potential, cultural similarity, and technological readiness to use online services. The lack of direct competitors is a large factor, which raises the competitive strength of the case company.

Sweden and Denmark are high in the market attractiveness dimension, with Sweden having the highest total score. However, relative competitive strength is lower in both, especially in Denmark, as there are strong direct competitors already in the market. Poland and Czech rate high in the competitive strength dimension, as both have low competition and a high percentage

of bus usage. However, the market attractiveness for both is lower, which drops them from the top rankings. Especially, the low scores from the level of digitalization category variables make them less attractive to initial expansion target markets.

6 DISCUSSION AND CONCLUSIONS

The final chapter of the thesis discusses the results of the research and provides conclusive remarks. First, the findings of the research are discussed, and research questions are answered. Secondly, theoretical contributions and managerial implications of the study are provided. Finally, limitations and future research suggestions are presented.

6.1 Discussion

First, each research question is given the answers that were found in the empirical research and connects the findings to the previous research.

Main research question 1: How the fully digital business model affects born digital company internationalization?

Previous literature has stated that BD internationalization is different from FDI and exports-based company internationalization (Cahen, Borini 2018), and many scholars suggest that new internationalization theories might be needed for digital companies (Luo 2021, Nambisan 2017, Wentrup 2016). The case study findings suggest that the digital business model shifts the focus from physical assets and stakeholders to digital factors. An example of this would be the case company's lack of need for physical presence in the target market, which leads to more importance on the target country's technological infrastructure and customer online behavior. However, not all physical factors should be forgotten, such as market research on local transportation companies, but the difference is that no direct investments are needed to begin the operations.

Digital technologies and business models enable faster, more cost-efficient, flexible, and scalable entry to international markets through online channels (Coviello, Kano et al. 2017, Monaghan, Tippmann et al. 2019, Vadana, Kuivalainen et al. 2021). The case study findings support the previous literature. Even smaller firms with lower resources, like the case company, are able to leverage the digital business model and overcome the resource and knowledge disadvantages that normally would hinder internationalization and growth efforts (Bell, Loane

2010). The case study backs the previous findings that BDs are able to use online website data to identify attractive markets (Coviello, Kano et al. 2017), which makes market research cheaper and more accessible. The ability to internationalize faster does not mean that every BD will and should do it. The findings of this study back Hennart's (2014) evidence that not all digital companies pursue rapid expansion, but rather a more controlled and slower approach. The case company has been operating for multiple years only in its home market and is pursuing slower expansion.

Sub-question 1: What are the opportunities and threats that digital companies face when expanding to international markets?

It can be said that digitalization brings many new opportunities to companies that have the skills and knowledge to exploit the technological advantages in their internationalization. Digital companies have gained the ability to avoid or remove multiple traditional barriers that have slowed early internationalization. (Annaële Hervé, Schmitt et al. 2020, Ojala, Evers et al. 2018) BDs have the opportunity to enter international markets only by changing their online service product, platform or app language, and website location (Ojala, Evers et al. 2018). The case company findings support this, as their market entry will happen online, which opens the choice to enter almost any country in the world. Thus, from the case company viewpoint, the country's geographical location is not a barrier, as it would be for a traditional manufacturing company. Other opportunities that BD companies have are flexibility and scalability. The adaptability of BDs enables them to learn quickly and change direction if needed. Also, if the initial expansion is successful, the digital business model is easily scalable to other countries. (Monaghan, Tippmann et al. 2019)

On the other hand, not all internationalization barriers have been removed and even new threats can be identified. Cultural differences still created some differences, as the customer behavior is connected to the culture and customs of the target market. Threats of being stuck as an outsider, because of unfamiliarity, relational and discriminatory hazards concern also digital companies (Brouthers, Geisser et al. 2016, Eden 2018). The technological level of the country might prove to be a bottleneck for market entry (Ojala, Evers et al. 2018). As the findings of the case study showed, many countries were screened out because of their lacking level of digital development. One threat intensified by digitalization is improved competition. As the

market entry gets easier and cheaper, the competition begins to come from multiple different countries (Katsikeas, Leonidou et al. 2020). In the case study, this was seen especially in the bigger countries where multinational digital companies were filling the market.

Main research question 2: How online market entry strategy of BD companies affects the international market selection process?

The main effects of an online market entry strategy on the international market selection process are the digital factors affecting the selection of markets and changes to the market evaluation dimensions. Studies have pointed out that online BD companies are selecting their international markets based on the level of technological infrastructure and the internet market size of the country (Schu, Morschett et al. 2016, Vadana, Kuivalainen et al. 2021). The findings of the case study showed the significant importance of the technological level of the target market. This could be seen as low scores on digitalization indexes, low number of online service searches, and low numbers of potential customers that are using the internet as the primary sales channel. Digital companies have to incorporate the evaluation of internet market size into their IMS process.

Another highlighting effect on the IMS process was the amount of competition. Digitalization increases the online competition coming from around the world (Katsikeas, Leonidou et al. 2020), which showed in the case research results. The case study findings suggest that competitive saturation can affect market selection. BD companies have to carefully research how many similar products are on the markets already and what is the quality level of them.

Sub-question 2: How the target markets for digital companies can be evaluated and ranked?

This thesis proposes two models for digital company market evaluation and tests them in the empirical case study. The models of this study were based on the Hollensen (2019) knock-out criteria and MACS models, which were created to evaluate manufacturing companies that were making a physical market entry. For digital company purposes, those models had to be adjusted, so the findings from the other research question were used to find the answer to this supporting research question.

In the first phase, knock-out criteria, to adjust the model for digital companies, variable categories for competition and technological level of the country were added beside the typical macro-level dimensions of market size and cultural and political risk. These added two dimensions were, highlighted in the other research questions. The results of the new model identified many countries, with overly saturated markets and with low technological levels, which would have otherwise been attractive markets. Those countries were knocked out and not needed to be investigated any further.

In the BD market evaluation matrix, the variables in the market attractiveness and the competitive strength dimensions were selected to improve the evaluation of the online markets of BD company. In the market attractiveness dimension, digital product-specific variables were chosen to measure the internet market attractiveness. In the profitability category, to get a closer view of the market demand, industry-specific variables were selected along with typical market size variables.

The competitive strength dimension needed larger remodeling to give a more accurate evaluation of the BD company. In the Hollensen (2019) model, variables are chosen to evaluate a company and product that is already made an expansion to at least some international markets. In this study, the case company is in its early internationalization phase and making its initial market entry. The focus is on measuring the competition and evaluating its strength in relation to the case company, which was seen as important in the theoretical review of this thesis and in the first screening phase. To complete the dimension, fit to market demand was evaluated.

6.2 Theoretical contributions and managerial implications

This thesis aims to contribute to the growing but still lacking literature on digital company internationalization, in which research gaps have been identified by multiple scholars (Nambisan 2017, Vadana, Torkkeli et al. 2019, Wentrup 2016). This study specifically adds to research on recently identified born digitals and brings understanding to this entirely new area of IB literature. The contributions can be divided into two categories based on the two main themes of the thesis: born digital internationalization and born digital IMS process.

For a while, scholars have raised questions that the traditional internationalization theories do not apply to digital companies (Monaghan, Tippmann et al. 2019, Schmitt, Baldegger 2020).

An entirely new theory has not been developed but multiple studies have researched the differences. The findings of this study back the findings of some of these studies and offer new insight into BD internationalization. The case study supports the findings of BD company's ability to enter international markets easier and cheaper through online market entry (Katsikeas, Leonidou et al. 2020), while also backing the findings that not all digital companies enter international markets rapidly and widely (Hennart 2014). The importance of technological requirements in early internationalization (Ojala, Evers et al. 2018) was also highlighted in the case study findings.

The second theme and the main theoretical contribution of this thesis is the IMS process model adjusted for digital companies. As the literature review shows, there is hardly any literature on ISM models for digital companies. The IMS models available, are made for traditional companies with physical products. The two models created and tested in the case study, show an example process of how a BD SME can screen, evaluate, and rank the target markets for its initial international expansion. The findings in testing the IMS models, support the previous findings on BD internationalization and characteristics of digital companies that affect the IMS process. The case study findings support the previous literature on the importance of competition and technological capabilities in the IMS.

This thesis provides a practical IMS process model that can be used in other SMEs that are entering markets through the internet. It helps the management to make important market selection decisions based on measurable factors and indicators, instead of relying on the feeling of the best market. The two models can be used as tools in other BD companies with digital products, by changing the industry-specific variables to their own industry. The use of secondary data in the IMS is cost-effective and gives a crucial advantage for SMEs that are operating on limited resources. This study provides a practical example of how data from online databases and analytics sites can be collected and used to contribute to decision-making.

6.3 Limitations and future research

Some limitations should be considered when evaluating the findings of this study. Firstly, the single case method of this study limits the generalization of the results. The market evaluation models were tested only in the case company's product type and industry environment. A multiple case study would have provided the opportunity to compare if the models would

function similarly with different types of products. Secondly, as the data was collected from secondary sources, it limits the validity of the findings. The choice of using only secondary data was dependent on the type of data that was needed to conduct the collaborative research of the IMS process. Adding primary sources would have improved the reliability of the study.

This thesis provides only a small part of the research that is yet to be done on digital company internationalization. While conducting this research, several aspects came up that could be looked at more specifically in future research. One factor that could be added to the IMS models is the legal aspect of international digital business. In future research, legal issues that appear when doing business in another country without being physically present could be studied more closely. The rules and regulations are constantly catching up with the new advancements brought by digitalization, which means that a lot of resources and legal knowledge are needed to fully understand the effects. An interesting and important dimension of the IMS is the significance of competition in the online markets. This study found the competition to be important in the initial international market entry, but further research could be conducted on how much existing competition matters to the success of new entrants and at which point online markets become saturated.

REFERENCES

- ANNAËLE HERVÉ, SCHMITT, C. and BALDEGGER, R., 2020. Internationalization and Digitalization: Applying digital technologies to the internationalization process of small and medium-sized enterprises. *Technology innovation management review*, **10**(7), pp. 29-41.
- AUTIO, E. and ZANDER, I., 2016. Lean Internationalization, 2016, pp. 17420.
- BARNEY, J., 1991. Firm resources and sustained competitive advantage. *Journal of management*, **17**(1), pp. 99-120.
- BELL, J. and LOANE, S., 2010. 'New-wave' global firms: Web 2.0 and SME internationalisation. *Journal of Marketing Management*, **26**(3-4), pp. 213-229.
- BRENNEN, J.S. and KREISS, D., 2016. Digitalization. *The international encyclopedia of communication theory and philosophy*, , pp. 1-11.
- BROUHERS, K.D., GEISSER, K.D. and ROTHLAUF, F., 2016. Explaining the internationalization of ibusiness firms. *Journal of International Business Studies*, **47**(5), pp. 513-534.
- BUCKLEY, P.J. and CASSON, M., 1976. The Future of the Multinational Enterprise. *Palgrave Macmillan Books*, .
- CAHEN, F. and BORINI, F., 2018. Explaining Internet Companies' Internationalization: An Approach of Competences. *Academy of International Business-Latin America Chapter Proceedings, Buenos Aires-Argentina*, .
- COVIELLO, N.E. and MUNRO, H.J., 1995. Growing the entrepreneurial firm: networking for international market development. *European journal of marketing*, **29**(7), pp. 49-61.
- COVIELLO, N., KANO, L. and LIESCH, P.W., 2017. Adapting the Uppsala model to a modern world: Macro-context and microfoundations. *Journal of International Business Studies*, **48**(9), pp. 1151-1164.
- DOUGLAS, S.P. and SAMUEL CRAIG, C., 2011. The role of context in assessing international marketing opportunities. *International marketing review*, **28**(2), pp. 150-162.
- DUBOIS, A. and GADDE, L., 2002. Systematic combining: an abductive approach to case research. *Journal of business research*, **55**(7), pp. 553-560.
- DUNNING, J.H., 2000. The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International business review*, **9**(2), pp. 163-190.
- EDEN, L., 2018. The fourth industrial revolution: Seven lessons from the past. *International business in the information and digital age*. Emerald Publishing Limited, .

- EDEN, L., 2016. Multinationals and foreign investment policies in a digital world, *E15Initiative, International Centre for Trade and Sustainable Development and World Economic Forum, Geneva. www.e15initiative.org* 2016.
- ELLIS, P., 2000. Social Ties and Foreign Market Entry. *Journal of International Business Studies*, **31**(3), pp. 443-469.
- FREYTAG, P.V. and YOUNG, L., 2018. *Collaborative Research Design*. Springer.
- GASTON-BRETON, C. and MARTIN, O.M., 2011. International market selection and segmentation: a two-stage model. *International marketing review*, **28**(3), pp. 267-290.
- HENNART, J., 2014. The Accidental Internationalists: A Theory of Born Globals. *Entrepreneurship theory and practice; Entrepreneurship Theory and Practice*, **38**(1), pp. 117-135.
- HOLLENSSEN, S., 2019. *Hollensen: Global Marketing_p8*. Pearson Education.
- JACOBIDES, M.G., SUNDARARAJAN, A. and VAN ALSTYNE, M., 2019. Platforms and ecosystems: Enabling the digital economy, *World Economic Forum Briefing Paper. World Economic Forum: Switzerland* 2019.
- JOHANSON, J. and MATTSSON, L., 1988. Internationalisation in Industrial Systems-A Network Approach.
- JOHANSON, J. and VAHLNE, J., 2009. The Uppsala internationalization process model revisited: From liability of Foreignness to Liability of Outsidership. *Journal of International Business Studies*, **40**(9), pp. 1411-1431.
- KATSIKEAS, C., LEONIDOU, L. and ZERITI, A., 2020. Revisiting international marketing strategy in a digital era: Opportunities, challenges, and research directions. *International marketing review*, **37**(3), pp. 405-424.
- KNIGHT, G.A. and CAVUSGIL, S.T., 2004. Innovation, Organizational Capabilities, and the Born-Global Firm. *Journal of International Business Studies*, **35**(2), pp. 124-141.
- LUO, Y., 2021. New OLI advantages in digital globalization. *International Business Review*, **30**(2), pp. 101797.
- MÄKILÄ, T., JÄRVI, A., RÖNKKÖ, M. and NISSILÄ, J., 2010. How to define software-as-a-service—an empirical study of finnish saas providers, *International Conference of Software Business* 2010, Springer, pp. 115-124.
- MCDOUGALL, P.P. and OVIATT, B.M., 1994. Toward a Theory of International New Ventures. *Journal of International Business Studies*, **25**(1), pp. 45-64.
- MONAGHAN, S., TIPPMANN, E. and COVIELLO, N., 2019. Born digitals: Thoughts on their internationalization and a research agenda. *Journal of International Business Studies*, **51**(1), pp. 11-22.

- NAMBISAN, S., 2017. Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship. *Entrepreneurship theory and practice*, **41**(6), pp. 1029-1055.
- OJALA, A., EVERS, N. and RIALP, A., 2018. Extending the international new venture phenomenon to digital platform providers: A longitudinal case study. *Journal of world business : JWB*, **53**(5), pp. 725-739.
- OVIATT, B.M. and MCDOUGALL, P., 1995. Global start-ups: Entrepreneurs on a worldwide stage. *The Academy of Management executive (1993)*, **9**(2), pp. 30-43.
- RAHMAN, S.H., 2003. Modelling of international market selection process: a qualitative study of successful Australian international businesses. *Qualitative market research*, **6**(2), pp. 119-132.
- RITTER, T. and PEDERSEN, C.L., 2020. Digitization capability and the digitalization of business models in business-to-business firms: Past, present, and future. *Industrial Marketing Management*, **86**, pp. 180-190.
- RUSSOW, L.C. and OKOROAFIO, S.C., 1996. On the way towards developing a global screening model. *International marketing review*, **13**(1), pp. 46-64.
- SARFARAZ, H.Z., ALI, E.T., ECER, F., TURSKIS, Z. and JONAS ŠAPARAUSKAS, 2021. International market selection: a MABA based EDAS analysis framework. *Oeconomia Copernicana*, **12**(1), pp. 99.
- SCHMITT, C. and BALDEGGER, R., 2020. Editorial: Digitalization and Internationalization. *Technology innovation management review*, **10**(4), pp. 3-4.
- SCHU, M., MORSCHETT, D. and SWOBODA, B., 2016. Internationalization Speed of Online Retailers: A Resource-Based Perspective on the Influence Factors. *Management International Review*, **56**(5), pp. 733-757.
- SCHWAB, K., 2017. *The fourth industrial revolution*. Currency.
- SINKOVICS, N., SINKOVICS, R.R. and "BRYAN" JEAN, R., 2013. The internet as an alternative path to internationalization? *International marketing review*, **30**(2), pp. 130-155.
- UNCTAD, U., 2017. World Investment Report 2017: investment and the digital economy, *United Nations Conference on Trade and Development, United Nations, Geneva 2017*.
- VADANA, I., KUIVALAINEN, O., TORKKELI, L. and SAARENKETO, S., 2021. The Role of Digitalization on the Internationalization Strategy of Born-Digital Companies. *Sustainability (Basel, Switzerland)*, **13**(24), pp. 14002.
- VADANA, I., TORKKELI, L., KUIVALAINEN, O. and SAARENKETO, S., 2019a. Digitalization of companies in international entrepreneurship and marketing. *International marketing review*, **37**(3), pp. 471-492.
- VADANA, I., TORKKELI, L., KUIVALAINEN, O. and SAARENKETO, S., 2019b. *The Internationalization of Born-Digital Companies*. Palgrave Macmillan, Cham.

VAHLNE, J. and JOHANSON, J., 1977. The Internationalization Process of the Firm-A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*, **8**(1), pp. 23-32.

VAQUERO, L.M., RODERO-MERINO, L., CACERES, J. and LINDNER, M., 2008. A break in the clouds: towards a cloud definition. *Computer communication review*, **39**(1), pp. 50-55.

WENTRUP, R., 2016. The online–offline balance: internationalization for Swedish online service providers. *Journal of international entrepreneurship*, **14**(4), pp. 562-594.

WILLIAMSON, O.E., 1986. *Economic organization: firms, markets and policy control*. New York University Press New York.

YIN, R.K., 2013. Validity and generalization in future case study evaluations. *Evaluation (London, England.1995)*, **19**(3), pp. 321-332.

YIN, R.K., 2009. *Case study research : design and methods*. 4 edn. Los Angeles, CA: SAGE.

YIN, R.K., 2003. *Applications of case study research*. 2 edn. Thousand Oaks (CA): Sage.

APPENDICES

Appendix 1. The knock-out results table

Country (order of inhabitants, high to low)	Number of competitors (direct)*	Challenge in the markets	Profitability	Technological level of the country
Russia	0			
Germany	7			
Turkey	1			
France	8			
UK	6			
Italy	4 (3)			
Spain	4			
Ukraine	0			
Poland	3 (0-1)			
Romania	0			
Netherlands	6			
Belgium	5			
Greece	0			
Czech	0			
Portugal	5			
Sweden	2 (1)			
Azerbaijan	0			
Hungary	2			
Belarus	0			
Austria	6			
Switzerland	3 (1) **			
Bulgaria	1			
Serbia	1			
Denmark	2 (1)			
Norway	0			
Red = Knock-out criteria filled, straight knock-out				
Yellow = Challenging factor, 3 x yellow = knock-out				
* The number in parentheses is the number of direct competitors that offer similar or almost similar service than the case company. Not notified in heavily competed countries.				
** Only one direct competitor in Switzerland, but also competition coming from neighboring countries.				

Appendix 2. BD market evaluation data sources

1. The World Bank (2018) GDP per capita PPP (current international \$), available:
<https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD?end=2018&start=2015>
2. Eurostat (2019) Data Browser, Population, available:
<https://ec.europa.eu/eurostat/databrowser/view/tps00001/default/table?lang=en>
3. European Commission (2019) EU Transport Statistical Pocketbook 2019, available:
https://ec.europa.eu/transport/facts-fundings/statistics/pocketbook-2019_en
4. IMD (2019) World Digital Competitiveness Ranking, available:
<https://www.imd.org/wcc/world-competitiveness-center-rankings/world-digital-competitiveness-rankings-2019/>
5. Euler Hermes (2018) Enabling Digitalization Index, available:
https://www.eulerhermes.com/en_global/news-insights/news/enabling-digitalization-index-2018-measuring-digitagility.html
6. European Commission (2020) Digital Economy and Society Index, available:
<https://ec.europa.eu/digital-single-market/en/scoreboard/norway>
7. The World Bank (2019) Ease of Doing Business Ranking, available:
<https://www.doingbusiness.org/en/rankings>
8. NHO Transport (2019) Tourbusmarknader i Norge, available:
<https://www.transport.no/siteassets/dokumenter/rapporter/turbussmarkedet-rapport---nho-transport.pdf>
9. Sveriges Bussföretag (2018) Statistik om bussbranchen, available:
<https://www.transport.no/siteassets/dokumenter/rapporter/turbussmarkedet-rapport---nho-transport.pdf>
10. Transport styrelsen (2019) Transport marknaden i siffror, available:
<https://www.transportstyrelsen.se/globalassets/global/publikationer/marknadsovervakning/transportmarknaden-i-siffror-2019.pdf>

Appendix 3. Bus number trends in Europe

TRANSPORT - MEANS OF TRANSPORT

Road
BUSES AND COACHES

2.6.3

STOCK OF REGISTERED VEHICLES

	1 000								%
	1990	1995	2000	2005	2010	2015	2016	2017	CHANGE 16/17
EU-28	740.3	754.0	781.5	795.2	819.2	840.2	849.6	859.0	1.1
BE	15.6	14.6	14.7	15.4	16.2	17.1	16.0	16.0	0.1
BG	34.6	41.8	43.0	37.8	24.5	24.1	23.4	21.0	-10.3
CZ	20.5	20.5	19.0	20.9	20.4	20.7	20.9	21.4	2.5
DK	8.1	13.7	14.0	14.4	14.5	13.4	13.4	13.5	0.6
DE	100.4	85.4	77.2	75.2	76.5	78.3	78.9	79.4	0.6
EE	7.9	7.0	6.1	5.2	4.2	4.8	4.8	4.9	2.1
IE	4.0	5.3	7.0	7.6	8.2	9.3	9.8	10.3	4.7
EL	21.4	24.6	27.0	26.8	27.3	26.5	26.5	26.4	-0.3
ES	45.8	47.4	54.7	58.2	62.4	60.3	61.8	63.6	2.8
FR	70.0	79.0	85.7	90.1	91.5	99.0	100.3	100.9	0.5
HR	5.8	3.9	4.7	4.9	4.9	5.3	5.5	5.7	3.4
IT	77.7	75.0	88.0	94.4	99.9	98.0	97.8	99.1	1.3
CY	2.3	2.7	2.9	3.2	3.4	2.7	2.8	3.0	5.6
LV	12.1	16.5	11.5	10.6	5.4	4.8	4.7	4.7	0.1
LT	15.2	17.6	15.5	15.3	13.7	6.9	6.9	7.2	4.0
LU	0.8	0.9	1.1	1.3	1.6	1.9	1.9	2.0	5.0
HU	26.4	20.5	17.9	17.5	17.6	18.1	18.5	18.7	1.2
MT	1.0	1.0	1.1	1.1	1.8	2.0	2.0	2.1	3.7
NL	12.1	11.6	11.4	11.0	11.3	9.4	9.8	9.9	0.8
AT	9.4	9.8	9.9	9.3	9.6	9.7	9.8	10.0	1.8
PL	92.4	85.4	82.6	79.6	97.0	109.8	113.1	116.1	2.6
PT	12.1	15.0	19.8	14.7	15.4	14.7	14.9	15.2	2.4
RO	28.3	42.0	40.7	39.3	40.9	47.3	48.8	50.3	3.1
SI	3.1	2.5	2.3	2.3	2.4	2.6	2.7	2.8	3.8
SK	14.3	11.8	10.9	9.1	9.4	9.3	9.1	9.2	1.6
FI	9.3	8.1	9.9	10.9	13.7	16.9	17.5	18.1	3.2
SE	14.6	14.6	14.4	13.5	13.9	14.1	13.9	14.4	3.7
UK	75.0	75.9	88.6	105.6	111.5	113.3	113.9	113.2	-0.6
AL		6.7	16.8	29.5	7.0	6.4	7.1	6.8	-3.5
ME						1.3	1.4	1.5	9.5
MK	2.3	2.5	2.5	2.3	2.7	3.2	3.2	3.2	-0.9
RS				9.7	8.0	9.5	9.6	9.9	2.8
TR	188.1	263.2	354.3	501.9	595.5	666.3	684.3	700.5	2.4
IS	1.3	1.3	1.7	1.9	1.9	2.5	2.9	3.1	9.4
NO	21.2	32.5	36.7	28.8	20.3	16.7	16.3	16.0	-1.6
CH	31.2	36.5	40.3	45.8	52.8	65.7	69.7	73.8	5.9
LI			0.1	0.1	0.1	0.1	0.1	0.1	2.0

Notes: Stock at end of year, except for BE: 1 August, CH: 30 September, LI: 1 July.
Data include buses, coaches, minibuses and sometimes also trolleybuses.

Appendix 4. Percentage of buses in passenger transportation in Europe

TRANSPORT - PERFORMANCE OF PASSENGER TRANSPORT
EXPRESSED IN PASSENGER-KILOMETRES

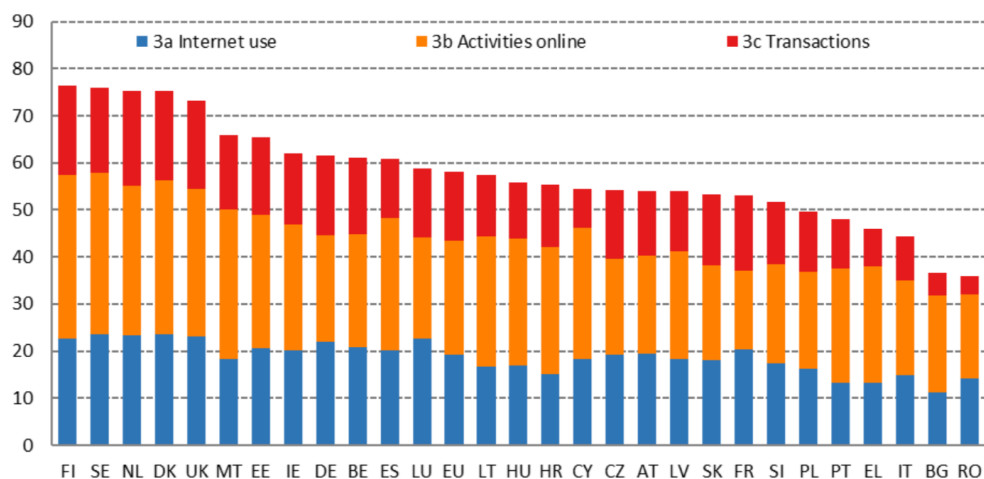
Modal Split of Passenger Transport 2.3.3 on Land 2017 – BY COUNTRY

	pkm as %			
	PASSENGER CARS	BUSES & COACHES	RAILWAYS	TRAM & METRO
EU-28	81.8	8.5	7.8	1.8
BE	81.1	10.1	7.7	1.1
BG	81.5	14.9	2.0	1.5
CZ	66.2	15.7	8.4	9.7
DK	81.2	9.9	8.5	0.5
DE	84.2	5.6	8.6	1.5
EE	79.9	17.2	2.2	0.7
IE	82.3	14.3	3.1	0.3
EL	81.4	16.4	0.9	1.3
ES	83.5	7.7	6.9	1.9
FR	81.0	6.2	10.9	1.8
HR	82.7	13.1	2.3	1.9
IT	82.0	11.4	5.9	0.7
CY	81.0	19.0	-	-
LV	83.8	12.1	3.3	0.7
LT	91.1	8.0	0.9	-
LU	82.9	12.4	4.7	-
HU	67.6	20.4	8.6	3.4
MT	82.5	17.5	-	-
NL	85.3	2.8	11.3	0.5
AT	72.7	9.7	11.2	6.4
PL	77.2	13.5	7.6	1.6
PT	87.6	7.0	4.3	1.1
RO	75.4	14.1	4.4	6.1
SI	86.5	11.7	1.8	-
SK	73.8	15.6	9.9	0.7
FI	83.6	10.3	5.4	0.7
SE	81.7	7.0	9.4	1.9
UK	84.5	5.0	8.7	1.8
AL	89.0	11.0	0.0	-
ME	96.4	2.4	1.3	-
MK	87.5	11.9	0.6	-
RS	73.6	23.9	0.9	1.5
TR				
IS	88.1	11.9	-	-
NO	88.3	5.6	4.8	1.3
CH	77.3	5.0	16.8	0.9

Note: If powered two-wheelers are included, they account for 2.02% of the total in EU-28, while the share of the other modes becomes:

EU-28	80.2	8.4	7.7	1.8
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Appendix 5. DESI use of internet services in EU



Appendix 6. DESI use of internet services in Norway

3 Use of internet services	Norway		EU
	rank	score	score
DESI 2020	NA	80.6	58.0
DESI 2019	NA	78.0	55.0
DESI 2018	NA	76.6	51.8