

INTERNATIONALIZATION OF FINNISH DIGITAL SERVICE FIRMS

**Jyväskylä University
School of Business and Economics**

Master's Thesis

2021

**Author: Lilli Palkio
Subject: International Business and Entrepreneurship
Supervisor: Juha Kansikas**



**JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ**

ABSTRACT

Author Lilli Palkio	
Title Internationalization of Finnish digital service firms	
Subject International Business and Entrepreneurship	Type of work Master's Thesis
Date July/2021	Number of pages 59
<p>With the facilitating effect of both globalization and digitalization internationalization efforts of service sector have seen a substantial growth within the past decades. Furthermore, these advances have paved the way contemporary business opportunities, such as efficient creation/distribution of digital services. However, much of the previous research focusing on firm internationalization concerns the manufacturing industry and the existing theories have been created in the pre-digital era.</p> <p>Therefore, this study took a more modern perspective and focused on the internationalization process of digital service firms. This study was further limited to Finnish digital service firms which have lately broadened their business to foreign markets. To gain insight of the process, four semi-structured interviews were conducted. With a qualitative research this study aimed to explore and deepen the understanding of how such firms move to foreign markets. Furthermore, this study aimed to highlight the influence of physical distance, networks, and entrepreneurial behavior for the foreign expansion in the given context.</p> <p>The findings show that the internationalization process of Finnish digital service firms starts early after the establishment. Main reasons and motivation for foreign expansion emerges from strive for business growth, limited home markets and entrepreneurial/managerial orientation towards international operations. Online/offline presence of a digital service firm within the target market is dependent on the intangible/tangible factors of the offering. Moreover, market selection is based on strategic reasons, such as level of competition and socio-economic factors. Hence, the physical distance has a significant influence on the market-selection, whereas networks and entrepreneurial behaviour is relevant in terms of providing essential support, resources, and capabilities for the internationalization as a whole. Furthermore, foreign expansion can be considered as a necessary step when a Finnish digital service firm aims for business growth since the home market are limited.</p>	
Key words Internationalization, digital service firm, physical distance, networks, entrepreneurial behaviour	
Place of storage Jyväskylä School of Business and Economics	

TIIVISTELMÄ

Tekijä Lilli Palkio	
Työn nimi Suomalaisten digitaalisten palveluyritysten kansainvälistyminen	
Oppiaine Kansainvälinen kauppa ja yrittäjyys	Työn laji Pro Gradu -tutkielma
Päivämäärä Heinäkuu/2021	Sivumäärä 59
<p>Globalisaation ja digitalisaation myötä palvelusektorin kansainvälistyminen on kasvanut merkittävästi viime vuosikymmenien aikana. Lisäksi nämä edistysaskeleet ovat luoneet uusia liiketoiminta mahdollisuuksia, kuten digitaalisten palveluiden luominen/ tuottaminen. Aiemmat yritysten kansainvälistymistä koskevat tutkimukset ovat kuitenkin keskittyneet pitkälti tuotantoteollisuuteen ja olemassa olevat teoriat ovat luotu ennen digitalisoitumista.</p> <p>Tässä tutkimuksessa näkökulma kansainväistymiseen on modernimpi ja tutkimus keskittyy digitaalisten palveluviejien kansainvälistymisprosessiin. Tutkimus rajattiin koskemaan Suomalaisia digitaalisia palveluvientiyhtiöitä, jotka ovat laajentuneet ulkomaisille markkinoille viime aikoina. Käsitös prosessista saatiin pitämällä neljä puolistrukturoitua haastattelua. Laadullisen tutkimuksen avulla pyrkimys oli tutkia ja lisätä ymmärrystä digitaalisten palveluvientiyhtiöiden kansainvälistymisestä. Lisäksi tämä työ pyrki selvittämään, miten fyysinen etäisyys, verkostot ja yrittäjähenkisyys vaikuttivat ulkomaille laajentumiseen tässä yhteydessä.</p> <p>Tulokset osoittavat, että suomalaisten digitaalisten palveluyritysten kansainvälistyminen alkaa pian perustamisen jälkeen. Tärkeimmät syyt ja motivaatio ulkomaille laajentumiseen ovat halu kasvattaa liiketoimintaa, rajoitetut mahdollisuudet kotimaan markkinoilla sekä yrittäjän/johdon orientaatio kansainvälistymistä kohtaan. Digitaalisen palveluyrityksen fyysinen läsnäolo kohdemarkkinoilla riippuu palvelun luonteesta ja se määräytyy aineettomien/konkreettisten tekijöiden perusteella. Markkinavalinta perustuu strategiin tekijöihin, kuten kilpailutilanteeseen sekä maan sosioekonomiseen tilanteeseen. Tulokset osoittavat, että fyysinen etäisyys markkinoista vaikuttaa eniten markkinavalintaan, kun taas verkostoilla ja yrittäjähenkisyydellä on merkittävä rooli kansainvälistymiselle välttämättömän resurssien, osaamisen ja tuen tarjoajina.</p> <p>Koska Suomen markkinat ovat rajalliset, kansainvälistyminen voidaan tulosten perusteella nähdä väistämättömänä vaiheena suomalaisille palveluyrityksille, kun tähtäimessä on liiketoiminnan kasvattaminen.</p>	
Asiasanat Kansainvälistyminen, digitaalinen palveluyritys, fyysinen etäisyys, verkostot, yrittäjähenkisyys	
Säilytyspaikka Jyväskylän yliopiston Kauppakorkeakoulu	

CONTENTS

1	INTRODUCTION	7
1.1	Background of the study.....	7
1.2	Purpose of the study.....	9
1.3	Key concepts of the study.....	10
1.4	Structure of the study	11
2	INTERNATIONALIZATION IN THE DIGITAL WORLD.....	12
2.1	Characteristics of digital firm & digital service.....	12
2.1.1	Value creation and value co-creation	13
2.1.2	Pace of internationalization.....	14
2.2	Digital service firm internationalization	15
2.2.1	Role of networks	17
2.2.2	Market selection and physical distance.....	18
2.2.3	Entrepreneurial behaviour	19
3	INTERNATIONALIZATION THEORIES.....	21
3.1	The Uppsala model.....	21
3.2	Network model of internationalization.....	24
3.3	International entrepreneurship.....	25
3.4	Digital service firm internationalization	26
4	RESEARCH METHODOLOGY	28
4.1	Qualitative research.....	28
4.2	Data collection.....	29
4.3	Data analyses	30
4.4	Selection & introduction of case companies	31
5	RESULTS OF THE STUDY	34
5.1	Findings on digital service firm internationalization.....	34
5.1.1	Reason for internationalization	34
5.1.2	Market selection.....	36
5.1.3	Mode of entry	40
5.2	Findings on physical distance.....	41
5.3	Findings on the role of networks.....	42
5.4	Findings on entrepreneurial behaviour.....	44
6	DISCUSSION AND CONCLUSION	47
6.1	Theoretical contributions	49
6.2	Practical contributions.....	50
6.3	Limitations and evaluation of the research.....	51
6.4	Future research suggestions.....	52
	REFERENCES.....	54

LIST OF TABLES AND FIGURES

Figures

FIGURE 1 Key aspects of internationalization process

FIGURE 2 The Uppsala model of internationalization

FIGURE 3 Steps of data analyses spiral

Tables

TABLE 1 Main characteristics of qualitative and quantitative research

TABLE 2 Information on interviewees

TABLE 3 Information on case companies

TABLE 4 Influence of physical distance in internationalization

TABLE 5 Influence of networks in internationalization

TABLE 6 Role of entrepreneurial behaviour in internationalization

1 INTRODUCTION

The Internet has been shaping the world during the 21st century in a way that cannot be compared to any other phenomenon. It has been transforming businesses, economies, and human interactions both in the professional and private contexts. Digital technologies have brought along both a seemingly endless number of opportunities and disruptive changes for future progress (Hervé, Schmitt & Baldegger, 2020). Moreover, digitalization has shaped the way companies are able to explore, enter (Ojala, Rollins, Fraccastoro, & Gabrielsson, 2020) and participate in foreign trade within new markets (Hervé, Schmitt & Baldegger, 2020). This development has paved the way also for contemporary business models, which are based on the latest digital technologies.

Another phenomenon that has recently seen significant growth and development is the service sector, as it is the largest and fastest-growing segment within the economies in the developed countries (Chase & Apte, 2007). In addition, the internationalization activities within the service sector have been increasing for decades (Samiee, 1999; Javalgi & Martin, 2007).

Following the trend amongst other developed countries, also the Finnish service sector has been increasingly active in its internationalization efforts during the last decade. Hence, during the years 2010-2017, the increase in volume was 53%. A lot is yet to be accomplished, since according to the latest statistics, only a quarter of the service firms are involved with foreign expansions. (Ali-Yrkkö, Kuusi, Pajarinen & Wang, 2020.) One of the reasons behind the growth has been the increase in the digital services and gaming industry. Hence, the focus on Finnish digital service providers and their international expansion offer an interesting environment for this study both theoretically and practically.

1.1 Background of the study

The foreign expansion process has been studied and observed mainly in a pre-digital business environment. However, as the existing economy is digitally connected and shaped by the recent megatrend of globalization, a need to further understand digital businesses and their foreign expansion is evident.

Despite the growth of the internationalization efforts amongst service firms, research on the phenomenon remains scarce. Furthermore, the existing theoretical and empirical studies are characterized by incoherence and lack of rigor. (Sanchez-Peinado & Pla-Barber, 2006; Javalgi & Martin, 2007; Axinn & Mathysenss, 2001.) Therefore, there is a need for progress and consistency in service internationalization research. As the separate theoretical models explaining a service firms' foreign expansion are non-existent, the service sector relies on the traditional internationalization theories, which are often characterized by

being focused on the manufacturing sector and large multinational enterprises (MNEs) (Acs, Dana & Jones, 2003). Due to these aspects, the existing research on service firm internationalization has conflicting viewpoints on whether the traditional theories can be used for both sectors. This thesis will take part in this conversation by applying three relevant theories from the IB literature to the modern phenomenon of digital service firm internationalization.

Firms' expansion beyond their national borders has been on the focus of research for more than four decades. Throughout the years, researchers have covered an extensive number of topics within the internationalization phenomenon, and, furthermore, an abundance of theories and models have emerged to explain the complexity of the phenomenon. In the early years, the focus of internationalization research was on gradualist models, which indicated that a firm's foreign expansion is a sequential process starting from geographically, culturally, and economically near markets. (Johanson & Vahlne, 1977). As digitalization has reformed the market from traditional national markets to a global market environment, it will be studied here whether the digital service firms perceive the markets as a whole or still operate within the national boundaries of a country. In addition, this study will also examine what role does the geographical closeness of a market has in the internationalization process of the digital service firm.

The graduality of the previous models was later questioned, and the researchers began to acknowledge and examine the fact that firms are not independent operators in the markets. Following this, the importance of network relationships in the foreign expansion process was recognized, emphasizing the possibility to learn and access resources from other companies within the network. (Johanson & Mattsson, 1988.) In the digital world, networks are emerging in a completely new form. Through the existing technology, people and machines can be connected to each other in an unprecedented way which then facilitates extensive networks and communities in the business context (Hervé et al., 2020). This, as Hervé et al. (2020) continue, presents new opportunities for firms to pursue market commitments and overcome international barriers. Therefore, the networks can be seen as an essential part of the digital service firm's internationalization.

Then again, some internationalization theories focus more on the internal factors affecting foreign expansion and see the process stemming from entrepreneurial behaviour. This is confirmed by McDougall and Oviatt (2000) by stating that international entrepreneurship (IE) can be defined as "*a combination of innovative, proactive, and risk-seeking behavior that support company to cross national borders.*" For this study, the IE theory is especially important. Firstly, previous studies have found that entrepreneurial actions in form of making decisions, undertaking activities, and implementing the process are essential for foreign expansion (Ojala, Rollins, Fraccastoro, & Gabrielsson, 2020; Jones & Coviello, 2005). Secondly, a recent study of the effects of digitalization on the entrepreneurial orientation and small-firm internationalization Hervé et al. (2020) found that when

the degree of digitalization increased, it positively affected the entrepreneurial orientation, which then increased the scope and speed of internationalization.

Based on the above characteristics of the existing literature, the internationalization theories need to be examined with a more contemporary lens. Therefore, this paper takes the digital business context and incorporates it into the service sector and examines the internationalization process. By doing so, this thesis aims to complement an evident gap within the IB literature regarding digital service internationalization. This will be done by drawing from existing literature concerning internationalization theories, service sector and digitalization and later combining the phenomena in the empirical part in a qualitative study.

The specific context of the study is the Finnish digital service firms that have recently started their internationalization journey. The service sector is an important part of the Finnish economy, and a growing amount of foreign trade comes from the service sector. Digitalization and digital services are seen as important facilitators for the growth. (Ali-Yrkkö, Kuusi, Pajarinen & Wang, 2020.) These facts highlight the importance of studying the Finnish digital service firms and their foreign expansion.

1.2 Purpose of the study

The purpose of this study is to examine the internationalization process of a digital service firm and the factors influencing the process. In more detail, the focus is on Finnish digital service providers, who have recently started their internationalization journey.

Hence, this thesis seeks to reach the objective by answering the following research questions:

1. How is the internationalization of a digital service firm perceived?
2. What kind of influence do networks, physical distance factors, and entrepreneurial behaviour have on the internationalization?

This thesis aims to deepen the understanding of the foreign expansion process of a service firm operating in a digital form. To reach this goal, this thesis utilizes several widely accepted internationalization theories and seeks to create an understanding of the phenomena through those theories. Therefore, this thesis contributes and expands the existing IB literature by adapting the selected theories within a modern context. However, as this is a qualitative study, the aim is not to test the theories rather to seek an understanding of the applicability of the theories in the given context. Moreover, this thesis also sheds light on the internationalization process of digital service firms, a process that calls for attention due

to the scarcity of existing research. This study will especially focus on three factors commonly emerging in the IB literature: physical distance of the target market and its influence on market selection, the role of networks, and entrepreneurial behaviour in the foreign expansion of the selected companies. By doing so, this study expands the understanding of what type of role these factors, commonly seen as important within more traditional business models, play in the digital world.

1.3 Key concepts of the study

In this section, the core concepts of the study will be explained and defined. This is done to enhance the understanding of the paper since the below terms are commonly used in literature and therefore might have several meanings depending on the source of information.

Internationalization

Internationalization can be understood as a complex process in which a company shifts from operating only in its domestic market to foreign markets by involving its resources in international operations (see, for example, Javalgi, Griffith & White, 2003). Furthermore, internationalization can be included in expansion strategy, in which the aim of a company is to seek business growth by increasing market share within foreign markets.

Service

Several characteristics can be attached to a service, even though it is a multidimensional concept with situational variations. First, service is intangible, meaning that it is an experience that cannot be seen or touched. Second, service is often defined as inseparable from its user, which especially in the context of traditional service firms means increasing local presence. Third, a service cannot be stored, which makes it perishable. (Javalgi & Martin, 2007.)

Digital firm

The existing literature introduces a variety of terms for a digital firm such as ibusiness (Brouthers, Geisser & Rothlauf, 2016), Internet-related firm (Forsgren & Hagstrom, 2007), or a digital-based firm (Ojala, 2020). All the terms refer to a firm that operates online and utilizes the Internet or other digital technologies in the supply of its products/services.

Furthermore, two main attributes of a digital firm can be seen to emerge from the way it creates and utilizes digital infrastructure. First, a digital firm is characterized by its online presence. The online/offline ratio of such a firm differs,

depending on the business model, meaning that most firms have some physical elements, such as offices, even when the core business is in a digital form. Second, a digital firm is reliant on the digital infrastructure since it facilitates (co-)creation and distribution of a firm offering through online channels. (Monaghan, Tippmann & Coviello, 2020.) Furthermore, it should be noted that a digital service firm differs from an Information and Communications Technology (ICT) firm since ICT firms include such as hardware and component manufacturers and telcoms providing infrastructure for communications, whereas digital services rely on the Internet for production, operation, and delivery of its service. (Monaghan et al, 2020.)

1.4 Structure of the study

This thesis starts with a theoretical part which consist of two separate chapters. Firstly, the theory part delves into the key attributes of a digital service and a digital service firm. Secondly, the internationalization is explained with a special focus the digital service firm foreign expansion. This part of the paper also highlights the current state of literature regarding service firms, since its digital counterpart includes similar elements.

The empirical part of the thesis begins from chapter number four, which illustrates the chosen methodology, data collection method and explains how the collected data was analysed. Additionally, the chapter includes the information regarding case company selection together with a short introduction of the chosen companies. The results of the study will be introduced and discussed in chapter five. The chapter six is the last chapter of this thesis and consists of discussion of the study findings, presentation of future research opportunities and the evaluation of the research.

2 INTERNATIONALIZATION IN THE DIGITAL WORLD

An increasing number of service firms aim to expand abroad, which has led to the emergence of service internationalization research. The importance of the sector is highlighted by Javalgi and Martin (2007) by stating that the competitiveness of the service sector will be the drive for the global economy in the 21st century.

There have been several factors enabling and advancing the growth of the service economies. Javalgi and Martin (2007) list four core elements enabling the trend, one of which being the technological advancements. For instance, modern technologies have made the transactions between service providers and customers faster and easier, enabling the services to be brought where the users are with the decreased impact of national borders.

This chapter will focus on the characteristics of digital service and explain the internationalization in a digital context in terms of key aspects of the process and some idiosyncrasies found in the current academic literature. Furthermore, the latter part of this chapter will focus on how physical distance, networks, and entrepreneurial behaviour influence the internationalization process. Hence, this chapter aims to provide a background on the context of the study.

2.1 Characteristics of digital firm & digital service

Throughout the years of service research, a definition for the term has been introduced from several different perspectives. Existing literature provides both simplified and complex, narrow, and wide definitions. Amongst these descriptions, several characteristics are commonly associated with the definition of a service. Following this line of thought, Pla-Barber and Ghauri (2012) list *intangibility*, *inseparability*, *heterogeneity*, and *perishability* as typical features distinguishing services from products. The intangibility of services refers to services being un-touchable experiences, which cannot be seen or transported. Inseparability means that services cannot be separated from their users. In general, this has been seen to increase the need for service firms to be locally present in the host country. (Javalgi & Martin, 2007.) Heterogeneity of services arises from the fact that service experience is defined by the consumer of the service, affected by surrounding and even momentary factors. Perishability concerns the inability to store service as opposed to manufactured goods. However, the abovementioned characteristics are situational, and only some services include all features.

Even though a digital service has characteristics of its traditional counterpart, the digital version of service has several attributes of its own. It can exist in several forms of internet-enabled platforms, such as smartphone applications or

websites. The current literature does not provide a coherent definition for a digital service, but three common characteristics are still evident:

1. A digital service is delivered digitally via the Internet or electronic network.
2. A digital service is highly (or entirely) automated.
3. A digital service and its value is a result of co-creation between the service provider and its users.

Furthermore, when considering the characteristics from the perspective of foreign expansion, several features emerge that distinguish the digital service from its more traditional version. Ojala et al. (2020) highlights these features and begins with digital service being product agnostic, meaning that a service can be used through different devices. The digital service is also borderless, which refers to the distribution of a service via the Internet, without any restrictions of f.e.g. national or physical borders. Another feature arises from the editable and interactive nature of a digital service. Through editability, a company can somewhat easily meet the needs of local users within a host market by modifying their offering according to the needs of the local users. Interactive nature refers to the role of the users; with their participation in the creation of the service, the final form of the service varies in each market. The fourth feature of a digital service is re-programmability, which allows firms to modify their service significantly which then may allow the firm to serve a larger segment within the new markets. (Ojala et al., 2020.)

To further enhance the understanding of the concept of a digital service firm, a few central determinants of such a company should be explained. There exist two streams of research that are widely studied within the contexts of services and internationalization. These are the value creation logic of service and, furthermore, the value co-creation. Another line of research deals with the phase of internationalization, which focuses especially on smaller firms that move to foreign markets practically from inceptions. These firms are often referred to as Born Global. Due to the effect of digitalization, another concept has emerged – a Born Digital firm. Since all these aspects can be seen to include fundamental characteristics within the context of this study, the following sub-chapters will provide further explanations of the phenomena. However, since the focus of this research is on the internationalization of digital services and the effect of networks, entrepreneurial behaviour, and physical distances, the aspects will be only briefly discussed.

2.1.1 Value creation and value co-creation

Among other fundamental changes, digitalization has changed the way value is being created. In the service context, value creation in general is referred to as configuration of resources, such as information, technology, and people. Furthermore, the value creation of a digital firm is based on technology, and it requires

technological and communication skills together with information sharing. (Saunila, Rantala, & Ukko, 2017.) Due to the intangible nature of a digital service value creation differs from conventional products, which leads to need for advanced operations and strategies for service firms to have a strong focus on their customer, since, as stated by Grönroos (2011), in a service context the value creation is often controlled by the customer. In an ideal situation, a digital service brings value both for the providers and the users by means of value co-creation (Saunila, Rantala, & Ukko, 2017).

Value co-creation in a service context is often explained as methods of collaboration and interplay among service providers and its users aiming to value experienced by both participants. Furthermore, in the traditional research considering value, the term is divided into value-in-exchange and value-in-use. These two aspects of value highlight the separate ways of understanding value creation. On one hand existing literature refers to a goods-dominant logic (related to value-in-exchange), which concerns companies that are focused in creating value through distribution of goods and products. On the other hand, service-dominant logic relates to value-in-use and sees value as co-created by not separating the producers and service users. Therefore, Saunila, Ukko and Rantala (2018) define value co-creation in the service context as *“a service system that is an arrangement of resources (e.g. people, technology and information) connected to other systems by value propositions.”*

2.1.2 Pace of internationalization

Through digitalization, more and more firms start their businesses based on the latest technologies. These firms have the two main characteristics highlighted in the introductory part of this paper, in short, 1) building and leveraging digital infrastructure and 2) relaying on the infrastructure for distribution its offering. According to the current literature, when a company fulfils these characteristics from the beginning it can be referred as a Born Digital firm. This means that there is no transition from a more traditional business model to a digital one, rather than having the core business in a digital form from the inception. (Monaghan et al, 2020.)

Digital service firms have become more important within the global economy and are involved in international operations at a growing speed (Wentrup, 2016). As their core business is in a digital form and they provide their service via the Internet, they are often characterized as uncommitted to the geographical limits. Furthermore, the digital channels enable such companies to move fast from local to offshore markets. Therefore, the digital service firms meets the definition of “Born Global” firm, given by Oviatt and McDougall (1994). However, Wentrup (2016) argue that nevertheless, a digital firm can enter the foreign markets soon or late after its establishment or stay in the local markets. The existing literature often assumes that a Born Digital company will internationalize at a fast pace.

2.2 Digital service firm internationalization

Internationalization has been widely studied by extensive number of authors throughout the years and it can be stated to be a major strategic decision for companies. As Cavusgil, Knight and Riesenberger (2013) state, internationalization of a firm “refers to the tendency of companies to systematically increase the international dimension of their business activities”. Two main reasons have been recognized in the literature as the driving factors for international expansion. Companies aim to risk-reduction by expanding their operations to multiple markets. Furthermore, as both globalization and digitalization has changed the business environment, the threshold for crossing borders have become lowered (Hervé et al, 2020). This drives firms to seek business growth from international markets.

In addition to the motivation behind foreign expansion, two more key aspects of the process are market selection and choice of entry mode to the target market. According to Johanson and Vahlne (1977), the internationalization process requires comprehensive research and planning including a consideration of all key aspects of the process. They also note that of the lack of knowledge of the target market can be seen as a main obstacle in the foreign market entry process (Johanson & Vahlne, 1977). The above-mentioned concepts are presented in model by Korsakienė and Tvaronavičienė (2012) in Figure 1 below, which further highlights the interrelation of the key aspects of the internationalization process. Wentrup (2016) agrees with the components being interrelated but adds the element of speed as one key feature in the internationalization process. He further highlights this by arguing that the selection of a physically distant entry market will slow down the entry process to the selected markets also in the case of an online service provider.

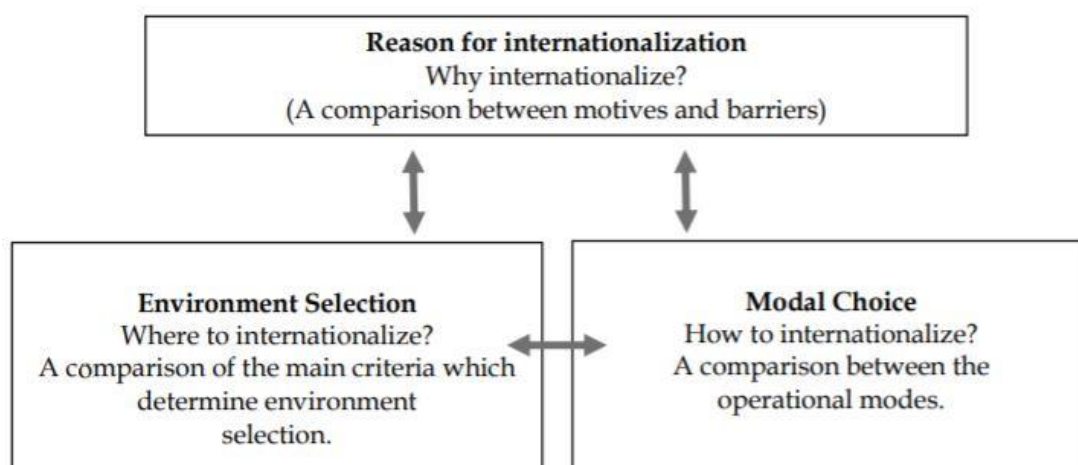


FIGURE 1 Key aspects of internationalization process (Adapted from Korsakienė & Tvaronavičienė, 2012)

Prior research on digital firm internationalization has uncovered some core issues regarding the foreign expansion process, concerning aspects such as patterns of internationalization (Brouthers et al., 2016) and value chain coordination through digital technologies (Saunila et al, 2017). Furthermore, the online-offline presence (Wentrup, 2016) of such firms has been in the focus of existing research. Another common feature acknowledged by the existing literature is that digital firms often choose to enter foreign markets with controlled modes (Ekledo & Sivakumar, 2004). Based on the studies, digital companies seem to differ from the conventional firms in terms of their internationalization process and operating modes. This is confirmed by Ojala et al (2020) who argue that the technological advancements have changed the time, pace, and rhythm of the internationalization process. The literature has recognized both features that facilitate the internationalization but also some barriers affecting the process, both of which will be further discussed in the following chapters.

Digitalization has advanced the way firms are able to both explore and enter foreign markets (Ojala, Rollins, Fraccastoro, & Gabrielsson, 2020). As Wittkop, Zulauf and Wagner (2018) presents, the major changes can be divided into four main categories: determinants of competitive advantage, reduced transaction costs, reduced asset and location specificity, and possibilities of outsourcing and offshoring their operations in advanced ways. With physical goods, the value chain and its efficiency are key features in the value creation process. With a digital service, the value chain differs and therefore, has much less meaning in determination of competitive advantage. The competitive advantage arouses more from uniqueness of the service as well as the brand reputation. Transaction costs are reduced with digital business due to technological advancements, referring to f. e.g., transportation of the service through a digital channel and utilization of an automated software in managing customer relationships. Another point stated by Wittkop et al (2018) is that a digital business can operate successfully in a foreign market without a physical presence. This is also highlighted by Philippe and Pierre-Yves (2011) by stating that the modern technologies enable a service to be distributed and utilized without any physical presence locally. By outsourcing and offshoring Wittkop et al (2018) refer to a digital firm being able to give parts of the value chain to responsibility of another firm without being bounded of national borders.

Another factor enabled by the current technologies is the speed of internationalization. Companies aiming to foreign markets can do so practically from inception. This is a critical feature since successful business can be rapidly mimicked. The existing literature assumes that a digital company internationalizes rapidly. Shaheer and Li (2020) agree with this showing in their study that the international entry has moved from years after inception to some weeks. With that being said, Shaheer and Li (2020) continue, that in the digital context the phase of the process is determined by user adoption, not by solely being available in foreign markets. Furthermore, Wentrup (2016) questions the assumption of

moving to foreign expansion from inception and highlights the role of home market within the process. According to Wentrup (2016) the home market acts as a test market enabling a digital service firm to conduct proof of concept for their offering before moving to offshore markets.

In addition, digitalization has enabled firms to gather and analyse user data and their habits in a revolutionary way, which then enables to create better customer relationships (Wittkop et al, 2018). This is true for most of the companies nowadays, but especially for the digital companies. A digital company has a large amount of data of its users available and can collect more information continually. This allows a fast way to learn about the users within a new market and through data analysing the information can be utilized to further deepen the customer relationship.

For digital firms overcoming barriers of market entry often means adapting their offering according to requirements of the host country, f.eg. language adjustments. As the main concern with digital firms deals with the user network and its efficiency in terms of size, the literature also recognizes this as a common challenge for all internationalizing digital companies. Therefore, such firms are stated to deal with Liability of Outsidership (LoO) (Brouthers et al, 2016). The aim for the digital companies when entering a new market is to overcome the LoO and establish a functional ecosystem to survive and grow its business within the market. Brouthers et al (2016) highlight this by stating that the value creation of digital firms emerges from creating and coordinating the user network. This aspect of the digital service firm internationalization will be further explained later in the following sub-chapter.

2.2.1 Role of networks

In the context of a digital service firm the concept of network can be seen as two-fold. Firstly, the role of network relationships in which the company operates in is also extant for all other business forms. Secondly, the user network within a market which enables establishment of the firm within the country. Hence, a digital service provider often faces the challenge of creating and maintaining both a business network and a user network. As Johanson and Vahlne (2011) present, a business network is described as "*set of connected business relationships*". Furthermore, Håkansson (2002) argues a business network to be an organizational system in which suppliers and consumers are able to exchange resources. Prior research on the topic of networks highlights their importance for businesses. Moreover, the supporting role of networks has been seen as essential in the internationalization phase of a company (Johanson & Vahlne, 2009; Ojala, 2008). Much of the earlier research has focused on physically and geographically close markets (Coviello & Munro, 1997). However, according to Håkansson (2002) the enabling force of networks can also be seen to emerge when a company is entering a country with a further physical distance, since through existing networks in the country, a firm can gain access to resources and support otherwise unreachable.

As mentioned before, digital service companies often face the challenge of user adoption and LoO (Brouthers et al., 2016). This can present a significant challenge for the market entry since the value of the business is often determined by the value co-creation in which the users are in a key role. Hence, a service often creates network externalities, which refers to the amount of value experienced by the user which increases as the user network increases. The existing literature recognizes the importance of the user network and as Brouthers et al (2016) explain, a company entering new markets starts as an outsider of the user network. Furthermore, possible users within the new markets are faced with uncertainty of the potential of the new network and therefore, also the value the network can offer. These aspects combined; the company often has difficulties in the user attraction when entering new markets. To overcome such challenges, Brouthers et al (2016) suggest that companies could utilize the existing user-network in other markets to gain more liability and trust within a new market. One factor explaining the challenges in user attraction could be seen to derive from the physical distance between the host and home markets. This will be further discussed in the following sub-chapter.

2.2.2 Market selection and physical distance

One key factor in the market selection of companies involved in foreign expansion has been seen to derive in terms of long-term potential and value offered by the selected market. Another key factor in the decision-making process within previous studies is the physical distance, in terms of geographical and cultural distance, of the new markets (Johanson & Vahlne, 1977). Physical distance in internationalization can be seen to emerge in the differences between local and off-shore market environment with aspects such as language, culture, education, and politics.

The cross-national distance has frequently been in the focus of previous research of IB literature regarding market selection of expanding companies. Regarding digital service, even when the transportation of the services can be easily done through existing technologies, cultural, administrative, geographic, and economical aspects are affecting the internationalization process. These factors are highlighted in the CAGE Distance framework, which has been created by Ghemawat in 2001. Shaheer and Li (2020) adapt the framework to the digital world and argue that the CAGE aspects are relevant also in the digital context, but in slightly different ways than with the more traditional business. These aspects emerge in the digital form as for example by digital penetration of the target market, user preferences, price, and language differences in the foreign markets. Within a firms' home market, these aspects might not present an obstacle since a company has comprehensive understanding of its local markets and the preferences of local users. Therefore, a digital service might be appealing within the local markets and thus create an illusion of the demand. However, in countries that are further away from the host market the offered service might appear less

appealing. Therefore, the physical distance can both further complicate the user adoption and explain the challenges in the given process. (Shaheer & Li, 2020.)

2.2.3 Entrepreneurial behaviour

Much of the IB research has aimed to creating models and explaining reasons which support firms towards international expansion. (Johanson & Vahlne, 2003; Oviatt & McDougall, 1994). However, these models do not include the potential internal resources and entrepreneurial abilities that companies often require to internationalize. Due to the perceived value of these resources for foreign expansion, a model named Resource-based view (RBV) has gained importance within the IB theories. RBV focuses to examine the significance of entrepreneurs' ability and ambition to offer resources for business growth in foreign markets (Westhead, Wright & Ucbasaran, 2001). Since the success of a company can be seen to partially derive from the tangible and intangible resources it possesses, the role of an entrepreneur is crucial. By assembling a set of valuable resources, a firm can ensure competitive advantage and increase the changes in success within foreign markets. Connection between the RBV model and foreign expansion can be seen to emerge from the ways an entrepreneurs or a firms' management are able to advance the firms international operations by providing and arranging management and industry specific knowledge, financial resources, and general human capital. (Westhead et al, 2001.)

Furthermore, Reuber and Fischer (2011) argue that main entrepreneurial resources and capabilities needed for the foreign expansion of a firm emerge in forms of international knowledge and competence. They also add networks and other social assets as key resources (Reuber & Fischer, 2011). These resources, when characterized as unique, valuable, and irreplaceable, are important for the ability to expand and gain competitive advantage, both in domestic and foreign markets. Furthermore, Westhead et al. (2001) argues, that these capabilities might increase a firm's tendency towards foreign expansion.

However, the attributes explained above are strongly emerging from research done in the pre-digital era. Hence, Reuber and Fischer (2011) argue that firms operating in a digital form have additional needs for their capabilities and resources. Reuber and Fischer (2011) argue these to include creation and management of online reputation, technological competence, and brand community management, all of which affect the foreign expansion of a digital firm.

A reputation in general refers to the perceived atmosphere surrounding a company, constituting from the previous actions of a company and future expectations of a firms' key stakeholders. Reuber and Fischer (2011) describe an online reputation consisting of being visible in the online markets and being perceived as a provider of high-quality services. The quality in the digital world can be shown through online signals, for instance in online reviews and ratings generated by the service users. Furthermore, an important part of the online signals is their volume since users often imitate the behaviour of previous users and with strong online signals a company is able to attract new consumers. However, in

the internationalisation context, the online reputation is seen to have an indirect role, since the perception of value differs due to cross-cultural differences. (Reuber & Fischer, 2011.)

Online technological competence of entrepreneurial firms forms the second resource identified by Reuber and Fischer (2011) as a significant resource for an internationalizing digital firm. With strong technological competencies, a firm is able to find new international opportunities and exploit the opportunities more effectively than its competitors. According to Reuber and Fischer (2011), these emerge in forms of 1) efficient utilization of existing technology by means of integration of needed applications to the firms' operations, 2) ability to modify and customize the firms' offering according to the requirements of local markets and its users, 3) firm's opportunistic attitude towards technology-usage. All of these highlight the role of the top management or an entrepreneur, since the value from deriving from technological advancements can be harnessed only by if the entrepreneur recognizes the value of the online initiatives and is willing to participate in them.

Reuber and Fischer (2011) state that online brand communities offer valuable source for international opportunity recognition and to the evaluation and exploration of them. Valuable information can be gathered through an online community, which is true for both the service provider and its user. For instance, foreign buyers can observe the community and based on the perception make decision to buy. This enables a digital service to spread to foreign markets when new buyer joins the community. Hence, there can be seen similarities in the description of the online brand communication described by Reuber and Fischer and the previously mentioned user networks.

3 INTERNATIONALIZATION THEORIES

In the following part of this paper, three internationalization theories are presented. The chosen theories are seen as relevant for the topic of the study, since they all are well-known and established theories which therefore create good foundation to examine the foreign expansion process. All the theories highlight slightly different characteristics when explaining the internationalization, which is seen as relevant with a complex phenomenon such as the internationalization of a digital service firm. Therefore, this study acts as an opportunity to examine these theories considering a contemporary phenomenon.

Foreign expansion of a service firm has received increasing amount of attention amongst researchers over the past decade (Wentrup, 2016). This can be seen to emerge due to the expanding role of services within the global economy and growing share of services traded. However, the amount of research focusing on international service trade is still minor compared to the attention given to the manufacturing sector. Furthermore, particularly the international trade of online services together with internet-enabled foreign expansion is in lack of research. Existing literature has conflicting viewpoints on whether the existing theories of internationalization fully encompass the movement towards a service economy and society characterized by high-technology achievements. (Brouthers et al, 2016.)

3.1 The Uppsala model

One of the most classical ways of explaining the internationalization of a firm is by the Uppsala internationalization model, also referred to as the U-model. The Uppsala model has functioned as a theoretical foundation in the IB literature for internationalization since its publication. The authors, Jan Johanson and Jan Erik Vahlne, published the first version of the Uppsala-model in 1977. The background of the model is in previous IB literature of internationalization, which had indicated the foreign expansion being a gradually increasing process. This is also what forms the basic idea of the Uppsala-model. Due its nature, it has been often described as a process model, stage model or sequential model for internationalization.

The model has gained much attention throughout the years, and it has been widely discussed and applied within the IB phenomena. An abundance of topics has been included in the discussions, including internationalization of service firms (Laanti, McDougall, & Baume, 2009), international entrepreneurship (Coviello & Munro, 1997) and internationalization of digitally driven firms (Coviello, Kano & Liesch, 2017).

The main characteristics of the model is its sequential nature and knowledge-commitment relationship. The model sees the international involvement of a company growing as the firm's knowledge about the market grows. The more a company learns, the higher the commitment and vice versa. Hence, the model indicates that the expansion process is started with forms requiring low commitment, such as exporting. From there the company, as it gains more knowledge, moves on to other forms of expansion through different steps. Another aspect of the model is that the foreign expansion is assumed to be started from markets which are close to the firms' home markets in terms of physical, economic, and cultural closeness. The four steps demonstrated in the model are:

1. No regular export activities
2. Export through independent representatives
3. Establishing sales subsidiary
4. Establishing production facilities

The knowledge and commitment features are highlighted in the model by two aspects: state and change. These elements are described to explain the steps of the internationalization process. The state aspect represents the current state of the company, and it is determined by market commitment and market knowledge regarding the foreign market. The change aspects include resource commitments regarding future commitment decisions to foreign markets as well as the performance of existing activities. (Johanson & Vahlne, 1977) The original model is highlighted in the figure 2 below.

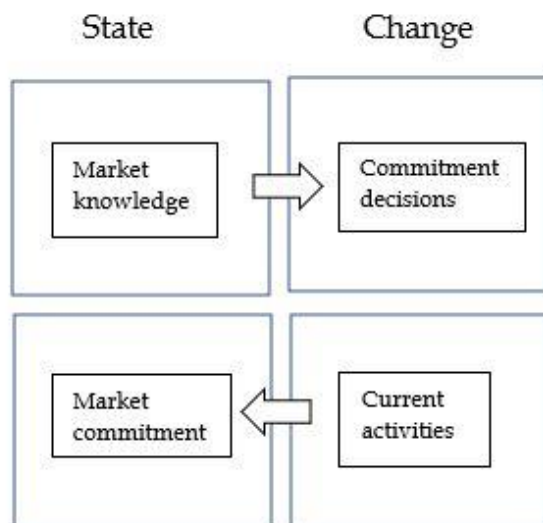


FIGURE 2 The Uppsala model of internationalization (Adapted from Johanson and Vahlne, 1977)

Over the four decades of its existence, the model has also gained much critique. In general, the model is often described to be relevant mostly for large manufacturing enterprises, which produce and distribute physical goods where foreign

expansion is slow and sequential. Furthermore, as Oviatt and McDougall (1997) pointed out that the Uppsala model is not able to explain the more accelerated foreign expansion stemming from changes such as technological advancements and globalization. Therefore, they point out the issue that has been mostly criticized in the model: rapid or instant internationalization of firms that are often referred as Born Globals or international new ventures (INVs) (Gonzalez-Perez, 2020). In addition, as Jones & Coviello (2005) underline, the model does not present the entrepreneurial behaviour currently recognized as a major driving force in the internationalization efforts of companies. Another significant factor in the internationalization process was recognized to be also missing from the original Uppsala Model: the role of networks (Gonzales-Perez, 2020).

To address the changes within the business environment and evolving internationalization research Johanson and Vahlne revised their model. The second version of the model was published in 2009. This version highlights the role of the business network in which companies operate in two ways. Firstly, the markets are seen as network of relationships where companies are tied into each other with complicated manners. Secondly, the networks are seen as opportunities to learn and build trust and commitment, which according to Johanson and Vahlne (2009), is the basis of internationalization. The most recent version of the model was published in 2017, which was updated to include elements from the theory of dynamic capabilities: entrepreneurship and uncertainty management. Even after the revisions, the model has gained some discord, of which some of the core issues are highlighted in the following chapter.

As mentioned above, the focus of the traditional internationalization theories has typically been in the manufacturing sector. The applicability of the theories, including the Uppsala model, to the service sector is questioned. Several researchers believe that due to the idiosyncrasies of both goods and services the existing theories cannot be generalized directly to services (Axinn & Matthyssens, 2002; Carneiro, Da Rocha, & Da Silva, 2008; Javalgi & Martin, 2007; Sanchez-Peinado & Pla-Barber, 2006). The Uppsala model makes no exception, as Johanson and Vahlne (1990) themselves state that the model might not be the optimal for observing a service firms' internationalization process. In addition, a concern of applicability to digitally driven firms have been pointed out as a point of contention in the internationalization literature (Gonzalez-Perez, 2020). However, Wentrup (2016) argues, that the existing theories can be utilized also for the digital based firms, but adaptations are needed.

This thesis will focus on exploring both the gradual nature for the process as well as the effect of market-closeness in the context of a digital service firm. By doing so, the model can be tested in terms of its applicability to a modern phenomenon, which then contributes to the on-going debate of the accuracy of the traditional internationalization theory within the contemporary context. With that being said, as the applicability of the model to the service sector is being questioned, this thesis includes additional internationalization theories, next of which the network model will be explained.

3.2 Network model of internationalization

During the 1980s the role of networks became more evident in the internationalization research. The networks and external connections were seen to facilitate the expansion to new markets as well as improving the position within the markets. Several research (Coviello & Munro 1997; Ojala 2008) implicate, that the network relationships are a major initiator for a firm to foreign market entry, and therefore, act as bridges to foreign markets. This is line with the Network model, created by Johanson and Mattsson in 1988, which was developed to explain the internationalization process by utilizing various networks.

Johanson and Mattsson (1988) state that the business network consists of relationship a company has with its suppliers, distributors, consumers, competitors, and government. The relationships are said to arise from, as stated by the authors: *"a mutual orientation of two firms towards each other"* (Johannsson & Mattsson, 1988). They started with the assumption that a firm does not act alone within a market, rather than being reliant on other firms and their network. Based on the model, firms are embedded in a network and the internationalization process is significantly influenced by the surrounding network, relationship establishment and development. (Johanson & Mattsson, 1988) The model does not concern the physical distance, whereas the Uppsala-model highlighted the gradual internationalization first to closer markets.

As implicated by the Networking model, the activities within the markets are seen as a cumulative process, which means that relationships within the markets are constantly developed by establishing new relationships, maintaining, and advancing old ones as well as ending the ones that do not serve the company as initiated. The development of the relationships is done to gain temporary economic revenue and positions within the network. This then enables the firm to gain a more stable situation and further develop itself. A basic assumption of the model is that a single firm relies on the resources in control of the other firms in the network. Through the activities a company can get the access to essential resources as well as distribute its products and services. The internationalization takes place when a company starts to create a relationship with another company in a foreign market. (Johanson & Mattsson, 1988.) Johanson and Mattsson (1988) also stated that as a firm expand to foreign markets, the amount and strength of the existing relationships increases.

Johanson and Mattsson (1988) distinguish two forms of networking, active or passive. The active networking occurs in a situation where the company itself initiates the action, whereas in the passive form the networking starts from outside the company. Furthermore, they describe three types of networks. Formal relationships are described as business relationships, informal ones are associated with social contacts such as friends and family. The third form is intermediary relationships, where a third-party act as a connector between the buyer and seller. (Johanson & Mattsson, 1988.)

As the networks can be seen especially important in the digital world, this thesis will examine how the networks shape the internationalization process of digital service firms. Furthermore, the paper aims to see whether the assumptions of the model regarding the forms and types of networks are relevant in the digital world.

3.3 International entrepreneurship

As the more traditional theories are somewhat challenged in terms of applicability to the contemporary phenomenon of digital service business, a third theory is added to enhance the understanding of the phenomenon. The theory of international entrepreneurship (IE) has been seen to better reflect the characteristics of a digital market environment (Wittkop et al, 2018).

IE has its grounds both on the international business theories and the entrepreneurship theories (McDougall, 1989). The definition of the term has been evolving throughout the years of the comprehensive theory-development. One of the first definition of IE as a term was offered by McDougall (1989) which included solely firms that are international from inception leaving out already established firms. Later, another study (McDougall & Oviatt, 1977) broadened this definition by adding the organisational view to the term: IE was then defined as business that is organized beyond a country's national borders involving innovative activities and having its goals in value creation. Oviatt and McDougall (1994) continued their research on rapid internationalization and provided a theoretical foundation for the internationalization of such companies, defined as 'international new ventures' (INVs). Hence, the theory of INVs paved the way for the IE research (Oviatt & McDougall, 2005). In more recent literature, the accelerated pace of internationalization has been seen as one key element of the IE theory (Hurmerinta-Peltomäki, 2004).

Furthermore, the harmony when searching for a definition for IE has been unaccounted-for. The term 'international' seems to be more evident and straightforward. For example, in the definition given by Oviatt and McDougall in 2000 states that IE is *a combination of innovative, proactive, and risk seeking behaviour that crosses national borders and is intended to create value in organizations*. Indeed, the literature often highlights the crossing of national borders and involvement in international networks as the definition for international operations. The definition of 'entrepreneurship' seems to have much less agreement. For example, Shane and Venkataram (2000), stated entrepreneurship to be *examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited*. However, this definition was later critiqued as neglecting the active part of the entrepreneur in opportunity creation, rather than assuming that opportunities are solely 'found'. Taking this into account, Oviatt and McDougall (2005) gave another definition of IE and described it as *the discovery, enactment, evaluation, and exploitation of opportunities – across national borders –*

to create future goods and services. This definition is broadly accepted within the IB literature and is also used in this paper.

Even though one element has been left out during the evolution of the above-mentioned descriptions, it can still be said to underline much of the entrepreneurial actions within the foreign expansion process (Liesch, Welch & Buckley, 2011). The element is entrepreneurs' attitude towards risk. This is reflected for example in the following statement made by Schendel (2007) "*probably the foremost characteristic of entrepreneurs in the minds of most is that they are willing to take risks, go where others will not.*" Liesch et al. (2011) argue that entrepreneurs with an international focus often recognize the possibly high risk involved, but are willing to act, nonetheless.

3.4 Digital service firm internationalization

As described earlier, the service firm internationalization has seen a growing trend within the economies (Javalgi & Martin, 2007). Through the facilitating effect of digitalization, digital services have also emerged and are moving to foreign markets with a growing pace (Hervé et al., 2020). Digital services commonly exist in forms of a smartphone application or a website and through the digital channels are able to move to foreign markets quickly after their establishment (Brouthers et al., 2016).

Even though globalization and digitalization have both affected the global economies by creating so-called global markets, the existing literature still recognizes the role of physical distance in digital service firm internationalization. The effect is not equal to manufacturing companies, which can expect e.g. higher transportation costs when entering a physically distant market. For digital service firms the challenges emerge from socio-economic factors, such as overall technology adoption, smartphone penetration and culture-related habits. (Brouthers et al., 2016.) Therefore, digital service firms could benefit to start their internationalization from culturally close markets. Furthermore, even when the transportation of digital service can be seen as easy and cost-effective through digital channels, which would then lead to almost instant shift to foreign operations, the role of home markets seems to still be important. The home markets act as test markets and through the feedback of local users, the firm is able to further develop its offering before moving to overseas markets. (Wentrup, 2016.)

When internationalizing, a digital service firm needs to create and maintain two kinds of networks. Firstly, a business network is essential for the overall business both in home and host markets. Furthermore, as several studies show, the supporting role of business networks for foreign expansion is essential. For instance, as the Network model assumes, firms tend to follow their networks to foreign markets and reach their networks for knowledge and resources. (Johansson & Mattson, 1988.) After the market selection a digital service firm faces what

seems to be one of the biggest barriers to entry. Since many of the services offered are based on factors such as network externalities, value co-creation and online communities, the need for creating a large enough user-network within the new markets is essential for the success of the market entry and to overcome the LoO. (Brouthers et al., 2016.)

Furthermore, the influence of entrepreneurial behaviour can be seen as crucial for digital service firms in their foreign expansion process, since it is the entrepreneurs themselves who are generally characterized with strong proficiency to recognize opportunities outside the home markets and capitalize on those opportunities. (Oviatt & McDougall, 2005). Furthermore, the digital context seems to be as reliant on the entrepreneurial resources and capabilities as the more traditional businesses. The current literature recognizes a phenomenon called digital entrepreneurship and its internationalization process, but the fundamental concept is still the same. Therefore, it can be concluded that the digitalization does expand the possibilities for opportunity recognition, evaluation, and exploitation regarding the foreign expansion of entrepreneurial firms (Gabrielson, Fraccastoro, Ojala, & Rollins, 2021) but does not fundamentally change entrepreneurial behaviour enabling the foreign expansion of a digital service firm.

4 RESEARCH METHODOLOGY

This chapter represents the first empirical part of the paper. It starts with an introduction to qualitative research and highlights its key features as opposed to quantitative research. The chapter continues by presenting both the data collection and analyses methods. In addition, all the methodological choices are explained and justified to create a clear view of the research process equivalent to proper scientific research. The chapter ends by describing the guidelines for case company selection together with a short introduction of the chosen companies.

As Silverman (2013, pp. 13-14) presents, the role of methodology and methods in a research is to provide a suitable approach regarding the chosen research topic. The choice between qualitative, quantitative, or mixed methods needs to be reflecting the goal of the research. Chosen methods act as techniques which dictate the ways of data collection and analysis to efficiently answer the research question(s). In addition it must be noted that, as Hirsijärvi and Hurme (2011, pp. 20) argue, the end result is always linked to the values of the researcher. Hence, a person conducting a research cannot completely separate from his/her personal values and therefore, the values are inevitably part of the research process and its result (Hirsijärvi & Hurme, 2011, pp. 20).

4.1 Qualitative research

Qualitative research in general aims to understanding and interpreting a contemporary phenomenon, which has rarely been in the focus of previous research. Therefore, the aim of qualitative research is to reveal new information and enhance understanding of a selected research topic. These aspects are in line with the topic of this study which led to the choice of conducting a qualitative research.

Even though the atmosphere towards the two different research fields has moved from differentiating to more as complementary mode, qualitative and quantitative research are often introduced by stating the opposite features within the two research strategies. (Hirsijärvi, Remes, & Sajavaara, 2007, pp. 131.) This thesis makes no exception, and by doing so the aim is to further highlight the suitability of qualitative research strategy for the study topic in question. The characteristics of the two research strategies are illustrated in the table x below.

Qualitative	Quantitative
Words	Numbers
Focus on participants	Focus on researcher
Scholar close	Scholar distant
Process varies	Structured

Specific, contextual data	Generalizable data
Natural setting	Artificial setting
Micro	Macro
Theory building	Theory testing

TABLE 1 Main characteristics of qualitative and quantitative research (adapted from Silverman, 2013)

Hence, qualitative study utilizes words rather than numerical data to demonstrate study findings. Furthermore, qualitative research focuses on the participants of the study and the scholar is usually in contact with them. The design of a qualitative research is an ongoing process, which means that even the research questions could be modified during it. The gathered data can be characterized as specific and contextual. Furthermore, often a practical issue can be solved with the collected data. The research problem usually focuses on micro-level, for instance individuals, rather than country-level issues. Moreover, qualitative research is often utilized first when only little is known about a certain phenomenon, enabling to move towards quantitative studies later on (Silverman, 2013, pp. 15). Eriksson and Kovalainen (2016, pp. 30) add, that qualitative research is effective way to create new information and even to possibly develop generalizations.

4.2 Data collection

The data collection for this thesis was done by utilizing a qualitative research method called thematic interview. This method was chosen as the data collection method since it enables the gathering of profound and comprehensive information of the chosen themes. Furthermore, a thematic interview is often favoured when the existing amount of information of the topic of the research is limited. Hence, this method is well-suited for the data collection of this study.

Thematic interview represents a so called semi-structured interview-method. It has characteristics from both open-ended and structured interviews. As Eriksson and Kovalainen (2016, pp. 94) state semi-structured interviews enable a casual and informal atmosphere while still including the element of exhaustiveness and being systematic. The themes of the interview are decided in advance and are based on careful familiarization of the study topic. Furthermore, the participants should be carefully selected so that the needed data can be expected to be obtained from the interviewees.

In addition, as Hirsijärvi and Hurme (2011, pp. 11) explain, an interview is based on interaction between the interviewer and the interviewees. The situation aims to be conversational, and the conversation should flow as freely as possible. The comprehensiveness is enabled by asking open-ended questions, usually starting with words 'what' and 'how'. As the focus of thematic interview is

more on the free conversation about the pre-decided themes, the interviews can have variations between each other. For instance, order of the questions in each theme can change between interviews. In addition, the depth of reflection of each theme may vary according to the responses of the interviewees.

Four interviews were held for this study between May and June in 2021. Due to the situation with the pandemic, all interviews were done by using Microsoft Teams. During the interviews, both the interviewer and each interviewee had their camera on which enabled a more trustworthy atmosphere as the participants were able to see each other. The length of the interviews slightly varied, shortest one being close to 40 minutes and the longest approximately 50 minutes. Since all the participants were Finns, all the interviews were held in Finnish. This enabled the interviewees to be more comfortable due to the ability to use their native language.

As mentioned above, the careful selection of interviewees is important. Therefore, the participants of the interviews were selected based on their position within the firm regarding the internationalization of the company. With two companies, the CEOs represented their firms. With other two case companies, the representatives were in the lead of foreign expansion. In both cases, the interviewees had also started working for the company since the inception and had seen the internationalization process from the beginning. Furthermore, as the table 2 below presents, all participants were in a leading role in the internationalization process of the company they represented and can be said to have relevant experience and knowledge of the process.

	Title of participant	Duration of interview	Role in foreign expansion
Company A	CEO	44 minutes	Leading role
Company B	CEO	50 minutes	Leading role
Company C	Head of internationalization	40 minutes	Leading role
Company D	Head of internationalization	43 minutes	Leading role

TABLE 2 Information on interviewees

4.3 Data analyses

Data analysis is a critical part within the scientific research process. As Hirsijärvi et al (2007, s. 219) suggest, the process of qualitative data analysis often resembles a spiral rather than being a linear process. This refers to the various steps taken during the analyses, between reading, analysing, writing, and editing the text

before the final version. The figure 3 illustrates the different steps of the analyses process.

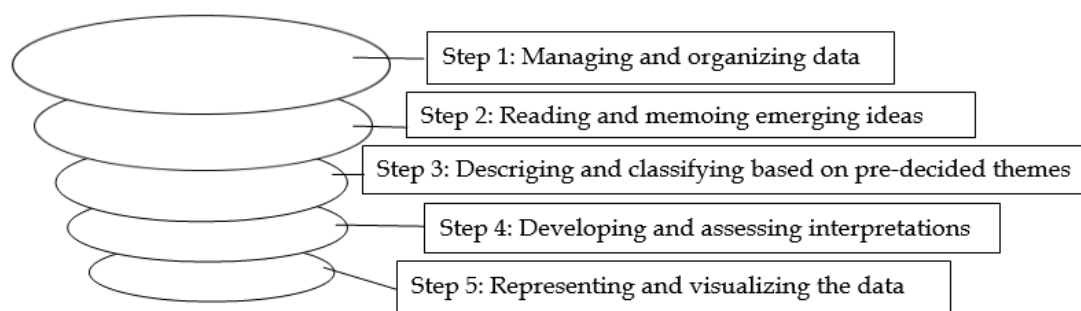


FIGURE 3 Steps of data analyses spiral (Adapted from Creswell, 2011)

Before starting the analysis, and to enable it to be done comprehensively, the recorded interviews were transcribed into written text. After listening and transcribing, the texts were read carefully. To further enhance the understanding of each case, I also created mind maps based on the transcript texts. This was done so that a clear view of the internationalization of each case company was created and to recognize the characteristics of each case.

The data analyses of this study was conducted by utilizing a qualitative method called thematic analysis. Thematic analysis refers to an analysis method which aims to recognize the fundamental topics from the data. As Hirsijärvi and Hurme (2011, s. 173) explain, when data is gathered with thematic interviews the analyses can be based on the pre-decided themes. The analysis of this study was done accordingly, and the pre-determined research themes (internationalization, physical distance, networks, and entrepreneurial behaviour) guided the analyses. Furthermore, also additional relevant themes that emerged from the data were noticed. The data analyses was done by following abductive reasoning. This refers to a reasoning method in which the relation with theory is described as theory bound. In abductive analyses the selected theories guide the analyses process, but it is not directly based on the theories. Hence, in the beginning of the analyses process pre-decided concepts guide the analyses. However, abductive analyses is not bounded to solely those pre-decided theories and there still exists room for new observations and ideas, as mentioned above.

4.4 Selection & introduction of case companies

For this study, the case companies were selected by evaluating the companies with several criteria. Firstly, the company had to full-fill the previously given criteria for a digital service firm. Secondly, the company had to have recent experience of foreign expansion and to ensure the needed experience, the chosen

companies were expected to have started their internationalization process into at least one foreign market. Thirdly, the company had to be founded in Finland.

The companies which were part of this study all fulfilled the abovementioned requirements. To ensure the suitability, the company facts were checked beforehand from their websites, news and by checking information from online databases. The evaluation criterion and short introduction of the case companies are presented below.

Evaluation criterion:

1. Main objective of the company is to provide service(s) in an online mode (such as a mobile application or website).
2. Company has started its internationalization process and operates at least in one foreign country.
3. Company is based in Finland.

Introduction of chosen case companies:

Case company A

Company A provides both an application and website through which they offer online yoga classes. The company was founded in 2013 and has its headquarters in Finland. Internationalization started in 2014 from Hong Kong and London. Currently, the company A has users in 100 of countries and is physically present in 3 (Finland, England, and USA).

Case company B

Company B provides a maternity application which delivers the Finnish maternity knowhow in a form of smartphone application. The company has been founded in Finland and has its offices both in Helsinki and Dubai. They started their internationalization 2108 Japan, in which they currently have the largest foreign user-network. They are actively participating in several offshore projects, focusing on Europe, Asia, and United Arab Emirates.

Case company C

Company C is a technology company which offers a food delivery platform. They have since the inception increased their offering to f. ex. grocery deliveries and other consumer goods - with the same business model. They build and utilize an online infrastructure, which enables the connection between consumers, suppliers, and couriers. The company was founded in 2014 and its headquarters is located in Helsinki. They started their foreign expansion in 2016 from Sweden and Estonia, and at the time of the interview operated in 23 countries.

Case company D

Company D provides a B2C platform for selling clothing and accessories. The company was founded in 2015 and started its internationalization in 2018. It currently operates in three countries in which it also has physical presence in forms of local offices.

The basic information regarding the case companies is presented in table 3 below.

	Company A	Company B	Company C	Company D
Foundation year	2013	2015	2014	2015
Amount of personnel	5	5	427	9
Mode	Application/website	Application	Application(s)	Application
Customer group	B2B/B2C	B2B/B2C	B2B/B2C	B2C
Internationalized in	2014	2018	2016	2018
Online presence	Users in 100 countries	Finland, Japan	23 countries	Finland, Germany
Offline presence	3	Finland, Dubai	23 countries	Finland, Germany

TABLE 3 Information on case companies

5 RESULTS OF THE STUDY

This chapter explains the main findings of the study in a way that follows the theoretical frame of this paper. The chapter begins by focusing into the internationalization process of digital service firms in general. In addition, the key components given earlier in the theoretical part - reasons for internationalization, market-selection and entry mode choice are all discussed. The chapter continues by further explaining how the components of physical distance, networks and entrepreneurial behaviour have influenced the foreign expansion of the case companies. Furthermore, many interrelations between the different aspects of the internationalization process were found during the data analyses.

To highlight the key findings, several quotations from the transcript material are presented. As the interviews were held in Finnish for the convenience of interviewees, the quotations have later been carefully translated for this paper in a way that the original message has remained. Also, the names of the participants have been changed to codes (A-D) in order for the interviewees to remain anonymous.

5.1 Findings on digital service firm internationalization

5.1.1 Reason for internationalization

The main reason and motivation for starting international expansion is business growth and market-potential in offshore markets. This is confirmed by all respondents and highlighted in the answers from representatives of companies C and D:

“The fact that we want to enter international markets means of course that we want to grow as a company. We are basically aiming to grow our company as much as possible and conquer the world.” -C

“Of course to grow our business, simply to get euros into our pockets from additional markets.” -D

Three respondents also further highlighted the size of the Finnish markets and the growth potential in foreign countries due to much larger scalability:

“The markets are so much bigger and therefore the scalability is something else.” -B

“The markets and their scale is so much bigger; Finland is the size as it is. For me it is obvious that if the offering is by its nature so that it can be expanded to foreign markets, it should be done” -A

All interviewees also add that international growth has been in the focus of their companies from inception and can therefore be seen as self-evident.

“From the very beginning when I started to plan the company establishment it was obvious that it will be a global business.” -A

“The whole business idea is created based on the idea that we will distribute the Finnish know-how abroad.” -B

“The expansion from Finland has been evident from the very beginning, it has never been unclear that we will internationalize.” -C

“It is in our mission to grow internationally, therefore it has been obvious from the very beginning” -D

Thus, this confirms the assumption of current academic literature which explains that both born global and born digital firms aim to international markets practically from their establishment. Furthermore, the literature also discusses the role of home market in the internationalization process of digital companies. Two aspects are highlighted, the utilization of existing user network in the market entry to offshore markets and the development enabled by the local markets.

When asked about the role of existing users in home markets in the internationalization process, on one hand B saw them valuable and on the other hand C stated that even though the user-network in another country does not ease the growth in another, it still has been important part in developing their offering.

“Yes, it has been a huge advantage for us that we were able to launch first in Finland. The user adoption in Finland is high, so we can use that as a reference in other markets. Also we have received a lot of feedback from Finnish users, so we have been able to make improvements based on that.”
-B

“No we haven’t been able to use the current users, only if a user travels and uses our app in a foreign country, but I suppose this is only occasional.”
-C

The representative of company D also saw the role of home market as valuable in the developing process of the service and also highlighted the role of home markets as enabling the internationalization in terms of revenue. This was seen essential in the beginning of the internationalization journey, as the new market

entries are resourceful in both in terms of time and money. D explains that this means that in the meantime the home market needs to bring the revenue in.

5.1.2 Market selection

The market selection process of the case companies seemed to evolve as the experience of the foreign expansion grew. Moreover, the early market decisions seemed to be perceived more as test environments for the internationalization and also lacking thorough market research.

“There has happened some learning in the market-selection, the first market entry was done with quite minor preparations. We basically just assumed that the trend we offer solution for is truly global and wanted to enter the markets in another continent.” -A

“We knew that Japan is adopting the Finnish system already, so we started there. In the beginning Japan was everything. We launched the app in the Japanese markets as a second test environment.” -B

“It is an evolution through time, our first countries Estonia and Sweden were not based on any market research. We simply thought that as those are our neighbouring countries it makes sense to start there and use those markets as learning platforms.” -C

The response of company C does vaguely correspond with the assumptions of the Uppsala model regarding the choice of markets which are located geographically near the home markets. In the digital context, when the technology could enable the entry to virtually anywhere, it is somewhat surprising. However, the decision for company C was made when they still lacked know-how and experience. Company C highlights, that from the first market entry they learned a lot and were then able to utilize their knowledge in the following entries. Hence, according to company C, with the knowledge they have now they would not start from Sweden. Furthermore, company D sees why Finnish firms would start from Sweden, as it is close and might seem more secure. However, company D sees the Swedish markets as rather small and highlights the role of market potential as the main criteria for market selection.

“Internationalization for a digital service firm means that companies go where revenue comes from. The decisions are purely monetary.” -D

Role of networks in market selection

The role of networks and existing connection seemed for market selection seemed to slightly differ depending on the company. Company C told that even though

they are currently already a quite international firm and usually always have some contacts in a new market before entry, those contacts has never been a factor in the decision process of whether or not to enter a certain market. Company D agreed with this as he also explained that existing contacts are not seen as essential for market selection, since as mentioned above, the main criteria is market potential. For company B the networks and contacts have been especially important, since the initiative to start all the existing projects in different markets have emerged from an external initiative. However, it should be noted that this could be derived from the business model of company B and could therefore be seen as company specific factor.

“Actually, so far all of them have come through an inquiry sent to us. So all the requests have always come when we have first met someone at, for example, the Arab Health expo. I have met so many different people and therefore they know to ask us to join.” -B

Also company A has followed a contact to foreign markets, but however, the interviewee highlights that they would have entered the markets eventually without the cooperation.

“We entered the USA markets together with another brand that wanted to work with us. But yes, we would have gone there eventually, I don’t know how but the opportunity with the other brand was the best way for us then to enter the markets.” -A

The Networking model explains the market selection of a company to occur by following the business network to foreign countries. However, despite the responses above, this does not seem to be a major trend in the given context. Thus, neither the Uppsala model nor the Networking model is able to comprehensively explain the market selection of a digital service firm.

As highlighted above, the market potential of the target country is perceived as one key aspect of the decision-making process in foreign market entry. The responses of the case companies highlight some key elements based on which the potentiality of a market is considered: cultural and economic factors and level of competition. Next, these elements are further explained.

Cultural and economic factors

All respondents highlighted the socio-economic level affecting the market selection. For company B, the potential emerges when the health care system of the country in question lacks the expert knowledge they offer through the application and therefore a lot of potential markets are located outside of the Northern countries.

For the other case companies, the socio-economic level indicates to an extent the potential user adoption. This is showcased in the answers given by A and C:

“It is a matter of how developed and wealthy the society is within the country, does people have time to take care of themselves and are they able to use money on this kind of service.” -A

“We check the GPD-level of the country, which roughly said, transitions to the whole market potential.” -C

They both also mentioned smartphone penetration as an indicator of market potential.

“Smart phone penetration and other device penetration also indicates the user adoption. Then for example with China there are other technological barriers, we looked at it as an option at some point, but the technological and other challenges seemed too big.” -A

“And then we check the smart phone penetration, so for example North Korea and Mongolia are not yet options for us since people there does not have a smart phone.” -C

Also companies B and D recognizes the technological issues a challenges and factors which need to be considered before market entry.

“The more different the market is, the more we need to do technical changes in addition to the usual localisations and the more there is to think about.” -B

“It is all about scalability of the application, this should be taken into notice from the very beginning, or it can present a barrier at some point during the process.” -D

Here, some confluence with the Uppsala model can be found since the model assumes that countries culturally close are perceived as potential new markets for a company planning its foreign expansion.

Level of competition

When asked about how competition has affected the market selection process, the answers varied. Company B told that as their offering is based on Finnish know-how and health care system, there is not much competition abroad per se. However, for company C the level of competition is one of the main criteria for

market selection. C explains that this was especially important in the early steps of the internationalization when their own understanding of the process was still limited.

“We quickly realized that the level of competition is high throughout the industry, and therefore it did not make sense to try to enter markets where we would have faced much competition when we were still not quite sure what we were doing. We then decided to focus on countries with low level of competition, markets to which we bring something new and where there was not anything like our service available yet.” -C

Company C further explains that it is important for them to enter the market before it is already saturated, otherwise the creation of a large enough user network presents a fundamental challenge.

“It is very hard to stand out if there are a lot of competitors already within the markets. If majority of the population already uses an app provided by a competitor and are used to it, the competitor probably also has most of the restaurants and therefore they are less keen on taking another software for them to use.” -C

Company C also highlights this by explaining how the level of competition has prevented them from entering several markets, for example the USA. Also company A has similar experiences.

“It’s all about timing, for example in the USA we were already doing market research but then we noticed that our competitor had expanded faster within the country than we thought. Our localization would have still taken another six months, so we decided not to go there.” -C

“Yes, it has affected quite drastically, in Finland the user network is quite cheap to acquire compared to what it is in the English-speaking markets. That is where our biggest barrier emerged, we were not able to get enough users. The level of competition is much higher.” -A

As presented above, the market decision process seems to be highly dependent on cultural and economic factors, as implied also in the theoretical part of this paper. The competition level was not as obvious in the literature but based on the empirical findings the level of competition can be seen to pose a considerable challenge for the market entry for digital service firms and, furthermore, act as a market entry barrier. These aspects are further highlighted in the answer of company C:

“At some point we did a lot of research and acquired lists of all countries and checked in which of the countries the competitors are with whom we

do not want to compete. Then we checked which countries are still left, checked their GDP-level, population and of course the smartphone penetration. That is how we then recognized the countries we want to enter to. Then we started to acquire local teams to the chosen countries and that is how it starts. After that it is all about learning, each country is basically a test since at the end you never know how it works before you establish the business in the markets.” -D

5.1.3 Mode of entry

Based on the study, the choice for entry mode for a digital service firm seems to be twofold and dependent on the industry/offering of the firm. Firstly, some service can be distributed globally without local presence of the company in each market. Second, if a digital service company decides to enter a country physically, it seems to do so by establishing its own subsidiaries and offices. Furthermore, often either local staff is hired or, as for example with company B, one of the founders lives abroad and operates from the offshore office to be near the potential markets.

“One of the founders lives in Saudi Arabia and therefore Dubai is almost as another home market for us. Familiar market, a lot is done from there.”
-B

However, as mentioned in the theoretical part, services often have a certain level of tangible components which can vary depending on the service in question. This is highlighted also in the answers given by the case companies, as the need for physical presence varied based on the industry/offering of the company.

“Our service is designed to work all over the world from the beginning, it is available in English in all markets. Our system supports sales and online presence virtually anywhere in the world.” -A

A further adds that they as their service “travels cross borders easily” through digital channels, there is no need for them to be present in every country. The representative of company C stated that physical offices and local staff is needed both for practical reason and to gain first-hand market knowledge from local residents. He also highlighted the need for local presence by explaining that in their case it is essential since their business includes tangible components. This was agreed by D, who also mentioned that being locally present helps in the process in several ways, as explained in the following:

“We need local talents in order succeed and therefore we need to be where the talent is. Also country specific aspects such as laws and other regulations are often so complex that those are not easily managed from Finland.

You really need to understand the local markets, it is very difficult to do from distance and without local help.” -D

Hence, mode of entry seems to not correspond with the assumption of the Uppsala model, as the controlled mode of entry does not occur in the early stages of the gradual model.

5.2 Findings on physical distance

In this study, the physical distance is perceived according to the CAGE Distance framework presented in the theoretical part of the paper. The different factors of the framework are separated to cultural, administrative, geographical, and economic factors. Both the economic and cultural factors were already discussed in the market selection part, but this sub-chapter will further explain some key findings regarding the physical distance in digital service firm internationalization perceived by the case companies.

When asked about how geographical distance has affected the market selection, the respondents mentioned issues related to time differences and travelling costs but still perceived countries with further distance as potential new markets. Therefore, the geographical distance was not considered as a barrier rather than a challenge.

“It should have been considered more, we had one employee travelling to Japan once a month for a year. We’ve spent a lot of money on that.” -B

“Yes, it has. If we would have a proper studio in the States, we would definitely have it in the West Coast. Just so that it would be easier for us to work as a team with the co-workers in the USA. Also Australia is our fourth biggest market, but we do not want to be there physically since it would be so difficult to coordinate. These kinds of everyday life issues we consider, such as time difference.” -A

All respondents mentioned the need for localization often increases as the physical distance from the target market increases. Need for language changes in the platforms/website were a common feature in all responses regarding the localizations, except for company A which offers their service in English throughout the markets. However, especially in the beginning of the internationalization efforts has been perceived as challenging due to the language differences, as company A explains:

“We felt that the language differences as restrictive, that it would be difficult to us to enter for example Sweden, Denmark or Norway due to the

fact that none of us speak any of the languages fluently enough. We felt that we can not understand the market as comprehensively without having a common language.”-A

Company B adds to this and explains how cultural differences in negotiation habits have made the advancing of projects in certain countries slow and challenging, especially in the time of the pandemic and social distancing.

“China and Japan are very traditional in a sense that they require everything to happen face-to-face – nothing happens online. This is also true with Southern Europe, during the pandemic everything is postponed to the future. It has surprised us.”

This is recognized also by company D and C, who both explain the need for familiarization to the local norms as essential. This is highlighted in the answer given by the interviewee of company D:

“It takes a lot of research with each country, because in principle each country is different from each other. This is showcased especially in practical issues such as how a company is established in a new country, how you pay for your employees and how you negotiate. Then there are also all the permissions and licences we might need which obviously need to be taken care of.” -D

However, as shown in the table 4 below the most important physical distance factors are related to cultural and economic aspects.

	Crucial	Supportive	Unimportant
Geographic		A, D	C, B
Cultural	A, B, C, D		
Economic	A, C, D	B	
Administrative		A, B, C, D	

TABLE 4 Influence of physical distance in internationalization

5.3 Findings on the role of networks

As mentioned above, the role of networks in market selection was not seen as crucial. Moreover, the role of networks as supporting the business growth was more evident throughout the response of the case companies. This was highlighted especially by three of the interviewees when asked about the role of networks in the internationalization process.

“Probably it can be described as revolutionary, how else could it be?” -A

“100%, it is everything. You need to have the right contacts to get to the right places.” -B

“Super important, in all our business activities. I would say that without networks we couldn’t have gone to new markets.” -D

For company C the role of networks was not seen as crucial as in the responses above but was still perceived to be very important.

“If you have contacts already somewhere, it could be described as a passing lane, it always helps when you need to create something from scratch. The bigger the network of contacts and the more you know people, the easier you can reach the right persons.” -C

However, the answer might reflect the company size, as company C is in terms of employees a much bigger company than the rest of the case companies. Company C has been able to grow especially in the international markets and to create comprehensive processes for the foreign expansion. Furthermore, they have several departments involved in the internationalization process, which enables them to utilize internal resources instead of being as dependent on external ones as the smaller firms seems to be.

Financial support and expert knowledge

The supportive role of networks the companies are embedded in emerged especially in forms of experiential knowledge and in some cases, also financial support. The company size might again be reflected in the answers since company C did not see these aspects as crucial in their foreign expansion.

“Typically if there is a problem which you don’t know the answer to, you ask someone who you know that has done something similar and they then tell you that you should contact another person who they know can help.” -A

“When entering new markets, having strong partners is crucial. We have got a lot of help from our networks during the market entries.” -D

Furthermore, both A and B highlight the importance of Business Finland and its programs, financial and overall support for firms in the early stages of internationalization.

“Business Finland is the number one resource in our network, for sure. We have got funding from them, for instance the Explorer-loan enabled us to fist go to Japan. In addition, the offices of Business Finland all over the world have helped us. We have also gained access to several expos through them. For internationalization, Business Finland is number one.”

-B

“One essential factor is funding of course and part of that the programs and aid from Business Finland. We would not have gone to the path we took in the beginning if there wouldn’t have been the support, for example from Business Finland.” -A

As company D explains, the role of investors in the internationalization process is crucial. D further continues, that it both enables the foreign expansion and also often to attract more investors the firm needs to gain growth from foreign markets as the home markets for Finnish companies are rather small. Therefore, the role of networks in terms of funding was seen as crucial for all case companies in their internationalization efforts. This is shown in the table 5 below, which further highlights how the role of network is perceived by the case companies in their internationalization process.

	Crucial	Supportive	Unimportant
Market selection	B	A	C, D
Funding	A, B, C, D		
Market-knowledge	A, B, D	C	
Overall support	A, B, D	C	

TABLE 5. Influence of networks in internationalization

5.4 Findings on entrepreneurial behaviour

As highlighted before, the main reason for international expansion relates strongly to the companies’ aim for business growth. Another reason behind moving to foreign markets can be seen to emerge from the entrepreneurial and managerial attitude and orientation towards internationalization. For example, company A told that his personal interests are in international business, and he therefore sees moving to foreign markets as endogenous. He also further highlights the willingness to learn as one reason to move to new markets:

“Me and my colleagues see that our company acts as a wonderful learning platform, and we often do things from our will to learn something new. Internationalization is a great way to create something new and learn from different cultures and how people and business works somewhere else.” - A

This shows how entrepreneurs’ own willingness and internal motivation to foreign expansion can act as a reason to start internationalization. Furthermore, the role of entrepreneur or company management can be described as significant. This is shown in the following response when asked about the role of management in the foreign expansion process:

“In our case it was very quickly obvious that it is very much a founder-led process. I have understood during the internationalization that if I would not have a passion and ambition to build something beyond the borders of Finland, we would not be doing so. I believe that the will should be internal, that’s probably just the way it is.” -A

Also the responses of companies B and D reflects these thoughts in her answer and sees the entrepreneurial/ managerial role as significant for the foreign expansion when answering to the same question:

“It is essential that the management is onboard with the expansion, they should have knowledge about the foreign markets, an international mindset and passion towards the growth. With the internal passion you are not willing to give up easily no matter what.” -B

“It is very important; in our case they are the once how decide all strategic actions and which countries to enter at the end of the day. They are also the once who have the responsibility. So for us the role of management is big.” -D

The table 6 below highlights how some key factors are perceived by the respondents that an entrepreneur/other person in a leading role in the internationalization process should have.

	Crucial	Supportive	Unimportant
Willingness to expand	A, B, C, D		
Resources and capabilities	A, B, D	C	
Risk-tolerance	A, B, C, D		

TABLE 6 Role of entrepreneurial behaviour in internationalization

6 DISCUSSION AND CONCLUSION

The aim of this thesis was to explore how Finnish digital service firms internationalize and how the process is perceived. Furthermore, this thesis focused on how physical distance of the target market, networks and entrepreneurial behaviour influence the internationalization in the given context. On this basis, the research questions were assigned as:

1. How is internationalization of a digital service firm perceived?
2. What kind of influence networks, physical distance factors and entrepreneurial behaviour have in the internationalization?

In this chapter the findings regarding the above-mentioned questions will be presented. This chapter will highlight both theoretical and practical implications and also present evaluation of the research and give suggestion for future research. Before that, an overall discussion of the findings related to the theoretical part is presented.

Based on both the theoretical and empirical findings, it can be stated that various aspects influence the internationalization process of a digital service firm. To begin with, both the form in which the service is provided (e.g. platform, website) and the service itself alters the characteristics of the foreign expansion. Main aspects creating the variations emerge from the possible tangible/intangible components of service. Two aspects are especially highlighted regarding this; firstly, the online/offline balance can be seen to correlate with the intangibility/tangibility. The case companies with some tangible elements included in their offering where the ones who saw offline presence as crucial for the successful internationalization. Furthermore, these same companies seemed to perceive the markets as country-specific rather than seeing a more unified global market environment. Therefore, this study shares the notion of earlier research, that due to the nature of service influences the internationalization process and therefore, should be taken into consideration both in theory and practice.

Moreover, the theoretical part of this paper identified value co-creation as a defining characteristic for digital service firms and therefore also their foreign expansion. However, the empirical part shows that also this characteristic can be seen as dependent on the business model/service in question. For instance, platform-based firms often require multi-sided user-networks (users/providers) and thus, rely more on the users in their value creation. This then leads to the conclusion, that the perceived LoO can depend on the business model/offering.

In addition, the theoretical part stated that the internationalization of a digital service is characterized by the speed of starting the foreign expansion early after company establishment. The empirical part supports this assumption, as all the case companies stated that foreign markets were their intention already

in the establishment phase. Furthermore, all case companies started their internationalization process within three years of the inception, which has been defined as the timeframe for early internationalizes.

In addition, several reasons and motivations behind starting internationalization process were identified from the data. The main reason for moving to foreign markets for the case companies is their aim to business growth. Furthermore, all companies shared the thought that market potential abroad drives them towards internationalization. In addition, the study focus was on digital service firms which have been founded in Finland, thus, within a market that can be characterized as small and limited. This was also evident in this study, as all case companies stated how the size of Finnish market is restricted and does not facilitate the business growth the companies are aiming for. However, the empirical data also shows that the role of home market is essential in terms of developing and improving the service before the foreign market entry. Together with aiming for increasing the size of their business the entrepreneurial/managerial willingness towards the foreign expansion was identified as a key reason for the internationalization amongst the case companies. They all saw it as a self-evident step for their business from the very beginning of the company.

The early market-selection of the case companies did not seem to be based on extensive market research rather than entrepreneurial/managerial assumptions on the market potential of the companies. Another factor characterizing the early decision evident in the empirical data was the role of the first entry as a learning platform for internationalization. After the initial decision the market selection seemed to be more considered. Furthermore, several common factors were identified as determinants for the market selection for the case companies. Key aspects of the market potential was considered based on the economic and cultural factors of the target market. Main indicators highlighted in the empirical data were such as GDP-level and smartphone penetration of a country. Therefore, from the aspects of the CAGE distance frameworks cultural and economical factors can be seen as the most influential for the market-selection of a digital service firm. Administrative factors were perceived challenging depending on the country, but not as crucial for the case companies. Moreover, the geographical distance was seen as more of a challenge in terms of time differences or travelling costs rather than a barrier to entry.

Entry mode choice for DFSs is recognized in the literature as focusing on the controlled modes (subsidiaries, offices in target markets). The findings of this study are in line with this, with one exception. As mentioned above, the tangible/intangible element of the service in question influences the foreign expansion process. It is highlighted also in the entry mode choice since the necessity for physical presence can be seen to increase when the number of tangible components increases. Therefore, even all case companies used controlled modes *when* physically entering a market a deviation occurred. The firms with no tangible elements in their service saw no particular reason for offline presence in each country and entered only few markets physically.

6.1 Theoretical contributions

This thesis focused on a contemporary phenomenon of digital service firm internationalization. The existing theories aiming to explain the foreign expansion of a firm all have been created in the pre-digital era. Since the literature does not present theories for the modern business models, this thesis aimed to see how the traditional models can explain the digital service firm internationalization. A discussion on the suitability of the selected theories for the digital service firm context follows.

The traditional Uppsala model assumes that the market-selection of companies is sequential, starting from the low-commitment modes of entry and increasing the level of commitment by gaining more market knowledge. (Johanson & Vahlne, 1977.) However, the empirical part of this study had conflicting results with the assumptions of the Uppsala-model. Firstly, the market entry of the digital service firms did not emerge sequentially. The firms either entered foreign countries with full control modes (such as establishing offices to the foreign markets, rather than using e.g. external agents) or did not have physical presence in the markets at all. Secondly, as the pace of internationalization seems to increase quite rapidly after their inception, digital service firms do not seem to have time to gain knowledge before the first market entry. Hence, in the early stages, the market entries seem to act as learning platforms which enable the expert knowledge to be gained in order to facilitate the following market entries.

In addition, the Uppsala model also assumes that firms aim to minimize risks by entering countries geographically and culturally close. The findings of this study were contradictory with this assumption since the results show that geographical distance did not seem to be a crucial factor in the decision-making process in the market selection. However, both the economical level and cultural closeness seems to be features which are considered to influence the market selection. This can be seen to apply at least in the case of Finnish service firms, since the society of Finland can be described as wealthy and has a high level of technological adoption – factors that were seen as enhancing the market entry in the given context. These findings add to the literature assuming that the traditional Uppsala model does not fully explain the internationalization of modern businesses, even though some similarities can be found.

Next, the Networking model assumes that firms follow their networks to foreign markets, hence the market selection is done based on the actions of other companies within the business network. However, in the case of digital service firms there emerged only a slight correlation with this assumption. However, both the theoretical and empirical part of this study recognized that networks can be seen as a key component in the foreign expansion process in general. This emerges in terms of support and resources, which a company can gain by creating and maintaining its connections. Based on this study, the role is equally important both in the domestic and foreign markets. Therefore, the Networking

model can be seen to partially explain the internationalization of a digital service firm.

One factor recognized in this study to be essentially important in the foreign expansion of a service firm is entrepreneurial behaviour and resources. Therefore, from the selected theories for this study the one that most explains the process is the IE theory. Hence, the findings of this study are in line with previous research, as the role of the entrepreneur in recognizing, evaluating, and exploiting the opportunities seems to be essential. Furthermore, the empirical part confirmed the assumption stated in the theoretical part of the paper and no idiosyncrasies emerging from the digital concept were found. Thus, a digital service firm can be seen to be as reliant on entrepreneurial behaviour as a traditional firm when aiming to international markets.

As a conclusion it can be stated that based on this thesis, the internationalization of a digital service firm shares some similarities with existing internationalization theories. However, as it is a modern phenomenon, not all the pre-digital assumptions can be considered to explain the foreign expansion in the digital era. Thus, this thesis joins the on-going discussion amongst scholars that there exists a need to further develop the internationalization theories so that the modern aspects are taken fully into notice.

6.2 Practical contributions

The results of the study offer insights to the internationalization in the digital service context in general and highlights some key features of the process. This information can be used by a firm's management or other decision makers when considering a foreign expansion in similar settings. Hence, the aim of this study is to act as an encouragement to other firms in their internationalization endeavours by presenting information of the process and experience of other companies in the given context.

A digital service firm seems to start the process of offshoring its operations rapidly after its establishment. This might be due to the facilitating effect of the online channels, which *inter alia* reduce the transaction costs and enable the foreign entry often without physical presence. Another factor, especially true in the context of Finnish markets, is the increased market potential of foreign markets. Finland is considered a rather small country with limited business opportunities, which then pushes firms seeking growth towards foreign expansion. Hence, internationalization might be the only way to reach business growth. Furthermore, two other essential points should be noted regarding the pace of internationalization. Firstly, the fast involvement in foreign expansion might ease the user adoption if the target market has not yet saturated and/or a similar service is not available yet. Secondly, an online service can be seen as easily mimicked, which

for successful business does present a threat. Therefore, it could be seen as beneficial for a digital service developer to keep the foreign expansion in mind already in the planning phase by increasing the scalability of the service.

Another important feature in foreign expansion of a digital service firm seems to be the role networks. Even though network relationships might not guide the market selection, the business networks still can be seen to offer essential support and resources needed for the expansion. This means that networking from the early stages might present an essential advantage for a company willing to expand to offshore markets. This is important both in the domestic and foreign markets and should be started whenever possible.

Role of user-networks and value co-creation seem to characterize the internationalization of a digital service firm. Challenges in user adoption can emerge as a barrier when entering offshore markets. Two external features seem to influence the user adoption: socio-economic level and competition within the target market. The former relates to factors such as smartphone penetration and overall technological adoption in the country. In addition, ability of spending money on non-essential services is a crucial determinant of the potential user adoption. The latter was mentioned already above and emerges in form of market saturation. Thus, when a certain service already exists in the markets and its users perceive it as functional and adding value to their lives, the willingness to change the service provider is low. For these reasons, it can be seen essential to consider both the level of competition and socio-economic situation of the country during the market selection process.

6.3 Limitations and evaluation of the research

As with all research, also this one has its limitations. Firstly, the sample size of the case companies involved can be seen as a limitation. Due to amount of case companies involved in this study, the finding of this study cannot be generalized. Furthermore, the theoretical models presented in the literature vary in the way those describe the foreign expansion and therefore, not all aspects could have been considered in this study.

The case companies selected for this study had their background in multiple different industries. Therefore, the results of the study can be seen to present an overview on the thoughts of Finnish digital service firms involved in the study rather than industry specific directions. Furthermore, as all the respondents obviously gave answers with regards to their own experience, the variance in industries affected the responses to an extent. For example, the business model of one company is so unique, that there is no other company offering the same kinds of service. This then leads them to have different kind of experience, for instance, on the effect of competition to foreign market entry. The same kind of effect can be seen to emerge from the size difference of the companies.

However, many similarities were still found despite the above-mentioned issues as many of the firms shared thoughts on the internationalization process. Furthermore, many confluences with the existing internationalization theories were found, which then can lead to the conclusion that a similar study would produce similar types of results as this study has presented. Therefore, the study can be seen as fulfilling the description of being reliable. In order to further evaluate the research done, the aspects validity should be considered. The validity of a research is met when the study is able to answer the research problem assigned to it. This can be achieved, among other things, by choosing the right research method and target group. As mentioned in the methodology chapter, the interviewees all had relevant experience of internationalization. The study itself was well designed in advance and its various stages are reported openly. The interview framework was carefully constructed guided by the literature and research questions. The questions asked were seen as relevant for this study and the answers were clear and could be well utilized. Hence, it can be stated that this thesis corresponds to the assigned research problem.

6.4 Future research suggestions

The digital service firm internationalization as phenomenon poses several opportunities for future research. Furthermore, the concept can be described as complex and multifaceted and not the least contemporary. Therefore, the existing research is still limited and especially, lacks rigor beginning from the terminology. With more research focusing on the phenomena common definitions and a more comprehensive understanding could be found. Therefore, all research on the digital service firm internationalization can be seen as beneficial as the outcomes can enlarge the understanding of the phenomenon as whole. Moreover, as the result of this study shows, the current literature does not seem to provide a theory that fully explains the foreign expansion of a firm with a modern business model. Therefore, future research could aim to building theories which take into notice the idiosyncrasies of the digital business models.

Furthermore, as the Finnish economy is driven by the service sector and both due to the high level of technological adoption and knowledge new opportunities are somewhat endless, it would be important to further study Finnish digital service firms aiming to foreign markets.

In addition, as the focus of this study was not on industry specific factors one possibility for future research could be to unravel whether or not the industry of the company has an influence on the internationalization process of a digital service firm and how the possible differences emerge. Moreover, another possible viewpoint could be to focus on the nature of the service offered and its possible influences on the foreign expansion process, since some variations did occur in this study relating on the characteristics of the offering in question.

As mentioned earlier in this paper, the acquisition of a user-network was seen as an essential step for the success of a digital service firm in off-shore markets. By conducting a study focusing both on factors advancing and potential barriers of user adoption could be beneficial both practically and theoretically.

REFERENCES

- Acs, Z., Dana, L. & Jones, M. (2003). Toward New Horizons: The Internationalisation of Entrepreneurship. *Journal of International Entrepreneurship*, 1(1), 5–12. Retrieved: <https://doi.org/10.1023/A:1023257414794>
- Axinn, C. & Matthyssens, P. (2002). Limits of internationalization theories in an unlimited world. *International Marketing Review*, 19(4–5), 436–449. Retrieved: <https://doi.org/10.1108/02651330210445275>
- Bell, J., McNaughton, R., Young, S. & Crick, D. (2003). Towards an Integrative Model of Small Firm Internationalisation. *Journal of International Entrepreneurship*, 1(4), 339–362. Retrieved: <https://doi.org/10.1023/A:1025629424041>
- Brouthers, K. D., Geisser, K. D. & Rothlauf, F. (2015). Explaining the internationalization of ibusiness firms. *Journal of International Business Studies*, 47(5). Retrieved: <https://doi.org/10.1057/jibs.2015.20>
- Carneiro, J., Da Rocha, A. & Da Silva, J. (2008). Challenging the Uppsala Internationalization Model: A Contingent Approach to the Internationalization of Services. *Brazilian Administration Review*, 5(2), 85–103. Retrieved: <https://doi.org/10.1590/S1807-76922008000200002>
- Gonzalez-Perez, M. (2020). The theoretical evolution and use of the Uppsala Model of internationalization in the international business ecosystem. *Journal of International Business Studies*, 51(1), 38–49. Retrieved: <https://doi.org/10.1057/s41267-019-00293-x>
- Coviello, N. E. & Jones, M. V. (2004). Methodological issues in international entrepreneurship research. *Journal of business venturing*, 19(4), 485–508. Retrieved: <https://doi.org/10.1016/j.jbusvent.2003.06.001>
- Coviello, N., Kano, L. & Liesch, P. (2017). Adapting the Uppsala model to a modern world: Macro-context and microfoundations. *Journal of International Business Studies*, 48(9), 1151–1164. Retrieved: <https://doi.org/10.1057/s41267-017-0120-x>
- Coviello, N. & Munro, H. (1997). Network relationships and the internationalisation process of small software firms. *International business review*, 6(4), 361–386. Retrieved: [https://doi.org/10.1016/S0969-5931\(97\)00010-3](https://doi.org/10.1016/S0969-5931(97)00010-3)
- Chetty, S. & Blankenburg Holm, D. (2000). Internationalisation of small to medium-sized manufacturing firms: A network approach. *International business review*, 9(1), 77–93. Retrieved: [https://doi.org/10.1016/S0969-5931\(99\)00030-X](https://doi.org/10.1016/S0969-5931(99)00030-X)

Erramilli, M. (1990). Entry Mode Choice in Service Industries. *International Marketing Review*, 7(5). Retrieved: <https://doi.org/10.1108/EUM0000000001535>

Eriksson, P. & Kovalainen, A. (2008). *Qualitative Methods in Business Research*. Sage Publications.

Forsgren, M. & Hagstrom, P. (2007). Ignorant and impatient internationalization?: The Uppsala model and internationalization patterns for Internet-related firms. *Critical Perspectives on International Business*, 3(4), 291–305. <https://doi.org/10.1108/17422040710832559>

Gabrielsson, M., Fraccastoro, S., Ojala, A., & Rollins, M. Digital Entrepreneurship Internationalizers: Definitions, Theoretical Implications, and Research Avenues. Proceedings of the 54th Hawaii International Conference on System Sciences. HICSS, 5069-5078. Retrieved: URI: <https://hdl.handle.net/10125/71235>

Hervé, A., Schmitt, C. & Baldegger, R. (2020). Digitalization, Entrepreneurial Orientation and Internationalization of Micro-, Small- and Medium-Sized Enterprises. *Technology Innovation Management Review*, 10(4), 5–17. Retrieved: <https://doi.org/10.22215/timreview/1343>

Hirsijärvi, S. & Hurme, H. (2011). *Tutkimushaastattelu – Teemahaastattelun teoria ja käytäntö*. Helsinki: Gaudeamus University Press.

Hirsijärvi, S., Remes, P., & Sajavaara, P. (2007). *Tutki ja kirjoita*. Helsinki: Kustannusyhtiö Tammi.

Javalgi, R. G., Griffith, D. A. & Steven White, D. (2003). An empirical examination of factors influencing the internationalization of service firms. *Journal of Services Marketing*, 17(2), 185–201. Retrieved: <https://doi.org/10.1108/08876040310467934>

Javalgi, R. G. & Martin, C. L. (2007). Internationalization of services: Identifying the building-blocks for future research. *Journal of Services Marketing*, 21(6), 391–397. Retrieved: <https://doi.org/10.1108/08876040710818886>

Johanson, J. & Vahlne, 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), 23. Retrieved: <https://doi.org/10.1057/palgrave.jibs.8490676>.

Johanson, J. & Vahlne, J. (2003). Business Relationship Learning and Commitment in the Internationalization Process. *Journal of International Entrepreneurship*, 1(1), 83-101. Retrieved: <https://doi.org/10.1023/A:1023219207042>

Johanson, J. & Vahlne, J. (2011). Markets as networks: Implications for strategy-making. *Journal of the Academy of Marketing Science*, 39(4), 484-491. Retrieved: <https://doi.org/10.1007/s11747-010-0235-0>

Jones, M. V. & Coviello, N. E. (2005). Internationalisation: Conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies*, 36(3), 284. Retrieved: <https://doi.org/10.1057/palgrave.jibs.8400138>

Keupp, M. M. & Gassmann, O. (2009). The Past and the Future of International Entrepreneurship: A Review and Suggestions for Developing the Field. *Journal of Management*, 35(3), 600-633. Retrieved: <https://doi.org/10.1177/0149206308330558>

Korsakienė, R. & Tvaronavičienė, M. (2012). The internationalization of SMEs: An integrative approach. *Journal of business economics and management*, 13(2), 294-307. Retrieved: <https://doi.org/10.3846/16111699.2011.620138>

Laanti, R., McDougall, F. & Baume, G. (2009). How well do Traditional Theories Explain the Internationalisation of Service MNEs from Small and Open Economies? – Case: National Telecommunication Companies. *Management International Review*, 49(1), 121-144. Retrieved: <https://doi.org/10.1007/s11575-008-0128-3>

Liesch, P., Welch, L., & Buckley, P. 2011. Risk and Uncertainty in Internationalisation and International Entrepreneurship studies. *Management International Review* 51(1), 851-873. Retrieved: <https://doi-org.ezproxy.jyu.fi/10.1007/s11575-011-0107-y>

McDougall, P. P. (1989). International versus domestic entrepreneurship: New venture strategic behaviour and industry structure. *Journal of business venturing*, 4(6), 387-400. Retrieved: [https://doi.org/10.1016/0883-9026\(89\)90009-8](https://doi.org/10.1016/0883-9026(89)90009-8)

Monaghan, S., Tippmann, E. & Coviello, N. 2020. Born digitals: Thoughts on their internationalization and research agenda. *Journal of International Business Studies*, 51(1), 11-22. Retrieved: <https://doi.org/10.1057/s41267-019-00290-0>

Ojala, A. (2009). Internationalization of knowledge-intensive SMEs: The role of network relationships in the entry to a psychically distant market. *International business review*, 18(1), 50-59. Retrieved: <https://doi.org/10.1016/j.ibusrev.2008.10.002>

Ojala, A., Rollins, M., Fraccastoro, S., & Gabrielsson, M. (2020). The Internationalization of B2B Digital Platform Providers: The Role of Cross-National Distance

and Digital Characteristics. In Proceedings of the 53rd Hawaii International Conference on System Sciences (HICSS 2020) (pp.4652-4661). University of Hawai'i at Manoa. Proceedings of the Annual Hawaii International Conference on System Sciences. Retrieved: <http://hdl.handle.net/10125/64313>

Oviatt, B. & McDougall, P. (1997). Challenges for Internationalization Process Theory: The Case of International New Ventures. *Management International Review*, 37, 85-99. Retrieved: <https://www.jstor.org/stable/40228434>

Oviatt, B. M. & McDougall, P. P. (2005). Defining International Entrepreneurship and Modeling the Speed of Internationalization. *Entrepreneurship theory and practice*, 29(5), 537-553. Retrieved: <https://doi.org/10.1111/j.1540-6520.2005.00097.x>

Philippe, J. & Pierre-Yves, L. (2011). Influence of entry modes and relationship modes on business services internationalisation. *The Service industries journal*, 31(4), 643-656. Retrieved: <https://doi.org/10.1080/02642069.2010.504826>

Pla-Barber, J. & Ghauri, P. N. (2012). Internationalization of service industry firms: Understanding distinctive characteristics. *The Service industries journal*, 32(7), 1007-1010. Retrieved: <https://doi.org/10.1080/02642069.2012.662498>

Reuber, A.R. & Fischer, E. (2011). International entrepreneurship in internet-enabled markets. *Journal of Business Venturing* 26(1), 660-679. Retrieved: [doi:10.1016/j.jbusvent.2011.05.002](https://doi.org/10.1016/j.jbusvent.2011.05.002)

Sanchez-Peinado, E. & Pla-Barber, J. (2006). A multidimensional concept of uncertainty and its influence on the entry mode choice: An empirical analysis in the service sector. *International business review*, 15(3), 215-232. Retrieved: <https://doi.org/10.1016/j.ibusrev.2006.02.002>

Saunila, M., Rantala, T., & Ukko, J. 2017. Characteristics of Customer Value Creation in Digital Services. *Journal of Service Science Research*, 9(1), 239-258. Retrieved: <https://doi.org/10.1007/s12927-017-0012-4>

Schendel, D. 2007. Risk and uncertainty. *Strategic Entrepreneurship Journal* 1(1), 53-55. Retrieved: <https://doi.org/10.1002/sej.17>

Shaheer, N. A. & Li, S. (2020). The CAGE around cyberspace? How digital innovations internationalize in a virtual world. *Journal of business venturing*, 35(1). Retrieved: <https://doi.org/10.1016/j.jbusvent.2018.08.002>

Silverman, D. (2013). *Doing qualitative research (Fourth edition.)*. Sage.

Westhead, P., Wright, M. & Ucbasaran, D. (2001). The internationalization of new and small firms: A resource-based view. *Journal of business venturing*, 16(4), 333-358. Retrieved: [https://doi.org/10.1016/S0883-9026\(99\)00063-4](https://doi.org/10.1016/S0883-9026(99)00063-4)

Wittkop, A., Zulauf, K. & Wagner, R. (2018). How Digitalization Changes the Internationalization of Entrepreneurial Firms: Theoretical Considerations and Empirical Evidence. *Management Dynamics in the Knowledge Economy*, 6(2), 193-207. Retrieved: <https://doi.org/10.25019/MDKE/6.2.01>