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The role of digitalization in the internationalization process of a traditional SME

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ABSTRACT:

The emergence of digital technologies and the on-going digital transformation accelerated by the Covid-19 pandemic has presented also traditional SMEs opportunities to exploit the advantages of digitalization in their internationalization process. Although, digitalization and its connection to entrepreneurship have been studied by various researchers, there are few studies examining the phenomenon from the perspective of an SME and even less focusing on the traditional SMEs.

The objective of the study is thus, to fill the research gap and extend the research to examine the role of digitalization in the internationalization process of a traditional SME. The term traditional SME is used in this study to describe a small and medium -sized enterprise trading consumer goods and services that exist in the physical dimension. The research was conducted in a form of a qualitative case study consisting of three Finland-based companies. The study was further supported by a literature review focusing on theoretical research around digitalization, internationalization, and the relationship between those two topics. The study's aim is to answer the research question "How can digitalization advance the internationalization process of a traditional SME?".

The study's findings show that digitalization has an enabling role in the internationalization process of a traditional SME. According to the results, digitalization can advance the internationalization process in terms of decreased risks related to foreign market selection, increased reach of wide audiences in a cost-efficient manner, and possibilities to swiftly implement data-based marketing decisions to support revenue creation. Additionally, remote operations enabled by digitalization create new international business opportunities and allow traditional SMEs to generate direct international sales. Lastly, digitalization enables resource-efficient internal and external value creation.

The findings further emphasize the significance of the companies' entrepreneurial orientation towards digitalization, appropriate capabilities, and sufficient resources in order to benefit from the opportunities presented by digitalization.

KEYWORDS: digitalization, digital technologies, internationalization, internationalization process, small and medium-sized enterprise, SME

VAASAN YLIOPISTO**Markkinoinnin ja viestinnän akateeminen yksikkö**

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TIIVISTELMÄ:

Digitaalisten teknologioiden kehitys ja meneillään oleva Covid-19-pandemian kiihdyttämä digitaalinen transformaatio ovat luoneet mahdollisuuksia myös perinteisille pienille ja keskisuurille yrityksille (pk-yrityksille). Yksi näistä mahdollisuuksista on digitalisaation hyödyntäminen pk-yritysten kansainvälistymisessä. Digitalisaatiosta ja sen yhteydestä yrittäjyyteen on tehty lukuisia tutkimuksia, mutta ilmiötä ei ole juurikaan käsitelty pk-yrityksen saatikka perinteisen pk-yrityksen näkökulmasta.

Tutkielman tarkoituksena on laajentaa aikaisempaa digitalisaation tutkimusta ja selvittää digitalisaation roolia perinteisten pk-yritysten kansainvälistymisprosessissa. Tässä tutkielmassa termillä ”perinteinen pk-yritys” tarkoitetaan pieniä ja keskisuuria yrityksiä, jotka toimittavat fyysisessä muodossa olevia tuotteita ja palveluita. Tutkielma suoritettiin laadullisena tapaustutkimuksena, joka koostui kolmesta suomalaisesta yrityksestä. Tämän lisäksi tutkielma hyödyntää digitalisaatiota, kansainvälistymistä ja näiden kahden aiheen suhdetta käsittelevää teoreettista tutkimusaineistoa. Tutkielman tavoitteena on vastata kysymykseen ”Miten digitalisaatio voi hyödyttää perinteisen pk-yrityksen kansainvälistymisprosessia?”

Tutkimustulokset osoittavat, että digitalisaatiolla on avustava rooli tutkimuskohteiden kansainvälistymisessä. Tulosten mukaan digitalisaatio voi hyödyttää kansainvälistymisprosessia usealla tavalla: vähentäen ulkomaan markkinavalintaan liittyviä riskejä, kasvattamalla kustannustehokkaasti suurten yleisöjen saavutettavuutta, ja mahdollistamalla nopeiden dataan perustuvien markkinointipäätösten implementoinnin tuloksen kasvattamiseksi. Lisäksi digitalisaation mahdollistamat etätoiminnot luovat uusia kansainvälisen liiketoiminnan tilaisuuksia sekä antavat perinteisille pk-yrityksille kyvykkyyden kansainvälisten suorien tulovirtojen muodostamiseen. Kaiken tämän lisäksi digitalisaatio toimii alustana resurssitehokkaalle sisäiselle ja ulkoiselle arvon luomiselle.

Tulokset korostavat lisäksi organisaatioiden digitalisaatioon suuntautuvan yrittäjämäisyyden, soveltuvien kyvykkyyksien ja riittävien resurssien merkitystä digitalisaation tuomien mahdollisuuksien hyödyntämisessä.

AVAINSANAT: digitalisaatio, digitaaliset teknologiat, kansainvälistyminen, kansainvälistymisprosessi, pienet ja keskisuuret yritykset, pk-yritykset

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1 Introduction

This study's purpose is to examine the role of digitalization in the internationalization process of traditional small and medium-sized companies in order to generate insights how other similar companies can utilize digital technologies to support their internationalization aspirations.

In this study the term "traditional SME" refers to small and medium -sized enterprises, which trade consumer goods and services that exist in the physical dimension.

1.1 Background of the study

The emergence of digital technologies has changed the field of entrepreneurship by creating new entrepreneurial opportunities (Nambisan, 2017, p. 1032) as well as decreased the barriers for entrepreneurs to establish their own company (Aldrich, 2014). According to Nambisan, digital spaces such as social media and crowdfunding have enabled this "*distributed entrepreneurial agency*" by facilitating the processes of effectuation and "*encouraging competition and collaboration*" (2017, pp. 1045–1046). Additionally, crowdfunding can offer small and medium -sized enterprises (SME) funding opportunities outside of the conventional routes, thus, enabling entrepreneurship for a wider audience regardless of their financial circumstances (Aldrich, 2014).

Due to a "*border dematerialization*" propelled by digitalization (Hervé et al., 2020, p. 33), global market has become accessible to virtually anyone, which has also created favourable new avenues of internationalization for SMEs (Hervé et al., 2020, p. 28). According to Hervé et al. (2020, p. 32), digitalization allows SMEs to produce additional revenue streams from international operations without the need for remarkable financial contributions as operating in another market can be done remotely. Digital technologies have further facilitated communication by offering remote opportunities for cultivating essential business networks, which Johanson and Vahlne (2009, p. 1426) state as the paramount factor for avoiding the "*liability of outsidership*". However, to some extent, the

nature of business relationships seems to be changing as, for instance, formerly long customer relationships become single digital transactions (Hervé et al., 2020, p. 33).

During 2020 digital commerce has increased by 23.9% worldwide (Euromonitor International, 2021). The growth speed is more than 10 %-units higher than the average of the previous five years' (Euromonitor International, 2021). It can be considered that the Covid-19 pandemic has accelerated the usage of digital technologies also among the SMEs, which have encountered a pressing need to seek revenues from alternative channels as physical interactions have experienced restrictions and customers have migrated to the digital purchase channels.

Digitalization has inspired several researchers, and there are studies related to digital artifacts (Kallinikos et al., 2013; Ekbia, 2009), digital platform businesses (Ojala et al., 2018), the emergence of ibusiness companies (Brouthers et al., 2016; Chen et al., 2019) and the relationship between digitalization and entrepreneurship (Nambisan, 2017; Gabriellsson, 2021; Coviello et al., 2017). Hervé et al. (2020) have further extended the study of internationalization and digitalization by including SMEs into the equation. Hervé et al. (2020) conducted an in-depth data analysis of the existing academic articles to examine the relationship between internationalization and digitalization from the perspective of SMEs. As their study is based on combining the existing academic studies, Hervé et al. state the necessity for empirical research in order to gain quantitative and qualitative data (2020, p. 35). This empirical data would thus aid in further understanding the impact of digitalization to the SMEs' strategies and models for foreign expansion (Hervé et al., 2020, p. 35). Therefore, it can be concluded that a need for an empirical study combining digitalization, internationalization, and SMEs exists.

Additionally, little is known about how so-called traditional companies utilize the opportunities presented by digital technologies in their internationalization processes, and how their internationalization strategies are affected by digitalization. Due to the recent fast-paced development of digital commerce (Euromonitor International, 2021) as well

as the several opportunities Hervé et al. (2020) connect to digitalization and internationalization of SMEs, it can be presumed that digitalization may introduce unprecedented possibilities also for traditional SMEs' internationalization processes. Furthermore, on the assumption that digital commerce continues its increase, there may be a risk of traditional companies being left behind from the on-going commercial evolution. Identifying the manners digitalization can benefit traditional companies' internationalization efforts may thus, allow these companies to not only discover ways to sustain the profitability of their business, but also to find new avenues for growth.

Denicolai et al. (2020, p. 165) conducted a quantitative data analysis of "*internationalization, digital innovation and sustainability of SMEs*" located in the Italian Lombardy region. Even though the sample of 438 SMEs provides some generalizability, digitally oriented and traditional companies cannot be distinguished from the data (Denicolai et al., 2020, p. 165), and thus, assessing the impact of digitalization specifically from the perspective of traditional SMEs is not possible. Furthermore, the study's focus is on the impact and the relationship between sustainability, internationalization, and digitalization to the companies' growth (Denicolai et al., 2020), not on the study, how digitalization can affect traditional SMEs' internationalization processes. Therefore, a research gap exists also in the study of the role of digitalization in the internationalization process of traditional SMEs.

1.2 Research question and aim of the study

The research question, which this study aims to answer, is:

How can digitalization advance the internationalization process of a traditional SME?

In order to answer the research question, the study seeks to find answers to the related sub-questions:

1. *How traditional SMEs utilize digital technologies in their business operations?*
2. *What methods and strategies traditional SMEs use in internationalizing their business?*

The objectives of this study are:

- 1) to identify the elements of digital technologies,
- 2) to explore the general internationalization strategies of companies,
- 3) to empirically identify the different digital technologies SMEs utilize in their business operations, and
- 4) to empirically examine the relationship between digitalization and internationalization of SMEs.

1.3 Delimitations

According to Eurostat (2018), in 2015, the number of SMEs was 99% of all the companies based in the European Union (EU). The amount of these companies in Finland in 2016 was 98% (Statistics Finland, 2017). As the majority of the companies in the EU and in Finland can be categorized as SMEs, a justification for the scope regarding the company size can be considered justifiable. Moreover, there are few studies that explore the relationship of digitalization and internationalization from the perspective of an SME, especially from the point of view of a traditional company.

Due to the topic and the desire to gain more in-depth knowledge related to the case companies' experiences, the scope of the studied companies is limited to the companies that have already internationalized their businesses. As the researcher is based in Finland, the aim was to conduct the case interviews face-to-face, the Covid-19 pandemic allowing, and thus, the selection of the case companies was limited to the companies that are also based in Finland.

Therefore, the study seeks to contribute to the existing literature by exploring the topic from the perspective of a traditional Finland-based SME that already has established

international operations. Additionally, the study answers to the call for empirical study (Hérve et al., 2020, p. 35) by conducting a qualitative data collection in order to gain in-depth knowledge about the topic. As the research was conducted as a qualitative case study, the number of sample companies was limited because the researcher of the study conducted the interviews, as well as transcribed the audio records, and categorized the data with no external resources. In total, six interviews with three case companies were conducted.

The theoretical background of the study reviews the key aspects of digital technologies (Nambisan, 2017; Kallinikos et al., 2013). The study also covers the topic of digital marketing, focusing especially on search engines and web analytics. The field of internationalization is explored by concentrating on, but not limited to, the original and the updated versions of the Uppsala model (Johanson & Vahlne, 1977; Johanson & Vahlne, 2009), and defining the concept of a “*born global*” company (Knight & Cavusgil, 2004; Cavusgil & Knight, 2015). Furthermore, the theoretical background examines the relationship between digitalization and internationalization (Hervé et al., 2020; Strange & Zucchella, 2017; Coviello et al., 2017) as well as explores the impact of entrepreneurial orientation and capabilities to the degree of digitalization of a company (Hervé et al., 2022; Penco et al., 2022; Ritala et al., 2021; Proksch et al., 2021; Lumpkin & Dess, 1996).

1.4 Definitions of key concepts

Born global: “*young companies that derive a significant portion of their revenue from international sales*” (Cavusgil & Knight, 2015, p. 4).

Business network: companies possess various different relationships with their customers, suppliers, and other stakeholders, who also have their own business relationships with various other companies (Johanson & Vahlne, 2009, p. 1414). Therefore, “*These webs of connected relationships are labelled business networks*” (Johanson & Vahlne, 2009, p. 1414).

Conversion rate: *“the percentage of visitors who take a desired action such as purchasing products, leaving a contact request, subscribing to newsletters, and downloading brochures”* (Järvinen & Karjaluoto, 2015, p. 123).

CRM: Customer Relationship Management refers to a technological solution, such as a *“database-driven system”* for companies *“to assess the effects of their marketing activities”* (Cambridge Dictionary, n.d.).

Digitalization: *“transformation of business processes so that the majority of the information is handled in a digital format”* (Gabrielsson et al., 2021, p. 5070).

Digital marketing: a broad term for using digital technologies in marketing in order to attract customers by *“promoting, advertising and creating awareness”* (Techlofy, 2017). These digital technologies consist of internet-fuelled online channels, such as search engine optimization (SEO), social media, email marketing, web ads and banners, and content marketing, but also offline channels such as TV, radio, SMS, and electronic billboard marketing (Techlofy, 2017).

Digitization: transforming physical products or services into a digital form (Yoo et al., 2010, p. 725). Additionally, *“Digitization makes physical products programmable, addressable, sensible, communicable, memorable, traceable, and associable”* (Yoo et al., 2010, p. 725).

Internationalization: *“a process in which the firms gradually increase their international involvement”* (Johanson & Vahlne, 1977, p. 23).

IoT: Internet of Things is *“an ecosystem of networked devices attached to objects or subjects”* (Goumagias et al., 2021, p. 1597).

SEM: Search Engine Marketing refers to *“paid online advertising to increase website visibility within search engines”* (American Marketing Association, n.d.).

Sensor: sensors can *“capture and process data, and to then communicate that data to people and other products”* (Strange & Zucchella, 2017, p. 175). Sensors are often incorporated within various types of devices, which, for instance, *“detects, measures or senses a physical phenomenon such as humidity, temperature”* (Perera et al., 2013, p. 83).

SEO: Search Engine Optimization is *“the practice of improving ranking within major search engines to increase online traffic”* (American Marketing Association, n.d.).

SERP: Search Engine Results Page presents a list of search results, or target pages, in a ranking-order based on their relevance (Kallinikos et al., 2013, p. 363).

Small and medium -sized enterprise (SME): a company with less than 250 employees and 25% or more of the company’s stock or equity is not owned by a company that is not considered an SME (Statistics Finland, n.d.). Additionally, the company’s annual turnover must not exceed 50 million euros or alternatively the balance sheet total must not exceed 43 million euros (Statistics Finland, n.d.).

Traditional company: in this study, the term traditional company refers to a company that trades consumer goods and services that exist in the physical dimension.

1.5 The structure of the thesis

The thesis is divided into six chapters. The first chapter introduces the topic and the aim of the study, presents delimitations, and defines the key concepts. The second chapter explores the study’s theoretical background in terms of digitalization and internationalization. The study’s theoretical framework is presented in the end of the second chapter.

In the third chapter the methodology of the case study is explained in terms of the research strategy and process, case selection, data collection and analysis methods as well as the assessment of reliability and validity of the study.

The fourth chapter presents the findings for each company in terms of digitalization, internationalization, and combining these both aspects. In the fifth chapter the findings are discussed in relation to the theoretical background. The final sixth chapter presents the conclusions and suggestions for future studies.

2 Theoretical background

This chapter presents the relevant theoretical background in terms of digitalization, digital technologies, and internationalization.

2.1 Digitalization

The main enabler of digitalization is the birth of the internet, which facilitated the development of innovations crucial for today's commercial activities (Ratchford, 2019, p. 36). With the internet came web browsers and search engines, which replaced manual searching and provided masses access to a large amount of data (Ratchford, 2019, p. 36). The internet has also provided companies with wide access to global markets in a relatively affordable manner (OECD, 2017, p. 116). Furthermore, online shopping and advertising were created, which offered an alternative for brick-and-mortar stores and traditional ways of advertising (Ratchford, 2019, p. 36). The emergence of social networks and smart phones further widened the access as well as the usage of available data (Ratchford, 2019, p. 36).

Due to the digital development, search costs for consumers have significantly dropped as the relevant information can be found from the internet and travelling is no longer required (Ratchford, 2019, pp. 36–37). This has also led to a development, where businesses must have an online presence (Ratchford, 2019, p. 37). Digitalization has provided companies with access to digital technologies, such as data analytics (OECD, 2017, p. 116) and, for instance, enabled companies to use data to track their customers and evaluate their customer journeys (Ratchford, 2019, p. 56). Crowdsourcing has allowed companies access to a platform for more affordable product development, whereas crowdfunding platforms have presented new ways for funding and bypassing the traditional financing providers (OECD, 2017, p. 116).

Furthermore, digital communication and collaboration tools have presented time and cost-efficient ways of working and conducting research, while various online channels

have enabled companies to access global talent pools and thus, improved the recruitment process of finding suitable talent (OECD, 2017, p. 116). However, this transition to a digital era is not without concerns about privacy and sufficient digital competencies as the development is fast-paced and many services are transferred to online channels (Malter & Rindfleisch, 2019, pp. 5–6).

2.1.1 Understanding digital technologies and digitalization

In order to study the role of digitalization in the traditional SME's internationalization process, it is important to understand the different components that constitute digital technology. Nambisan (2017, p. 1031) defines these components to be "*digital artifacts, digital platforms, and digital infrastructure*", which can create business opportunities for entrepreneurs (Nambisan, 2017, p. 1032).

According to Kallinikos et al. (2013, p. 358), digital artifacts have several distinct characteristics which differentiate them from physical objects. Firstly, digital artifacts are editable, such as digital lists or blogs (Kallinikos et al., 2013, p. 358). Editability means that digital objects can be altered and adjusted repeatedly and in an orderly manner (Kallinikos et al., 2013, p. 358). Secondly, they are interactive, which permits the users of the digital objects to initiate an action and access information (Kallinikos et al., 2013, p. 358).

Thirdly, digital objects are considered to be open in a sense that they are "*possible to access and modify by means of other digital objects*", such as a software that is used in digital photo editing, which makes these artifacts open and reprogrammable (Kallinikos et al., 2013, pp. 358–359). Furthermore, digital artifacts are also "*distributed and are thus seldom contained within a single source or institution*" (Kallinikos et al., 2013, p. 360). Additionally, Kallinikos et al. (2013, p. 360) associate digital artifacts with modularity and granularity as digital artifacts often consist of different blocks, which can be traced to their numerical foundation.

Search engines are a way of finding and accessing digital objects (Kallinikos et al., 2013, p. 363). Advertisements provide financing for these search engines, whose main concern is to produce suitable search results to capture the users' attention regardless of whether the content fully represents all the available information (Kallinikos et al., 2013, p. 363). Search engine results page, also known as SERP, presents a list of search results, or target pages, in a ranking-order based on their relevance, and thus, *"mediate our relationship with digital artifacts in nontrivial ways"* (Kallinikos et al., 2013, p. 363). This type of ranking presentation is practiced even though, *"there neither is nor can be an inherently right order of things on the Web"* (Kallinikos et al., 2013, p. 363).

As users of these search engines often prefer links, which have achieved a higher ranking and are located on the first result page, reaching high search rankings has become attractive for the companies (Kallinikos et al., 2013, p. 363). This has created a new field of business *"for companies offering search engine optimization services for website owners to increase their likelihood of achieving high ranking"* (Kallinikos et al., 2013, p. 363). Ranking algorithms, however, seek to adjust their criteria in order to prevent the interference of search engine optimization, which leads to these methods being *"in constant flux"* (Kallinikos et al., 2013, pp. 363–364). As a result, the relevance of the search results is influenced by *"the search engine companies, content producers, optimization consultants, and advertisers"*, which is also experienced as instability of *"information access and retrieval"* (Kallinikos et al., 2013, p. 364).

Nambisan (2017, p. 1032) describes digital platforms as *"a shared, common set of services and architecture that serves to host complementary offerings, including digital artifacts"*. A good example is iOS, Apple's digital platform, where developers can distribute their applications to the end-users (Nambisan, 2017, p. 1032). Brouthers et al. (2016, p. 513) refer these digital platform companies as ibusiness firms, which produce value by facilitating user interactions and content co-creation. The third component of digital technology is digital infrastructure, that Nambisan defines *"as digital technology tools and systems"* (2017, p. 1032). These tools and systems can be utilized in the number of

ways; for instance, in communication, interactive collaboration, 3D printing, and analysing data (Nambisan, 2017, p. 1032).

Digitization of products and services from physical into a digital format has enabled digital innovation (Yoo et al., 2010, p. 725), which can be characterized in terms of “(1) *the reprogrammability*, (2) *the homogenization of data*, and (3) *the self-referential nature of digital technology*” (Yoo et al., 2010, p. 726). Reprogrammability refers to the digital device’s ability to carry out various activities, which can be, for instance, calculation or word processing (Yoo et al., 2010, p. 726). The homogenization of data means that all data “*can be stored, transmitted, processed, and displayed using the same digital devices and networks*” even when their sources differ (Yoo et al., 2010, p. 726). This characteristic enables the development of new innovative products and services (Yoo et al., 2010, p. 726).

The third characteristic of digital innovation, the self-referential nature, means that digital innovation can be generated only by utilizing digital technologies (Yoo et al., 2010, p. 726). Yoo et al. (2010, p. 726) state that due to decreased costs and increased efficiency of computers and availability of the internet, digital technologies required for digital innovation have become accessible to a wider population, which has “*democratized innovation and almost anyone can now participate*”.

Due to the nature of the digital technology, the boundaries of the physical products and services no longer apply as the digital dimension of the product can be modified and enhanced even in a quick manner (Nambisan, 2017, p. 1033). For example, a product containing a digital component can be updated and new value can be added for the consumer also after the product has been purchased and left the company facilities (Nambisan, 2017, p. 1033). Examples of these products are, for instance, smart phones, smart watches, and products containing some type of updatable software.

The fluidity of outcomes and processes has created a need for change in the entrepreneurial behaviour as constant change requires entrepreneurs to be open to new opportunities and to constantly develop their value proposition and activities (Nambisan, p. 1034). Furthermore, the concept of entrepreneurial agency has broadened and become distributed due to involvement of digital technologies (Nambisan, 2017, p. 1035). Digital platforms enabling value co-creation among its members (Nambisan, 2017, p. 1035; Brouthers et al., 2016, p. 513) are one example of the distributed entrepreneurial agency as users pursue their individual objectives, and have specific resources and offerings to the collective, which often happen unexpectedly and unpredictably (Nambisan, 2017, p. 1035).

Nambisan refers to sociomateriality to explain the emergence of new market opportunities related to digital artifacts (2017, p. 1040). Additionally, digital artifacts allow “*entrepreneurial experiments*” due to their open, editable, and distributable nature, which not only increase opportunity creation but can also favourably affect cost-effectivity (Nambisan, 2017, p. 1041). Furthermore, Nambisan highlights the role of digitalization in expanding entrepreneurial opportunities to a wider population through mediums such as crowdfunding platforms and social media (2017, p. 1046).

2.1.2 Digital marketing

Digital marketing is a concept, which covers all manners of marketing when they are performed by using “*electronic devices which utilize some form of a computer*” (American Marketing Association, n.d.). Whereas the nature of traditional marketing can be considered as a method for “*one-way communication*”, digital marketing is the opposite as it can enable companies and their audiences to engage with each other in a manner of “*two-way communication*” (American Marketing Association, n.d.). Kannan and Li (2017, p. 23) define digital marketing as “*an adaptive, technology-enabled process by which firms collaborate with customers and partners to jointly create, communicate, deliver, and sustain value for all stakeholders*”.

Digital marketing consists of internet-fuelled online channels such as search engine optimization (SEO), social media, email marketing, web ads and banners, and content marketing, but it also covers offline channels such as TV, radio, SMS, and electronic billboard marketing (Techlofy, 2017). Although, digital marketing can consist of a myriad of methods, there are some prevailing modes, which, when combined, can yield favourable results for companies (American Marketing Association, n.d.).

Search engines

Search engines provide a free-of-charge avenue for users to seek information by generating search results based on the keywords and the websites matching the search criteria (Kannan & Li, 2017, p. 29). These search results include also *"paid search listings"* (Kannan & Li, 2017, p. 29), which can be an attractive way of marketing for companies as search engine users often prefer links among the top of the listings (Kallinikos et al., 2013, p. 363). According to Chan et al. (2011, p. 837), customers, which were acquired by using paid search engine advertising, made more purchases and generated higher lifetime value than the customers which the companies obtained from other online or offline marketing channels. Customers acquired through search engines, namely Google, often make frequent purchases and *"increase their purchase quantities over time"* (Chan et al., 2011, p. 837).

Search Engine Marketing (SEM) is a term, which refers to *"paid online advertising to increase website visibility within search engines"* (American Marketing Association, n.d.). To increase visibility, search keywords have become a prime interest for the advertisers, which has created a highly competitive *"auction-based market"* for keywords (Kannan & Li, 2017, p. 30). One method of pricing search advertising is that companies pay based on the number of clicks their website receives, which has a benefit of the costs being related to the actual performance (Chan et al., 2011, p. 837; Kwon, 2009, p. 262). This type of pricing is called Pay-Per-Click (PPC) method. (American Marketing Association, n.d.; Kwon, 2009, p. 262).

According to the American Marketing Association (n.d.), Search Engine Optimization (SEO) is *“the practice of improving ranking within major search engines to increase online traffic”*. Unlike SEM, SEO is a way of driving *“organic website traffic”* (Erdmann et al., 2021, p. 651), and it has created business opportunities for companies offering optimization services (Kallinikos et al., 2013, p. 363), thus, turning SEO into *“a multi-billion-dollar business”* (Erdmann et al., 2021, p. 650). Due to the importance of search engine positioning, SEO has become a relevant component in the companies’ marketing expenditure allocation (Erdmann et al., 2021, p. 650).

In order for a website to receive a suitable level of organic traffic, it must appear on the first page of the search results (Ziakis et al., 2019, p. 2). Moreover, ensuring the place within the top three results for the specific keyword should yield the most favourable outcomes as *“the click through rates are 30% (1st position), 16% (2nd position), and 10% (3rd position), while the click through rate for positions past the first page of SERPs is limited to under 2%”* (Ziakis et al., 2019, p. 2). In order to maintain the preferred spot in the result ranking, constant adaption and optimization is required as the search engines alter their algorithms frequently (Ziakis et al., 2019, p. 2; Kallinikos et al., 2013, pp. 363–364). According to Erdmann et al. (2021, p. 650), studied examples of SEO are, for instance, *“website design and tools to identify strong keywords and trends”*, as well as *“linkage optimization or the optimal proportion of the number of keywords concerning the total number of words on the website to achieve a high positioning”*.

Email marketing

Email marketing is broadly used by companies targeting either business or consumer customers, and it is considered to be relatively profitable when measured by *“revenue-based return on investment (ROI)”* (Zhang et al., 2017, p. 851). However, managing efficient email marketing to generate desired results can be challenging due to the customers’ variable tendencies of opening the marketing emails and finding the suitable frequency and number of emails sent to the customers (Zhang et al., 2017, p. 851). Zhang et al.’s (2017, p. 865) study suggests that the email open-rate does not necessary imply

the customer's purchasing behaviour as different customer types behave differently in terms of opening marketing emails and purchasing. Therefore, companies should utilize data to recognize different "*customer-level characteristics*" and target these customer types based on their observed behaviour (Zhang et al., 2017, p. 865).

It is crucial to understand that email marketing is not solely a tool for mass communication, but also a way for personalized communication (Goic et al., 2021, p. 118). According to Goic et al. (2021, p. 118), "*Triggered emails are personalized messages that are automatically sent as a response to specific actions or states of customers*". Triggered emails can be sent in situations, such as campaign reminders sent for the purposes of cross-selling or reminding customers in case they have abandoned their online shopping cart (Goic et al., 2021, p. 118). Additionally, re-order reminders can be sent to customers to remind them to re-order a product or service, which are frequently purchased or encourage customers to re-connect with the company through re-engagement emails (Goic et al., 2021, pp. 118–119).

Goic et al. (2021, p. 130) state that triggered emails can be a cost-efficient solution producing also larger revenues, when compared to the traditional mass emails as they enable targeting "*the right customer at the right time*". However, as the customer being targeted with the triggered email, has already demonstrated an interest towards the company and its offerings, their likeliness to purchase is already higher than other customers (Goic et al., 2021, p. 130).

Social media

According to the American Marketing Association (n.d.), Social Media Marketing (SMM) is "*the practice of using social media channels to promote business products or services*", which often includes influencer marketing that utilizes social media influencers to conduct promotion activities towards their audiences. As social media is an interactive media, there are two drivers that generate the need for action: the company's objectives and the customer's motivations (Li et al., 2020, p. 55). These drivers set out the inputs,

that on the company's side are "*Social Media Engagement Initiatives*", which create customer behaviour (Li et al., 2020, p. 55). The inputs create "*throughputs*" that consist of social connectedness and social interaction, resulting in customer engagement (Li et al., 2020, p. 55).

Company's social media marketing strategy and the level of customer engagement depends on the company's objectives (Li et al., 2020, p. 58). Social commerce strategy is on the lowest level of the customer engagement impact as its only objective is to promote and sell, which creates solely one-way interactions (Li et al., 2020, p. 58). On the next level is the social content strategy, where the company aspires to connect and collaborate with its customers (Li et al., 2020, p. 58). Social monitoring strategy's objective is to listen and learn, whereas the highest collaborative customer engagement is achieved by implementing the social customer relationship management (CRM) strategy, where the company's social media objective is to empower and engage its customers (Li et al., 2020, p. 58).

Additionally, Kannan and Li (2017, p. 27) state that in the digital environment "*customers can share word-of-mouth information*" with audiences exceeding their personal social network by, for instance, sharing product reviews on company specific or "*third-party*" websites, and social network channels. When compared to traditional world of mouth in the physical dimension, the reach of the audience is significantly wider (Kannan & Li, 2017, p. 27).

Web analytics

A significant advantage, which digital marketing has, when examined in contrast with traditional marketing, is that its results can be measured (Chaffey & Patron, 2012, p. 30). According to Gartner (n.d.), web analytics are used to describe "*a market of specialized analytic applications used to understand and improve online channel user experience, visitor acquisition and actions, and to optimize digital marketing and advertising*

campaigns". Järvinen and Karjaluoto (2015, p. 119) consider web analytics as "*an important developmental step toward measurable marketing*".

Quantitative and qualitative indicators may be used in order to learn about the target customer behaviour and guide decision-making (Saura et al., 2017, p. 7). Qualitative data can be gathered, for instance, by asking customers direct questions or analysing their behaviour (Saura et al., 2017, p. 8). Table 1 illustrates examples of the different qualitative indicators that companies can utilize in their digital marketing activities (Saura et al., 2017, p. 8). Table 2 presents the quantitative indicators, which are grounded in relatively more measurable data than the qualitative indicators, which can be utilized to discover reasons behind actions (Saura et al., 2017, pp. 7–8).

Table 1. Qualitative indicators used in digital marketing (Saura et al., 2017, p. 8).

Qualitative Indicator	Description
A/B Testing	A/B testing refers to two different versions of a page or a page element such as a heading, image or button. A/B testing is aimed at increasing page or site effectiveness against key performance indicators including click through rates, conversion rates and revenue per visit.
Call to Action (CTA)	A statement or instruction, typically promoted in print, web, TV, radio, on-portal, or other forms of media (often embedded in advertising), that explains to a mobile subscriber how to respond to an opt-in for a particular promotion or mobile initiative, which is typically followed by a Notice.
User experience (UX)	Encompasses all aspects of the end-user's interaction with the company, its services, and its products through different devices. This term is also used with Information Architecture (IA), which is the structural design of shared information on a site based on user behaviour.
Rating systems	A system of classifying according to quality or merit or amount which could divide and organize the type of users.
Surveys and forms	Tools that allows users to send information to a website. It is usually used to set the number of conversions or conversion goals in a web site or DM campaign.
The Flow of Users	Graphical representation of the paths users took through the site, from the source, through the various pages, and where along their paths they exited the site. The Users Flow report lets you compare volumes of traffic from different sources, examine traffic patterns through your site, and troubleshoot the effectiveness of your site. It is used to understand the user behaviour on a site.

Table 2. Quantitative indicators used in digital marketing (Saura et al., 2017, p. 8).

Quantitative Indicators	Description
Impressions	An instance of an organic search-engine listing or sponsored ad being served on a particular Web page or an image being viewed in display advertising.
Traffic	Number of visitors who come to a website.
Unique users	Number of different individuals who visit a site within a specific time period.
Lead	When a visitor registers, signs up for, or downloads something on an advertiser's site. A lead might also comprise a visitor filling out a form on an advertiser's site.
Conversion	What defines a conversion depends on the marketing objective. It could be a sent form, a click on an ad or a purchase. It is an objective or goal.

To benefit from the measurability of digital marketing, the planning of the digital marketing strategy and the use of web analytics should begin with identifying the most relevant key performance indicators (KPIs) to allow the assessment of the chosen marketing strategy (Chaffey & Patron, 2012, p. 38; Järvinen & Karjaluoto, 2015, p. 125; Saura et al., 2017, p. 2). In Table 3, Saura et al. (2017, p. 9) present examples of the meaningful KPIs that can be utilized to track the effectiveness of digital marketing. Furthermore, companies should create a structured process for utilizing and managing incoming web analytics data as well as to report the results to the senior management to ensure commitment for continuous development (Järvinen & Karjaluoto, 2015, p. 125)

Table 3. Meaningful KPIs to track (Saura et al., 2017, p. 9).

KPI in DM	Description
Conversion Rate	The average number of conversions per click in SERP results or in Ads click (depends on the marketing objective), shown as a percentage. Conversion rates are calculated by simply taking the number of conversions and dividing that by the number of total ad clicks/actions that can be tracked to a conversion during the same time period.
Goals Conversion Rate	A <i>goal</i> represents a completed activity (also called a conversion). Examples of goals include making a purchase -e-commerce-, completing a game level (App), or submitting a contact information form (Lead generation site).
Type of Users	<i>New Visitors.</i> They are users who visit your site for the first time. <i>Returning Visitors.</i> They are users who visit your site for the second or more times. It is important because it shows the interest of your business and website for the target audience.
Type of Sources	<i>Source.</i> Every referral to a web site has an origin, or source. <i>Medium.</i> Every referral to a website also has a medium, such as, according to Google Analytics: "organic" (unpaid search), CPC, referral, email and "none", direct traffic has a medium of none. <i>Campaign.</i> Is the name of the referring AdWords campaign or a custom campaign that has been created.
Keywords/Traffic of Non branded Keywords	<i>Keywords</i> in DM, are the key words and phrases in a web content that make it possible for people to find a site via search engines. A <i>non-branded keyword</i> is a one that does not contain the target website's brand name or some variation. Ranking for non-branded keywords is valuable because it allows a website to obtain new visitors who are not already familiar with the brand.
Keyword Ranking	Rank is an estimate of your website's position for a particular search term in some search engines' results pages. The lower the rank is, the easier your website will be found in search results for that keyword.

When analysing the effectiveness of digital marketing, conversion rate is often a metric, which companies seek to improve (Chaffey & Patron, 2012, p. 35). Conversion rate refers to *“the percentage of visitors who take a desired action such as purchasing products, leaving a contact request, subscribing to newsletters, and downloading brochures”* (Järvinen & Karjaluoto, 2015, p. 123). Optimization of conversion rates has become a significant part of marketing due to digitalization expanding formerly local competition to a global level (Econsultancy, 2017, p. 9). According to the study consisting of answers of over 800 *“digital marketers and ecommerce professional”* conducted by Econsultancy (2017, p. 13), A/B testing was mentioned among the most impactful ways to increase conversion rates. A/B testing is a qualitative indicator, where two versions of the same webpage or webpage component are tested to configure the most effective choice based on customer behaviour (Saura et al., 2017, p. 8). Furthermore, *“checkout optimization, customer journey analysis and segmentation”* are also considered among the significant methods to improve conversion rates (Econsultancy, 2017, p. 13).

According to Järvinen and Karjaluoto (2015, p. 120), SMEs are less active in the usage of web analytics, which can be due to limited resources and lack of knowledge. This is confirmed by Taiminen and Karjaluoto (2015, p. 14), who found that the lack of resources, knowledge, and competences are the greatest barriers for SMEs’ usage of digital marketing in general. Furthermore, in terms of social media, one notable barrier for utilizing social media channels is identified as resistance from the management (Taiminen & Karjaluoto, 2015, p. 15). Moreover, Econsultancy’s (2017, p. 76) study indicates that lack of resources and budget are the two most prevailing perceived barriers for companies to increase their conversion rates.

Digital platforms for commerce and innovation

With digitalization, diverse forms of digital platforms have appeared and enabled various ways to conduct commercial activities by connecting individual consumers and sellers with each other, as well as offering avenues for companies to connect with business and consumer customers around the world (Kannan & Li, 2017, p. 28; Ojala et al., 2018, p.

725). Additionally, crowdsourcing and innovation platforms have emerged *“to connect firms to their customers (the crowd) and help generate ideas for new products and services”* (Kannan & Li, 2017, pp. 28–29). These platforms are often operated by third parties, who generate revenues in various forms, such as commissions or charges based on the performance (Kannan & Li, 2017, p. 28). Also, social networking sites have incorporated commercial elements onto their platforms, for instance, Facebook has created the Marketplace to facilitate commerce among its users (Kannan & Li, 2017, p. 29). A crucial factor to note is that *“a platform cannot survive unless both buyers and sellers participate”*, and their activity is highly impacted by the perceived value of the platform in terms of the number and activity of the other side (Ratchford, 2019, p. 51).

2.1.3 Sensors

To understand the concepts of sensing and sensors, it is crucial to first define the phenomenon called the Internet of Things (IoT), which by combining declarative and relational dimensions can be defined as *“an ecosystem of networked devices attached to objects or subjects”* (Goumagias et al., 2021, p. 1597). Nowadays, diverse type of objects can incorporate sensors, which can be described as *“a device that detects, measures or senses a physical phenomenon such as humidity, temperature”* (Perera et al., 2013, p. 83). According to Strange and Zucchella (2017, p. 175), sensors can *“capture and process data, and to then communicate that data to people and other products”*. Strange and Zucchella (2017, p. 175) further state that IoT will also have a significant impact on the value chain management when these value chains are scattered around the world as products and the product-specific data will become interlinked and thus, increase the efficiency of the distribution.

In addition to collecting data, sensors can pre-detect customer needs and prevent issues from materializing, for instance, by remotely assessing device data and, as an example, ordering an ink cartridge before the current cartridge is empty, or by conducting data analysis, which helps technicians to solve potential issues before they arise (Narang & Shankar, 2019, p. 109). One device can contain several sensors, which can have different

applications (Perera et al., 2013, p. 83). Everyday examples of different sensor applications may, for instance, be wearable devices such as activity bracelets, fire detectors, smart household appliances, cars, and motion sensors commonly used in office buildings for lighting control.

Nowadays, sensors are utilized in overseeing and regulating a wide variety of production-related processes to provide feedback or monitor predefined thresholds (Ahrend et al., 2021, p. 2). According to Ahrend et al. (2021, p. 2), there are several trends that increase the demand for more sensors, such as high volatility in raw materials and energy driving companies to optimize their activities in order to maintain competitive advantage (Ahrend et al., 2021, p. 2). Moreover, customer expectations have developed towards more personalized offerings (Ahrend et al., 2021, p. 2). Also, as the population ages, especially the older employees can require more support in their work tasks, and as the employees retire the know-how is lost with them (Ahrend et al., 2021, p. 2). Another driving trend is the tightening regulation setting requirements related to safety and environment controls (Ahrend et al., 2021, p. 2). These trends in the market therefore, create more business opportunities for businesses using sensors in their business models.

2.1.4 Challenges of digitalization

The development of digital technologies has decreased the costs of data-related gathering, storing, and handling activities as well as favourably affected the increase of efficient computing performance, and thus paved the way for new applications and innovations (OECD, 2017, p. 6). Although, digitalization presents companies several opportunities, there are also challenges especially experienced by the SMEs *“The ability of SMEs to swiftly adopt new technologies, to learn by doing, innovate, and optimise their production, is constrained by their small scale, limiting their ability to reap the benefits of the digital economy”* (OECD, 2017, p. 115).

According to Nguyen et al. (2015, p. 207), small companies in particular tend to struggle with IT implementation as *“the adoption rate is traditionally low and the failure rate is*

high". In order to enhance IT adoption, SMEs must overcome the challenge of potentially inadequate knowledge-based resources as having suitable skills and competences in place can, for instance, facilitate changing between different technologies (OECD, 2017, p. 9). Nguyen et al. (2015, p. 221) further state that the top management's commitment and a positive mindset towards IT initiatives as well as the company culture are crucial for successful IT adoption. Nguyen et al. (2015, pp. 221–222) also argue that external factors, such as customers, suppliers, and the support from external IT consultants can favourably influence the SMEs' IT adoption. Integrating the company's and supplier's IT systems as well as taking customers into consideration when deciding the "*IT communication in their daily business operation*" are examples of activities, which can successfully contribute to the SMEs' IT adoption (Nguyen et al., 2015, pp. 221–222).

Access for SMEs and other users to these digital technologies has several dependencies in terms of existing infrastructure, general attitude, such as "*trust in digital technologies*", suitable skillsets, but also "*high costs and poor access to financing*" which especially affects SMEs (OECD, 2017, p. 9). Overcoming these barriers of access can improve global consumption and business opportunities by providing access to digital platforms, as well as digital communication, collaboration, and networking tools and thus, for instance, enable "*cross-border e-commerce*", and provide access to global human resources (OECD, 2017, p. 36).

Digitalization has also expanded the number of accessible sales channels for companies by bringing the internet-based sales channels into the mix (Gabrielsson & Gabrielsson, 2011, pp. 89–90). The internet-based sales channel strategies can involve direct internet sales, sales to "*indirect channel partners*", or combining these strategies (Gabrielsson & Gabrielsson, 2011, p. 88). However, when utilizing the internet-based sales channels and other traditional channels in tandem, potential sales channel conflicts, where the company is competing with its partners, can arise and thus, the implementation of the internet-based sales channels often requires cautiousness (Gabrielsson & Gabrielsson, 2011, p. 89).

Finally, digital security and data privacy related issues can create challenges for consumers and companies (OECD, 2017, p. 8). The General Data Protection Regulation (GDPR), which has been applied since 2018 within the EU, is one manner of enforcing customer rights in terms of personal data gathering and processing (European Commission, n.d.). The GDPR sets personal data-related requirements for organization to ensure “*lawfulness, fairness and transparency*”, as well as to limit data collection, usage, and storage, to ensure “*accuracy*” of data, and to ensure “*accountability*” of the data controller, and “*integrity and confidentiality*” of data processing (EUR-Lex, 2016).

2.2 Internationalization

As the study’s objective is to understand the relationship between digitalization and internationalization, it is crucial to examine the theoretical background regarding internationalization as a process. This chapter presents internationalization by concentrating on, but not limited to, two different approaches: the Uppsala model and the concept of born global companies.

2.2.1 Gradual internationalization and opportunity creation

Johanson and Vahlne (1977, p. 23) recognize internationalization as a gradual process, where involvement in foreign markets is increased step by step as the essential knowledge grows. Their so-called Uppsala model is rooted on the study of Swedish companies conducted in the University of Uppsala (Johanson & Vahlne, 1977, p. 24). According to Johanson and Vahlne (1977, p. 24), the early steps on the path of internationalization are often, for instance, to begin exporting activities with a help of an agent and later to form a subsidiary in the foreign market. If the previous steps have been successful, the company may eventually start production operations in the foreign market (Johanson & Vahlne, 1977, p. 24).

The Uppsala internationalization model is built on two aspects, namely state and change aspects (Johanson & Vahlne, 1977, p. 26). The state aspect consists of two elements, which are market knowledge and market commitment while the change aspect involves the elements of commitment decisions and current activities (Johanson & Vahlne, 1977, p. 26). The idea in the model is that the existing market knowledge influences the market commitment which in turn impacts the change aspects (Johanson & Vahlne, 1977, pp. 27–28). Market commitment is considered as a combination of resources allocated to a certain market and the commitment of these resources to this specific market in terms of, for instance, specialization (Johanson & Vahlne, 1977, p. 27).

The second state aspect is market knowledge, which can be either objective or experiential (Johanson & Vahlne, 1977, pp. 27–28). Johanson and Vahlne (1977, p. 28) argue that experiential knowledge is paramount in the internationalization process, and it is obtained gradually while conducting business in the foreign market. This knowledge allows companies an understanding to grasp and generate opportunities within the foreign market (Johanson & Vahlne, 1977, p. 28). Furthermore, Johanson and Vahlne (1977, p. 28) view market-specific knowledge as a valuable resource as it consists of knowledge of *“characteristics of the specific national market, its business climate, cultural patterns, structure of the market system, and, most importantly characteristics of the individual customer firms and their personnel”*. When combined with the general knowledge about different business operations’ functionalities, growth can be created (Johanson & Vahlne, 1977, p. 28). Therefore, *“the better the knowledge about a market, the more valuable are the resources and the stronger is the commitment to the market”* (Johanson & Vahlne, 1977, p. 28).

Current business activities are one of the change aspects and they generate experiential knowledge (Johanson & Vahlne, 1977, pp. 28–29). In current business activities both company and market experience are important, and while acquiring market experience can be done through recruitment, the new hires must also obtain the company-specific knowledge (Johanson & Vahlne, 1977, p. 29). Therefore, internationalization can be a

long process as learning while conducting current activities is often a time-consuming endeavour (Johanson & Vahlne, 1977, p. 29). Commitment decisions are the second change aspect involving “*decisions to commit resources to foreign operations*” (Johanson & Vahlne, 1977, p. 29). According to Johanson and Vahlne (1977, p. 29), perceived opportunities and problems in the market influence these commitment decisions. Johanson and Vahlne (1977, p. 30) further argue that commitments tend to be made gradually as the market experience develops, and this process is accelerated by further market growth.

In the original Uppsala model, lack of knowledge is seen as the main obstacle in the internationalization process, and therefore, a low psychic distance regarding the culture and language to the home market is preferred in the early stages of internationalization (Johanson & Vahlne, 1977, p. 26). The original Uppsala model is illustrated in Figure 1. However, in the revised Uppsala model presented in Figure 2, the significant driver for the company’s internationalization process is the ability to recognize opportunities within the company’s business relationship network (Johanson & Vahlne, 2009, p. 1423).

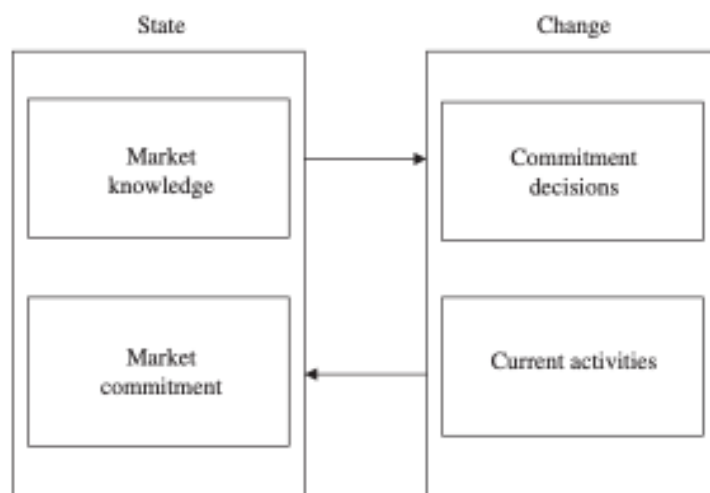


Figure 1. Uppsala model 1977 (Johanson & Vahlne, 1977, p. 26).

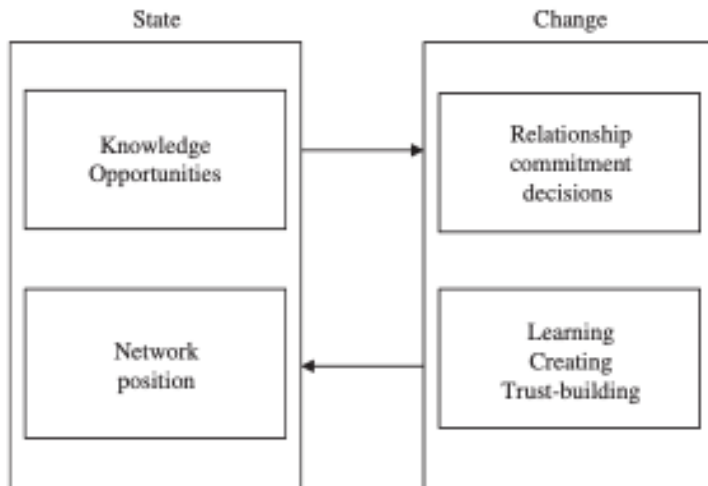


Figure 2. Revised Uppsala model 2009 (Johanson & Vahlne, 2009, p. 1424).

Johanson and Vahlne (2009, p. 1424) recognize opportunities as the most significant part of the knowledge component in the internationalization process. According to Johanson and Vahlne (2009, p. 1424), internationalization is “*pursued within a network*”, and these networks together with strategies and capabilities are seen as different aspects of knowledge. Together knowledge and the ability to discover opportunities prompt decisions regarding relationship commitments, which generally affect the choice of the foreign market, the extent of the investments to the foreign market, and the preferred entry mode (Johanson & Vahlne, 2009, p. 1424).

Johanson and Vahlne’s (2009, p. 1424) argument about the importance of opportunities aligns with Sarasvathy’s (2001, p. 243) findings that companies’ decision-making involves effectuation and causation processes. Causation focuses on creating a pre-meditated and rational strategy in order to achieve specific targets, while effectuation utilizes the existing set of means to create one or multiple possible effects (Sarasvathy, 2001, p. 245). Sarasvathy states, that companies with limited resources could benefit from effectuation reasoning as it allows opportunity creation with the resources the company already currently possesses (Sarasvathy, 2001, p. 249). Furthermore, Galkina and Chetty (2015, p. 668) argue that “*effectual networking*” creates opportunities, that often affect the SME’s decisions regarding which market to enter and how. Galkina and Chetty (2015, p. 669)

continue that *“The effectual logic of networking is more likely to occur in any conditions of uncertainty throughout the SMEs growth”*.

Johanson and Vahlne further highlight that learning, knowledge creation, and trust-building form as an important dimension of the internationalization process (2009, p. 1424). Due to the importance of relationship networks in the company’s internationalization process, the *“liability of outsidership”* is considered as the primary source of uncertainty, and therefore, *“a firm’s problems and opportunities in international business are becoming less a matter of country-specificity and more one of relationship-specificity and network-specificity”* (Johanson & Vahlne, 2009, p. 1426).

Coviello et al. (2017, p. 1153) further connect the Uppsala model to the digital era by stating that digitization, that is considered to be among the *“macro-level influences”* (2017, p. 1156), can alter the dynamics of the internationalization process regarding, for instance, timing, entry mode selection, learning, access to resources, and *“the firms’ ability to manage the liabilities of foreignness and outsidership”*. Because of digitalization, companies can become international from the establishment, and thus, create revenue streams from overseas markets without the need to invest in costly elements such as production facilities or local personnel (Coviello et al., 2017, p. 1153). Coviello et al. (2017, p. 1156) further argue, that individual decision-makers or so called *“micro-level influences”* impact the internationalization process as the action of creating knowledge happens between individuals (2017, pp. 1156–1157).

2.2.2 The born global perspective

Exploring internationalization together with digitalization requires familiarity of the concept of born global companies, which have internationalized their business operations close to their inception (Knight & Cavusgil, 2004, p. 124). Oviatt and McDougal (2005, p. 29) refer to these type of companies as *“international new ventures”*, which are often established within the IT industry, an environment characterized by global competition. Cavusgil and Knight (2015, p. 4) define born globals as *“young companies that derive a*

significant portion of their revenue from international sales". Additionally, the founders of born globals have a strong international orientation, and due to the often limited resources, these companies usually start their internationalization process through exporting (Cavusgil & Knight, 2015, p. 4).

According to Knight and Cavusgil (2004, p. 127), *"young firms with a strong innovation culture and a proclivity to pursue international markets tend to internationalize earlier"*, and this innovativeness further enhances the capture of knowledge. With increasing knowledge, also the company's internal capabilities and thus, performance develop (Knight & Cavusgil, 2004, p. 127). Born globals can be characterized as entrepreneurial companies, and despite their often lacking *"tangible resources"*, the *"intangible knowledge-based capabilities"* facilitate their foreign expansion already near their establishment (Knight & Cavusgil, 2004, p. 127). Furthermore, while larger companies with longer histories often have an organizational *"administrative heritage"* which may constrain the decision-making within the company in terms of internationalization (Collis, 1991, p. 64), born globals tend to be free of this type of heritage and thus, the necessary process of unlearning routines related to home country functions is not required (Knight & Cavusgil, 2004, p. 128).

Globalization, the internet, and development of digital technologies have enabled companies with scarce resources to expand their operations to foreign markets (Cavusgil & Knight, 2015, p. 4). Diverse motivations, such as, limited size of the domestic market, changing overall market conditions, advancements in technology, increasing relationship networks, and the company's own resources and capabilities affect the speed of the company's internationalization (Cavusgil & Knight, 2015, p. 9). According to Cavusgil and Knight (2015, p. 9), the company founders' or the senior management's attention to *"an internationalization premium"* has enabled born globals to outperform their peers concentrating solely on the domestic market. Moreover, digital technologies and the internet have enabled these companies to personalize their product offerings often characterized by *"high-tech or superior quality"*, search for market-specific information, and

find “*narrow, cross-national market niches*” (Cavusgil & Knight, 2015, pp. 9–10). Finally, these companies’ ability to efficiently construct “*global networks of collaborators*” has further advanced their internationalization process (Cavusgil & Knight, 2015, p. 10).

2.3 Internationalization in a digital world

Hervé et al. (2020) have examined the role of digitalization in the internationalization of SMEs by conducting a comprehensive article review and an analysis process. The findings of the study led to the identification of the following four fields, where digitalization impacts the internationalization processes of SMEs: 1) “*Costs, accessibility, resources and competences*”, 2) “*Market knowledge*”, 3) “*Distance and location*”, and 4) “*Relational competences and partner networks*” (Hervé et al., 2020, pp. 32–33). Furthermore, Hervé et al. (2022, p. 332) conducted a quantitative research study to examine internationalization and digitalization from the perspective of “*entrepreneurial behaviours of firms and entrepreneurs*”.

Digitalization enables remote management of SMEs’ business activities in foreign markets and thus, companies have opportunities “*to generate alternative revenues without making significant investments*” (Hervé et al., 2020, p. 32). Additionally, the usage of big data and analytics can allow companies to avoid significantly committing to foreign marketing operators as they can remotely “*monitor emerging trends and opportunities*” in these markets by themselves and therefore, efficiently optimize their business operations across different countries (Strange & Zucchella, 2017, p. 176). This type of optimized decision-making together with reduced transaction costs and optimally dispersed resources across different markets form further benefits for companies (Hervé et al., 2020, p. 32). According to Coviello et al. (2017, p. 1154), digitalization enables companies to access resources and capabilities as they are needed through “*a worldwide market*”. Hervé et al. (2020, p. 32) note that entering a niche market with an innovative product when internationalizing can be an effective way to attract attention from the local competitors.

Digitalization supports the development of the companies' market knowledge due to digital technologies, as customer data and direct customer interactions allow companies to better respond to the needs of their customers as well as to increase the value of their value proposition by personalizing their offerings (Hervé et al., 2020, p. 32). In order to better cater for their customers in the foreign markets, companies can utilize digital platforms to collect user feedback and communicate with their customers (Hervé et al., 2020, pp. 32–33; Brouters et al., 2016, p. 514). Neubert (2018, p. 52) further states that digitalization can enhance the selection of foreign entry-markets by using algorithms to predict the “*future attractiveness*” of potential markets and thus, improve decision-making.

Digital technologies have decreased the meaning of distance and location, which Hervé et al. (2020, p. 33) refer to as “*border dematerialization*”. Ability to manage current foreign operations as well as to target a large number of new markets online with the existing resources can allow SMEs to efficiently seek opportunities outside of their domestic market (Hervé et al., 2020, p. 33). This “*reduced asset and location specificity*” further supports companies' internationalization efforts (Wittkop et al., 2018, p. 204). As borders dematerialize, companies can interact in the global market with growing number of participants (Coviello, 2017, p. 1154), and thus, gain access to direct feedback from the customers (Strange & Zhucella, 2017, p. 179). These type of customer interactions provide opportunities to schedule tests and make improvements for offerings before they are launched, which can also reduce costs (Strange & Zhucella, 2017, p. 179).

Although, digitalization can bring companies diverse benefits in terms of internationalization, the materialization of these benefits depends on how digital technologies are applied within the company (Hervé et al., 2022, pp. 332–333). Utilizing digital technologies to strengthen the companies' entrepreneurial behaviour and thus, their entrepreneurial orientation, facilitates the companies' abilities to “*increase their internationalization intensity*” (Hervé et al., 2022, pp. 332–333). Lumpkin and Dess (1996, p. 162) define entrepreneurial orientation as an organization's inclination in their processes and decision-making to demonstrate innovative, independent, and proactive manner and an

ability for risk-taking and building competitive advantage. Shane (2000, p. 466) states that as entrepreneurs do not all discover same opportunities to exploit, similarly some opportunities can remain unexploited, which applies also for the opportunities related to changing technologies.

Penco et al. (2022) studied through case studies the role of entrepreneurial orientation in the digitalization of SMEs during the Covid-19 pandemic and found that entrepreneurial orientation had a significant role in terms of exploiting new opportunities presented by digitalization during an unstable time of crisis. The pandemic could be interpreted as an external stimulus pushing the SME into the direction of digital transformation; however, it is the entrepreneurial orientation of the company, affected by *“the role of the entrepreneur and their leadership style”*, which determines the outcome (Penco et al., 2022).

According to Lumpkin and Dess (1996, p. 162), companies lose their *“entrepreneurial edge”* when they stop being proactive, taking risks, and innovating in order to exploit opportunities. Ritala et al. (2021, p. 9) further state that an entrepreneurial orientation can provide advantages for the company’s digital strategy. However, taking risks and displaying proactivity and innovative approach do not automatically produce a favourable outcome in terms of digitalization, and companies should consider adjusting the digitalization-related activities to match the capabilities of individual employees (Ritala et al., 2021, p. 10). Proksch et al. (2021, pp. 18–19) further confirm that the digital IT capabilities of employees as well as the company’s digital culture impact the degree of digitalization. Additionally, as the digital strategy affects the extent of digitalization of the company offerings, the founders can be considered to have a significant role in the outcome of the company’s digitalization efforts (Proksch et al., 2021, p. 19).

2.4 Theoretical framework

The theoretical framework of this study seeks to identify the elements of digital technologies and determine how SMEs can utilize these technologies in their business

operations. The theoretical framework further explores the general internationalization strategies of companies, and finally examines the relationship between digitalization and internationalization of SMEs. The objective is to provide an answer to the research question “*How can digitalization advance the internationalization process of a traditional SME?*” and develop a model to illustrate the different elements constituting the answer.

The study’s literature review is divided into three segments: 1) digitalization, 2) internationalization, and 3) internationalization in a digital world. In order to understand digital technologies and digitalization, the paramount concepts and characteristics are defined and explained through the studies by Nambisan (2017), Kallinikos (2013), and Yoo et al. (2010). As the literature review is based on the “*inductive approach*” (Dey, 2004, p. 90), where the theoretical material is selected on the basis of the themes related to the research question but also to the data collected through the case study interviews, digital marketing is considered a prevailing topic and is thus, included in the literature review.

Digital marketing is examined through the following topics to understand the concepts, applications, and benefits described by the case company interviewees:

- 1) search engines based on the studies of Kannan & Li (2017), Chan et al. (2011), and Ziakis et al. (2019),
- 2) email marketing as defined by Zhang et al. (2017) and Goic et al. (2021),
- 3) social media mainly described by the study of Li et al. (2020),
- 4) web analytics drawing insights from the studies of Järvinen and Karjaluoto (2015), Taiminen and Karjaluoto (2015), Saura et al. (2017), and an online survey focusing on conversion rate optimization based on the responses of 800 professionals conducted by Econsultancy, and
- 5) digital platforms defined by Kannan et Li (2017).

Furthermore, the theme of sensors is examined due to its strong connection with one case company’s business model. The literature review in terms of sensors is based on the studies of Goumagias et al. (2021), Strange and Zucchella (2017), Perera et al. (2013),

and Ahrend et al. (2021). Additionally, when studying the role of digitalization, it is important to not solely focus on the advantages, but also consider the potential challenges of digitalization. These challenges are studied through the OECD report on the “*Key issues for digital transformation in the G20*” (2017) and the studies of Nguyen et al. (2015) and Gabrielsson and Gabrielsson (2011) who consider the risk of sales channel conflicts when companies combine traditional and online sales channels.

In the field of internationalization, the literature review focuses on two main concepts: the traditional view of gradual internationalization process and the importance of knowledge based on the Uppsala model by Johanson and Vahlne (1977) combined with the updated version of their model (2009) placing importance on the business relationship networks during internationalization. Another main concept which was highly relevant in terms of the interview material, was the concept of early internationalizing companies, or born globals, as defined by Knight and Cavusgil (2004) and Cavusgil and Knight (2015).

The final chapter of the literature review focuses on combining the theoretical background of the different elements of digitalization and internationalization. The literature review of internationalization in a digital world examines the advantages, which digitalization can offer to SMEs to support their internationalization process as described by Hervé et al. (2020), Strange and Zucchella (2017), and Coviello et al. (2017). The chapter also includes the studies of Hervé et al. (2022), Penco et al. (2022), Ritala et al. (2021), Proksch et al. (2021), and Lumpkin and Dess (1996) to recognize that entrepreneurial orientation and the individual capabilities of employees have mediating roles regarding the breadth of advantages brought by digitalization.

Based on the findings of the literature review and the research objectives, the author illustrated the Figure 3 to demonstrate the connections between different variables influencing the breadth of advantages brought by digitalization for the internationalization process of SMEs. As SMEs apply digital technologies in their business activities, the

variables of entrepreneurial orientation and employees' individual capabilities moderate the captured scope of advantages of digitalization. These advantages consist of access to resources, capabilities, and market knowledge, reduced location dependency, and cost and time savings, and thus reduced risks related to the internationalization process. As SMEs internationalize their operations, they gain experiential knowledge, which can be applied in utilizing digital technologies in further international expansion.

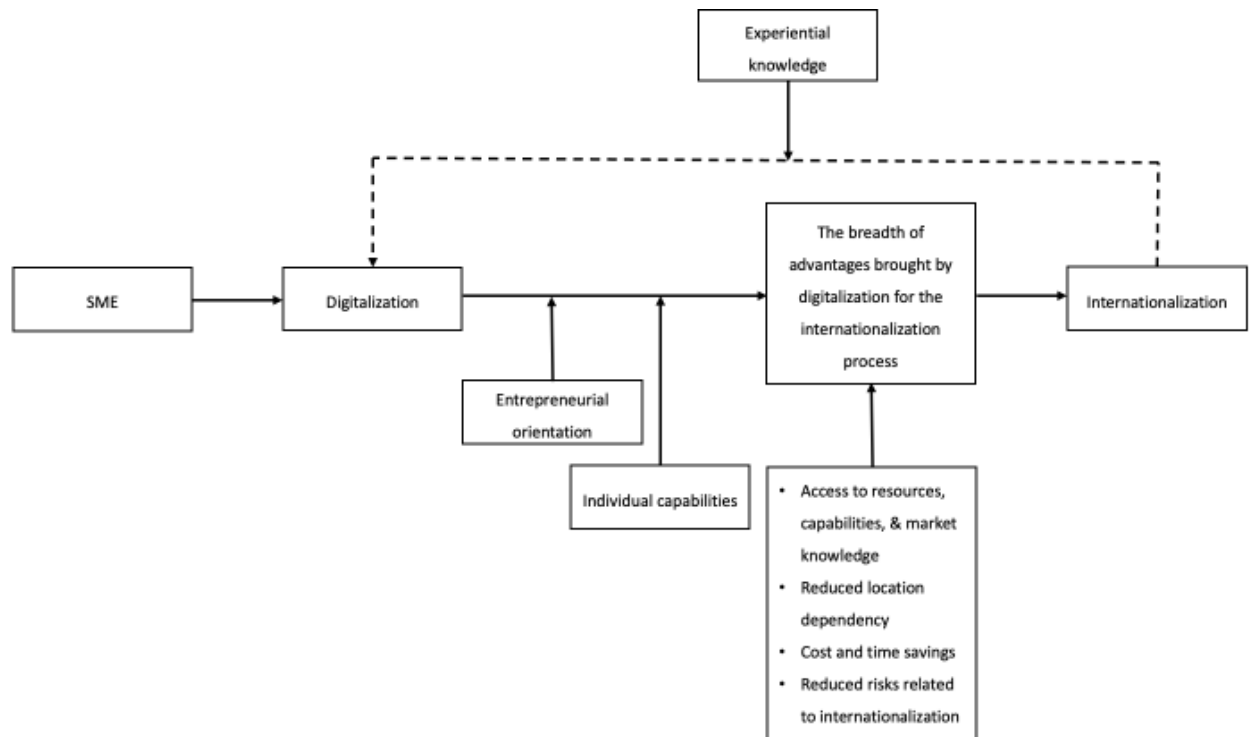


Figure 3. Digitalization in the internationalization process of an SME.

3 Research methodology

This chapter presents the research methodology in terms of the research strategy, case selection, data collection and analysis methods as well as the assessment of reliability and validity of the study.

3.1 Research strategy

In order to gain in-depth knowledge (Saunders et al., 2007, p. 315) of the research topic, a qualitative case study research method was chosen to be conducted. According to Eisenhardt (1989, pp. 535–536), a case study aims at theory development based on the study's findings. This type of theory development has several advantages, such as "*novelty, testability, and empirical validity*" (Eisenhardt, 1989, p. 548). Additionally, case studies can lead to a detailed theory, which, however, contains a risk of the theory being excessively complex due to a vast amount of insightful and meaningful data (Eisenhardt, 1989, p. 547).

According to Travers (2001, p. 2), there are five manners to conduct qualitative research, such as "*observation, interviewing, ethnographic fieldwork, discourse analysis and textual analysis*". Qualitative interviewing intends "*to understand the meaning of respondents' experiences and life worlds*" (Warren, 2001, p. 83) in a form of a "*guided conversation*" (Warren, 2001, p. 85). This method is typically selected when the aim is to find similar themes among a certain group of participants (Warren, 2001, p. 85). As the aim of the study is to find answers to the specific research question covering a particular interest group, interviewing was selected as the appropriate research method.

Interviews can be conducted either in a structured, semi-structured, or unstructured format (Saunders et al., 2007, p. 312; Eriksson & Kovalainen, 2008, pp. 80–81). Structured interviews are often surveys based on standardised selection of questions and can be also called "*quantitative research interviews*" (Saunders et al., 2007, p. 312; Eriksson & Kovalainen, 2008, pp. 80–81). Semi-structured interviews consist of list of questions,

which can vary, new questions may arise, and the order of the questions may change due to *“the flow of the conversation”*, which is the reason why this interview type is regarded as a *“qualitative research interview”* (Saunders et al., 2007, p. 312). Unstructured interviews, however, do not use any predetermined set of questions, but instead allow the interviewees the freedom to guide the interview (Saunders et al., 2007, p. 312; Eriksson & Kovalainen, 2008, pp. 80–81). As the aim of the research is to gain in-depth knowledge regarding a certain topic, a semi-structured interview format was chosen.

Devising a research strategy often consists of a literature review, considering practicalities, such as available time, resources, and access to the respondents, but also the structure of the interview (Warren, 2001, p. 86.). In order to collect meaningful data, open-ended interview questions are typically favoured (Warren, 2001, p. 86). Furthermore, the interview questions should be structured to include three types of question: *“main questions that begin and guide the conversation, probes to clarify answers or request further examples, and follow-up questions that pursue the implications of answers to main questions”* (Warren, 2001, pp. 86–87). The interviewer should be able to facilitate the discussion *“without overly directing the interviewee’s talk”* meaning that emphasized attention should be paid into wording, but also to a non-verbal communication (Rapley, 2004, p. 20). The researcher should also maintain openness to the surfacing information, which might *“render previously designed questions irrelevant in light of the changing contexts of meaning”* (Warren, 2001, p. 87).

As grounded theory aims at developing theory *“through research data rather than testing ideas formulated in advance of data collection and analysis”*, it also includes the selection of sources based on their *“theoretical relevance in generating comparisons and extending or refining ideas”* (Dey, 2004, p. 80). The literature review is thus, based on the relevance in terms of the research question and its main topic areas, but equally importantly the interviewee data. This type of research is often considered as *“an inductive approach”* (Dey, 2004, p. 90). Furthermore, the analysis of the collected data, retrieved often through a qualitative method, focuses on coding and categorizing the

collected data (Dey, 2004, p. 80). When the central theme arises, the analysis process typically ends (Dey, 2004, p. 80).

3.2 Case selection

The purpose of the case selection is to support the selection of meaningful criteria in order to answer the research question “*How can digitalization advance the internationalization process of a traditional SME?*”. Additionally, as the plan was initially to conduct face-to-face interviews with the case company representatives, the location in the author’s country of residence was deemed important. Therefore, the case companies were selected based on the following criteria:

- they are SMEs,
- they represent the so called traditional businesses as described in the chapter 1.4 “*Definitions of key concepts*”,
- they have internationalized, and
- they are based in Finland.

Based on the beforementioned criteria, originally four case companies were selected for the study. However, as the chosen fourth case company presented challenges in terms of long delays in responding to emails, decision was taken to continue the study with the remaining three companies, which had demonstrated a positive attitude and commitment towards the interview process.

Multiple tactics were used to establish contact with the representatives of these three remaining case companies. When liaising with the company for the first time, an email was sent to a high-ranking company representative. On two occasions the email was followed by a phone call, where the interview was agreed upon, and on one occasion, the interview practicalities were agreed in the email conversation. After these initial interviews with the case companies were conducted, the interviewees would on two occasions refer to a colleague or colleagues for the collection of further interview samples. According to Rapley (2004, p. 17), “*When accessing potential interviewees you have to*

follow many trails, often relying initially on friends and colleagues and then on contacts given by other interviewees". The colleagues of the already interviewed company representatives were contacted by phone and the meeting time and place were agreed during the phone call. However, one of the case companies was only able to commit to a one interview due to the small size of the company and a hectic "start-up schedule". This was balanced by gaining three interviews from another case company.

3.3 Data collection method

The research was conducted in the form of six semi-structured interviews from three different case companies according to the study's research scope. The number of the cases is limited as the researcher conducted the research process without any external resources. Also, the study's timeframe was limited. According to Travers (2001, p. 3), although, time available for data collection, transcription, and analysis can be limited, *"it is always possible to learn a lot from very little data"*. Due to the limited number of samples, the findings are not generalizable (Saunders et al., 2007, p. 319) but, nevertheless, will seek to offer new insights to the existing literature.

Prior to the interviews, an interview guide containing the interview questions was sent to the company representatives in order to allow them to familiarize with the content and prepare for the interview. The aim was also to ensure a fruitful conversation related to the research topic as well to ensure a sufficient timeframe reserved for the meeting (Saunders et al., 2007, pp. 316–317). The interview guide was divided into five sections: 1) Introduction, 2) Company and interviewee background information, 3) Digitalization, 4) Internationalization, and 5) combining digitalization and internationalization. The interview guide is presented in the Appendix 1 of this study.

Although, the initial intention was to conduct face-to-face interviews, the summer vacation season and the convenience of remote meetings resulted that all the interviews were held via video conferencing tools. As the interviews were held in a remote video conferencing setting, the interviewees were asked for a permission to record the

sessions in order to allow the author to concentrate on the interviews instead of extensive notetaking. The permission to record was approved in all cases. According to Rapley (2004, p. 18), besides allowing the interviewer to better interact with the interview, the recordings often provide *“a much more detailed record of our verbal interaction than any amount of note-taking or reflection could offer”*.

The interviews consisted of open-ended questions, which allowed the researcher to secure valuable information with the possibility to comment, ask follow-up questions, and clarifications (Saunders et al., 2007, p. 336; Travers, 2001, p.3). During the interview, the answers given by the interviewees were summarized, which thus, ensured that the interviewees had an opportunity to further define, elaborate, or correct the collected information. In the end of the interview, the interviewees were given an opportunity to address topics they considered relevant, but which had not been included in the set of interview questions. This way more in-depth information was collected. The interviews' durations altered between 40 and 60 minutes. After the interviews, the recordings were transcribed and prepared for data analysis. Case company and interviewee pseudonyms, the companies' operating industries as well as the durations of the interviews are presented in Table 4.

Table 4. Interviewee information and pseudonyms

Company	Industry	Role	Interviewee pseudonym	Duration of the interview
Company A	Healthcare	Strategist, Founder	A1	43 min
Company A		Sales Director	A2	60 min
Company A		Export Business Partner	A3	45 min
Company B	Alcoholic beverages	CEO, Founder	B1	40 min
Company B		Digital Sales Manager	B2	44 min
Company C	Packaging	Chief Marketing Officer	C1	55 min

3.4 Data analysis method

The interviews were recorded, and the audio files transcribed soon after the interviews to ensure a manageable workload (Saunders et al., 2007, p. 475). The transcription of the recordings transferred the data into a written format, which enabled further examination and analysis of the collected data (Poland, 2001, p. 629). The analysis process was performed by using a Word document template containing three columns, one for the transcribed text, another for the coding, and the third column for the categories (Dey, 2004, p. 84).

After the data was organized into a processable format, the content was assigned descriptive codes, which were then clustered and given interpretive codes, which helped to answer to the research question (Saunders et al., 2007, pp. 479–480). According to Dey (2004, p. 85), *“The data itself will dictate what categories are there to be discovered”*. In some cases, there was a need to adjust the descriptive codes as the analysis advanced.

Categorization is the central part of the analysis process, however, it is crucial to recognize that the researcher attaches meanings to the data based on, for instance, the context, and, therefore, it can be also said that *“Meaning is created, not discovered”* (Dey, 2004, pp. 87–88). As categories emerge, they can be compared, which allows the researcher to uncover connections and *“generate insights, by identifying patterns of similarity or difference within the data”* (Dey, 2004, p. 88). As these relationships became visible and answers to the research question materialized, the analysis process came to a natural end.

3.5 Reliability, validity, and generalisability

To ensure the credibility of the findings, the research process was evaluated based on reliability, validity, and generalisability (Saunders et al., 2007, pp. 149–150; Gummesson, 2007, p. 232; Eriksson & Kovalainen, 2008, p. 291). *“The lack of standardisation”* (Saunders et al., 2007, p. 318) and concerns whether other researchers would draw similar

conclusions in case they would be conducting the same study, can affect the study's reliability (Saunders et al., 2007, p. 318; Gummesson, 2007, p. 232). As the interviews were recorded, the recordings as well as the interviewer's notes can provide other researchers understanding of the interview process in a situation, where the study would be replicated (Saunders et al., 2007, pp. 319–320).

There are also various types of biases, which can cause concerns about the study's reliability (Saunders et al., 2007, p. 271). Interviewer bias can form due to interviewer's *"comments, tone or non-verbal behaviour"* influencing the answers of the interviewees (Saunders et al., 2007, p. 318). Also, the interviewer may show bias when interpreting the answers (Saunders et al., 2007, p. 318). Furthermore, the interviewees may demonstrate bias in their answers, for instance, by deciding *"not to reveal and discuss an aspect of the topic"*, which can lead to *"a partial picture of the situation"* (Saunders et al., 2007, p. 318). In case the interview is considered an extensively time-consuming process, the bias may be seen in the samples due to company representatives' hesitance to participate (Saunders et al., 2007, pp. 318–319). The beforementioned potential sources of biases were closely monitored during the interview and analysis process to decrease the risks of the interviewer or interviewee biases.

Validity is of paramount importance in the research, which is conducted through case studies (Gummesson, 2007, p. 232). Validity is related *"to the extent to which the researcher gains access to their participants' knowledge and experience, and is able to infer a meaning that the participant intended"* (Saunders et al., 2007, p. 319). The issue of validity can be mitigated by ensuring flexibility and openness as well as *"responsive interaction"* during the interviews (Saunders et al., 2007, p. 319). Therefore, the interviewees were asked follow-up questions and clarifications to ensure the highest possible validity (Saunders et al., 2007, p. 319). Additionally, the discussion was occasionally summarized during the interview to allow the interviewees to define and correct their answers and thus, improve the validity. However, as five interviews out of six were held in Finnish instead of English, the findings and direct quotations required translation into

English, which can distort the original tone of voice and thus slightly alter the interpretation of the findings.

Additionally, ensuring that the conclusions were supported by data and that there were no *“logic leaps”* were paramount in producing a credible study (Saunders et al., 2007, pp. 151–152). Relevant literature review also aided in validating the findings. Furthermore, triangulation was used wherever possible to verify *“the findings with other independent data sources”* (Saunders et al., 2007, p. 271) by, for instance, confirming the interviewees’ statements about the company or its products from the company website or from sources, such as Asiakastieto (Asiakastieto, 2022). Triangulation was also applied with the literature review and thus, ensured that the review was composed of various different theories and researchers to enhance the validity (Eriksson & Kovalainen, 2008, p. 292). However, the research is not generalisable as it is *“based on a small and unrepresentative number of cases”* (Saunders et al., 2007, p. 319).

4 Findings

The three cases are presented in this chapter. Each case company is introduced in terms of the company background, digitalization stage, internationalization process and phase, and finally the relationship between digitalization and internationalization. The case studies are based on the interviews, which were held with the company representatives. Three interviews were conducted with Company A, two interviews with Company B, and one interview with Company C. Company C is the youngest of the three companies and can be classified as a start-up. Due to the company size and hectic development stage in the company's business operations, only one interview was secured from Company C. The case-specific findings of this study are summarized in Appendix 2.

To facilitate the apprehension of the case company findings and to protect the identity of the interviewees, two measures have been taken. Firstly, each interviewee is assigned to a codified pseudonym, which is referred to when presenting direct quotes. The company and interviewee pseudonyms are presented in Table 4 in the end of the Chapter 3.3 "Data collection method". Secondly, in situations, where direct quotes are not cited, the information gathered through the interviews is presented in a holistic manner to support the comprehension of the findings. The company websites have been used to verify the interviewees statements about the company background or the products.

4.1 Case Company A

Case Company A was founded in 2012 in Jyväskylä, Finland. The company manufactures and distributes *"living green walls, which act as air purifiers and humidifiers often used in the office space environments"* (A1, 2022). The company's product is a combination of physical living plants and a digital component offering automation and remote monitoring functionalities. Additionally, the company provides maintenance to their products, and this service forms the core of the company's business model.

The company has grown steadily and currently employs approximately 80 employees and is present in three continents composing of 17 countries. Operating in a partner model has been a factor, which has enabled a geographically wide presence as due to the living aspect of the product, it is always accompanied with a service agreement. The company's main target customers are businesses; however, they are gradually expanding their attention towards the consumer sector.

4.1.1 Digitalization

The company has utilized digital technologies since its inception in various manners. The product itself is a combination of physical and digital components, an Internet-of-Things (IoT) product, which affects the way of working and determines a critical aspect of the company's business model. Furthermore, digitalization has been an integral part of the company's operations since relatively early on in their production, supply chain management, invoicing, sales, and marketing. However, the resources directed to the digital development have gradually increased and the focus areas developed as learning has happened.

The essential part of core product has been digital already before the *"digitalization wave wiped over pretty much every industry"* (A1, 2022). The product has been remote-controllable already since 2012, which has been a crucial enabler of the business as the physical product is always accompanied with a service. When a customer purchases a green wall, it is not solely a plant wall they purchase. Instead, they purchase the service of indoor air purification and humification, which is enabled by the selection of plants and a growth medium. However, as the product is made of living plants, it requires constant maintenance. This is enabled through remote monitoring, where artificial intelligence (AI), together with automation, monitors and controls the product's functions via cloud service, where, for instance, the AI can adjust the product's functions and the amount of nutrients or water to reach the optimal indoor air quality. Also, the customers are able to adjust the product's functions by themselves. Therefore, less customer

service support is required from the company. Without digitalization, the product would require constant on-site monitoring and servicing, which would bind a lot of resources.

Even though the product has enabled remote monitoring since its first iteration, the digitalization has developed through different iterations. In the first version of the product the customer had no control over the product's functionalities, and while some of the adjustments could be carried out remotely, an on-site maintenance visit was often required. Through the development of the digital technologies, the customers' and the company maintenance teams' remote capabilities have increased, which has led to a significant decrease in on-site visits from every other week to once in two or three months. The development of these remote-control capabilities as well as the creation of a customer-facing application have also positively influenced the customer and employee user experiences. Additionally, the data gained through the product's sensors has enabled the maintenance teams to pre-emptively react to the different issues that require action.

The company has also implemented a cloud-based Enterprise Resource Planning (ERP) system, which integrates operations, such as production, logistics, ordering, and payroll among other things, into a one centralized system. The goal of this undertaking has been to simplify the structure of formerly multiple different systems and to enhance the visibility of the different operations. The company has also utilized a crowdfunding platform to raise capital from private investors.

The company has had a strong focus to marketing and sales automation since the beginning, and they are currently utilizing a Customer Relationship Management (CRM) platform to assist, for instance, in website performance maintenance and sales and marketing email automation. Their chosen CRM platform contains most of the marketing tools required for the company's marketing operations. The platform also offers analytics, which permit the company to adjust their marketing activities based on the actual data instead of guesswork. Digitalization is seen as an enabler to, in a quick and agile manner,

test different marketing strategies and adjust in order to reach the most favourable outcomes. Furthermore, the company is present in social media platforms, such as Facebook, Instagram, and LinkedIn, where they have, to some extent, utilized marketing campaigns. Additionally, the company uses an external consult to offer services, such as search engine optimization (SEO). *“Basically, all marketing except events is purely digital marketing”* (A1, 2022), even the previously tangible brochures are now mostly in the digital format and instead of handing out physical business cards the customers are connected through LinkedIn.

Even though, contacting the customers is mostly based in digital automation, one-to-one customer meetings are still considered as a crucial dimension of the business-to-business sales process. Before the covid pandemic, which started in 2020, suggesting a video call was not considered sufficient, and the common idea also within the company was that the product had to be experienced physically in order to generate sales. The pandemic challenged that way of thinking, and the company adopted a “digital first” way of thinking. Currently, the assumption also from the customers’ side is that at least the first meeting is held via remote meeting, and if the interests of both parties are aligned, then physical meeting can be an option.

The company has also utilized Augmented Reality (AR) and Virtual Reality (VR) to enhance the purchasing experience, for instance, in the form of virtual office tours. *“The pandemic was an eye-opener that the product doesn’t necessarily need to be experienced and seen in person, and it can be sold rather effectively without that”* (A3, 2022). In addition to the reduction of physical sales meetings, the pre-delivery on-site visits have also diminished from approximately 100% to 30-40%. *“We aim to solve remotely as much as possible, because besides the impact on the carbon footprint, the costs arise from travelling to the customers’ premises – so, we try avoid any unnecessary travelling”* (A1, 2022).

Digitalization has been a crucial element of the company's internal communication and collaboration since the company's inception. The company uses a digital workspace environment and project management tools to collaborate across different countries, however, this was meaningful already when the company had presence only in two cities in Finland. The increasing number of remote meetings is seen also as an important part of the internal communication as they facilitate active communication, even in complex matters. This has resulted in a more efficient collaboration, where *"Issues have been advanced and resolved in a quicker pace than before"* (A1, 2022). Digitalization could be better utilized when communicating and collaborating with the partner network. Online instruction videos are an example of a slight development in the area of partner communication, where instead of physical training days, digital tools are being used. However, the company sees a need for more efficient solution development in terms of partner communication.

Another aspect of the business model, which digital technologies have influenced is the manner of how purchases are made. Originally, purchases were made mostly in two different ways 1) customer purchased the product and signed a service agreement to cover the maintenance of the product, or 2) customer formed an external leasing agreement and after the leasing period ended, they could redeem the product. The issue with these type of purchase models is that customers rarely have a desire to use their capital to own the products, but often choose to allocate their operational expenditures to the monthly costs. However, the leasing contracts did not support a good customer experience as the customer had to make two contracts, one with the company to cover the maintenance of the product and another with the financing provider to cover the cost of the product itself. There was also a lack of transparency of the costs in the leasing model as the financing provider often had small additional costs related to, for instance, opening the account or purchasing a compulsory insurance. Renting or providing a transparent subscription service were not financially viable for smaller companies due to the high initial investments required for IT development. As the digital technologies have developed, the systems of the financing providers now also enable SMEs to utilize the renting model

in a customer-friendly way by providing one contract with transparent pricing. This development has led to renting amounting to approximately 60% of all purchase models.

Although, digitalization is mainly considered as an enabler in the business, it is not without concerns. The development of digital technologies is nowadays relatively fast, and thus, it requires fast development also from the companies. As technologies become outdated quickly, the product life cycle must be kept in focus when building new versions. For instance, the first iterations of the product were built to 2G and 3G networks, which are aging and at some point, will not be supported at all. Therefore, the developers must concentrate on 4G, 5G, and even 6G networks when updating the product.

As digital marketing has become “mainstream” it has also increased the costs due to intensifying competition on visibility. *“It’s much more difficult to get the content go viral if not investing a lot of money, and even if you do, it might not happen because there is so much content in the world these days”* (A2, 2022). Furthermore, marketing and sales activities must constantly be adjusted as *“Something could be really efficient for a couple of months, but then suddenly something changes in the customer behaviour, and it won’t work anymore”* (A3, 2022).

One new challenge from the seller’s perspective is that sales have moved to the buyer’s purchasing process and changed the dynamic of the sales process. *“Before the seller could always bring new information to the negotiations. But nowadays the customer can gather information in a more structured way and control the process. If you as a seller can’t adjust and go to their preferred channels, you are not in the game”* (A3, 2022). Currently, a business customer has often already made all the research in the digital channels and contacts the sales department with a ready purchase decision.

4.1.2 Internationalization

The company was founded in Jyväskylä, Finland in 2012 and it quickly expanded to Helsinki, which the interviewees refer as the first internationalization of the company,

although, it happened within the country borders. Expanding to Helsinki was seen as an trial run in terms of matters, which need to be considered prior and during an actual internationalization process. The company's global potential was seen already early on by the investors, but it was not until approximately in 2016 when the company expanded to Sweden and established a Swedish subsidiary.

The company first opened an office and recruited sales and maintenance teams in Stockholm due to short distance from Finland as the logistics are a critical aspect when handling living plants. Also, language was considered an enabling element. After Sweden the idea was to expand city by city within Europe, but with the involvement of a North American investor, the plan changed, and the company expanded to the United States and later also to Canada. High initial investments were made to enter the United States in form of building local sales and maintenance teams. However, the vast distances were creating challenges as the company's maintenance teams could only cover a limited geographical area. *"A company whose HQ was in New York might say that this is great, we want to try this in Alabama. We would then have to say that it's not possible, we don't have maintenance there."* (A3, 2022). Through learning the company was able to decide the locations, where they should be present, for instance, via local partners. The company representatives refer this as "geo-exact thinking".

The company decided to select the partner model as the primary model when entering new markets due to the learnings from the North American venture. The company expanded to their biggest partner market, South Korea, around the year 2018. In South Korea the selected model is a franchising type of an arrangement, where Company A does not own the company, but instead sells the products and the local company takes care of everything else. Company A has also formed various partner agreement within Europe in countries such as, Germany, the UK, the Netherlands, the Czech Republic, Poland, and Denmark. However, the company considers Finland, Sweden, the United States, and South Korea as their main markets because these markets have more than ten active customers.

Due to Finland being relatively remote from most of the European markets, logistics presented a challenge for the company. Therefore, the company transferred their plant production from Finland to the Netherlands, which is considered as the plant hub of the world with heated trucks, multiple logistics opportunities, and available routes to other European cities.

The internationalization of the company has not happened without challenges. Importing restrictions regarding living plants have created challenges, for instance, in the state of California in the U.S. and in Switzerland. Also Brexit has had its implications on importing products to the UK. The company further mentioned that operational activities, such as recruitments, can be challenging especially when building sales teams, as they are an unknown Finnish company, which cannot pay above market level salaries. Also, validating the candidates' experiences can be challenging.

There have also been learnings in terms of the partner agreements. *"This is a product people easily fall in love with. However, forming a partner agreement doesn't guarantee sales"* (A3, 2022). There have been cases when various partner agreements have been formed, but then relatively few sales or none have been made by those partners. The company has realized that they must support partners more to enable them to generate sales. *"Finding a balance of how many partner agreements we should make and how much time to allocate has probably been the biggest challenge for us"* (A3, 2022).

Furthermore, creating awareness for a new product and educating customers, demands time and financial resources. The company has had to carefully calculate the number of unprofitable markets they can sustain simultaneously, as well as when these markets must start generating cash flows. The sales time for the company's products is considered relatively long, which makes the beforementioned considerations even more critical.

4.1.3 Digitalization and internationalization

Digitalization has been an integral part of the company's internationalization and the entire business model on two main levels. Firstly, the idea behind the product has been an international functionality in terms of uniqueness and viability due to its digital nature, such as remote monitoring capabilities. This has increased the efficiency of the maintenance operations and enabled worldwide product monitoring and development. *"The digital nature of the product pretty much enables the whole thing, without it our business would look very different"* (A1, 2022). *"This would be a very local business without digitalization"* (A3, 2022). Secondly, extending the partner network has become faster as using digital tools has become a new normal partly accelerated by the pandemic. The company has formed the latest ten partner agreements without any physical contact.

Furthermore, digitalization enables marketing activities from Finland to other markets as well as conducting market studies. Testing the market potential in terms of demand and interest can be conducted remotely in a light, easily adaptable, and relatively cost-efficient manner. However, digitalization in marketing is seen as a supportive element – *"not the holy grail"* (A1, 2022). Additionally, internal and external collaboration through digital workspaces and video conferencing have brought time and cost savings for the company as travelling between countries has significantly diminished.

4.2 Case Company B

Case company B is a manufacturer and distributor of alcoholic beverages, but also sells other merchandise through their webstore. The company was founded in 2013 in a South-Western Finnish town by five friends, who got the idea of distilling their own rye whiskey as nobody in Finland was manufacturing it despite rye being an essentially Finnish grain. The production of the rye whiskey begun in 2014. The company also developed another product, which had a shorter time to market than whiskey. This product ended up winning the first prize in a competition held in London in 2015, which catapulted the company's growth onto an unexpected level and started the company's

internationalization process. The company has currently presence in total of approximately 20 countries in Europe and Asia and it employs approximately 30 employees.

4.2.1 Digitalization

The company considers digitalization as a vital part of their existence even though, the company's products are purely physical. Digital sales and marketing are seen as critical enablers as *"An SME of our size must be in the online channels as we don't have enough recourses to put into the traditional marketing channels like perhaps our global competitors do"* (B1, 2022). Therefore, the company has been determined to understand the processes of digital customer journeys and utilize data in their marketing processes. This is done by utilizing digital technologies to build customer awareness through targeted marketing, generate conversions such as website visits, clicks, or purchases, and trigger reoccurring purchases.

In the early days, digital marketing was relatively traditional storytelling, which was mostly limited to creating the company's online presence in the different social media platforms. However, the activities lacked structure and the usage of web analytics. In Finland the focus was on community creation as marketing of alcohol is restricted. By 2019 the company had shifted from the traditional social media presence into a more structured approach and implemented various digital tools, which has allowed the execution of data-based measurable activities in terms of digital sales and marketing. E-mail automation is considered a powerful marketing tool in terms of customer reach and conversion creation, where available customer data is utilized to personalize the content, and emails are automatically triggered, for instance, by certain actions customers take in different channels. However, having a suitable and well-thought plan in place is paramount as *"You must be careful not to annoy and harass customers on all platforms"* (B2, 2022).

The company has transferred its online operations to a Shopify platform, which offers companies, for instance, an online store, inventory, discount code generations,

marketing, and ecommerce automations (Shopify, 2022). The advantage when working in different markets, has been the platform's adaptable and optimizable nature, where the online stores can be copied and localized to other markets. Additionally, the company utilizes a software to understand customer behaviour on their website via heatmaps demonstrating customer clicks and scrolls as well as user feedback, which allow the company to adjust their website functions to better cater for the customers and increase user experience. This in turn is seen to positively influence sales. *"During the pandemic the majority of alcohol purchasing moved to online channels and without these tools and capabilities we couldn't have answered the challenge"* (B1, 2022).

The company utilizes Google analytics and advertising tools. However, an important enabler is search engine optimization (SEO), where existing texts and product pages are optimized to match the existing keywords and thus, provide the company with an improved ranking in the search engine results page. This way the company can also drive organic traffic to its websites on top of the paid marketing. However, a constant optimization is required as *"Google doesn't like it so it's a bit of a struggle"* (B2, 2022).

Digital marketing is considered a relatively inexpensive way when compared to the traditional media for gaining wider reach and visibility to raise customer awareness. *"It's less effort in a sense that you don't have to go somewhere to get people to see it (the product)"* (B2, 2022). Furthermore, because of the adaptable and modifiable nature of these digital tools, changes can be made in a relatively quick pace if current digital marketing efforts are not yielding favourable results. Constant optimization is considered important as *"In the world of digital marketing, you have to test something and then it could work for one week. And the next week it doesn't work at all. So, you'll have to change things up all the time"* (B2, 2022).

Although, digital marketing has provided access to wider audiences in a cost-effective way, it is noted that larger investments also in the digital side bring better visibility. Therefore, finding the balance between sufficient investments and visibility is seen

crucial. The company also remarks that there is a risk of uncontrollable spending if the objectives of different digital marketing activities are not clear. *“As everyone wants to be in these digital channels, money can be spent in a very reckless way, which then also increases the pricing”* (B1, 2022).

The inflation of digital marketing related prices, such as Google Ads and influencer marketing, is noted to have increased especially since the beginning of the pandemic. This development is considered separate from the regular seasonal fluctuations, where, for instance, digital advertising during Christmas season is more expensive as most companies invest in visibility during that time. Additionally, as digital marketing has become an activity increasingly high number of companies engage in, standing out from the crowd is considered a challenge. Understanding the reason for existence in different digital marketing channels is viewed as the key. *“You have to think, are we here only because everyone else is here, and do the actual benefits correspond with the pricing”* (B1, 2022).

4.2.2 Internationalization

The company started its internationalization process by exporting its products from Finland to foreign markets via local distributors. In the beginning, the number of export markets was considered as an important indicator of success and thus, the company expanded its exporting to over twenty countries. *“For the first few years we thought that the distributors could do our job. It took some time for us to start gaining back the control over our value chain”* (B1, 2022). This was conducted by seeking direct contact with the local retailers as well as the restaurant and bar owners, and finally, the end-consumers.

Germany was chosen as the main foreign market, where the company made also physical commitments, due to its size, market potential, and perceived cultural similarity to Finland. They first hired a brand ambassador located in Germany while business was conducted from Finland. Later, one of the company founders moved to Berlin to oversee the market growth implementation plan. They also founded a company to Germany, which currently employs three people. Having local physical presence is seen important

in terms of maintaining relationship networks, collaborating with the retailers, and organising tastings. Having an established company in Germany also enabled the company to market and sell its products freely in digital channels, such as the company's online store and digital food home delivery platforms, while in Finland selling and marketing alcohol is highly restricted. Gaining access to two food home delivery platform providers' selection in Berlin enabled sales even during the pandemic, when restaurants and bars were closed or under operational restrictions.

The company refers its strategy as "a hyper local strategy", where instead of physically covering the entire Germany, they concentrate on Berlin, and in Berlin to certain postal code areas. The company considers Berlin as "*an international mecca, where people travel, not only from Germany, but from abroad and ideas can spread over the country borders*" (B1, 2022). The company has also started operations in London with the similar business strategy.

4.2.3 Digitalization and internationalization

The company currently exports to approximately twenty countries within Europe and Asia, which is mostly by virtue of the global online store established in the Netherlands. In the United States their products can be bought from nearly every state via state-specific online stores. However, the company has learnt that having an online store in place does not guarantee sales if there are no complementing marketing and customer communication activities present. "*The customer traffic doesn't automatically just emerge if you don't have the capabilities and resources to build the whole package*" (B1, 2022). Selling through online channels has enabled the company to reach broader customer audiences as well as to decrease the number of third parties in their distribution channels. This development has not only given the company more control over the brand communication, but it has also diminished costs.

Furthermore, digital tools have enabled geographically wider customer reach with a cost-efficient manner through digital marketing. The company has also been able to

adjust its digital marketing efforts in foreign markets, when the data flowing from these tools has demonstrated that the on-going activities have not been working. This has allowed more efficient use of the company's resources. However, combining the online and offline presence is considered the best way of ensuring favourable market penetration as well as developing sales. Videoconferencing opportunities have further facilitated internal and external collaboration across the countries.

4.3 Case Company C

Case company C was founded in 2016 in Helsinki, Finland by three doctors, who invented a biodegradable packaging material, which can be used in the existing machinery originally designed to produce plastic packaging. As the innovation presented a more ecological alternative for plastic, the company's global potential was immediately recognized.

4.3.1 Digitalization

The company has had a strong focus on digital customer journey way of thinking since the early days of its founding. The company utilizes web analytics to measure the effectiveness of their digital marketing activities in terms of, for instance, website customer traffic and conversion rates. All the customer data is transferred to the customer relationship management system (CRM), where the customer profile development is measured in terms of the rate a customer lead is turned into an opportunity until the profile becomes either a won or lost customer. Enterprise resource planning system (ERP) is utilized to integrate and optimize variety of company's operations. The company also digitally measures customer satisfaction. This data helps the company to understand the whole customer life cycle and discover potential pain points.

Search engine optimization (SEO) is one example of how customer traffic is driven to the company website. Additionally, the company is present in social media platforms, such as Facebook, Instagram, Twitter, and LinkedIn. As the pandemic begun, the usage of social media seemed to increase. However, maintaining the customer traffic levels became

challenging and required a lot of digital marketing adjustments due to a changed customer behaviour. Also, the unpaid traffic, for instance, from the news articles dropped as the media was concentrated on covering the news related to the pandemic.

The company has also adopted “*a mobile first way of thinking*” (C1, 2022), where their website supports mobile devices and thus, creates a positive user experience despite the choice of device used to access the company website. Based on the website analytics, the customer traffic from mobile devices has significantly increased even though, the packaging industry can be considered as a relatively traditional industry.

Digital communication and video conferencing tools are used in daily internal interactions, which are supplemented with a digital working environment and document management system. Additionally, digital customer meetings have significantly increased and in general, remote meetings are automatically considered as the natural first choice meeting option. As a result, communication and collaboration internally, but also with customers is efficient and not bound by location. Also, to enhance the remote meeting experience, the digital materials and physical product samples, if necessary, can be sent to the customer prior to the meeting. Therefore, the development in the usage of digital technologies has notably decreased the need for travelling.

Digitalization is mostly seen as an opportunity, however, the General Data Protection Regulation (GDPR), which came into force in 2018, has brought its own challenges in terms of ensuring that data collection and handling are done appropriately according to the regulatory guidelines. Also, while digital communication channels have lowered the bar for customers to engage with companies, the same has happened also with other stakeholders. As these stakeholders can engage the company in a dialogue, sometimes publicly via social media, the company must have a plan in place to handle those dialogues. This was considered crucial especially in terms of sustainability related communication.

4.3.2 Internationalization

Due to the nature of the industry and the various potential usages of the company's material, the company's global potential was noted in an early stage. As Finland is a small market, greater opportunities in terms of volumes were seen to exist abroad. *"We didn't start by thinking that we must first succeed in Finland, then move to Sweden and so on, but the international angle was there since the beginning"* (C1, 2022). The company's innovation received a considerable amount of international attention, which resulted in various contacts from companies across the world. The company's products can currently be found in the United States, Asia, Middle East, and Europe, where Europe is the biggest market. The majority of Company C's customers are international and global companies, which has facilitated the fast internationalization of the company.

The company plans its entries to new markets in a structured manner. They have conducted market studies based on, for instance, sales potential in terms of volumes, certain market-specific characteristics, and competition, which they have combined to determine the pre-conditions the market must fulfil in order to be considered favourable. Another important aspect to take into account is the nature of the applications, where the company's material can be used. This requires conducting studies of which applications have potential in different markets. The applications, such as cosmetics, supplements, gift packaging, or food applications such as straws and cutlery are then matched with the market study to decide, which inbound customer cases to take on, but also which markets and companies to target in outbound sales.

The method of entering a new market is chosen based on the market study. The company has created a go-to-market model, which sets relatively strict criteria based on the market studies and different market entry methods. Currently the company operates with a few different methods depending on the market: they have entered the markets through local partners, established subsidiaries, and in some cases, they have decided to operate from Finland.

4.3.3 Digitalization and internationalization

Digital marketing tools have been paramount in creating global awareness and building wider interest. This could not have been done solely with physical, more traditional marketing methods, in a relatively short time span. With the expanding amount of data and analytics, digital marketing and market comparisons have developed and improved.

“These market analyses are something you can’t really do without digital tools, so that’s definitely a big advantage” (C1, 2022).

5 Discussion

This chapter discusses the findings of the case studies and connects these findings to the study's theoretical background. The chapter is divided into three sub-chapters: digitalization, internationalization, and finally answering the research question in the sub-chapter which discusses the role of digitalization in the internationalization process of traditional SMEs.

5.1 Digitalization of SMEs

According to Kallinikos et al. (2013, pp. 358–359), digital artifacts' editable, interactive, open, and reprogrammable nature separates them from physical objects. Nambisan (2017, p. 1033) further states that digitization has transferred "*entrepreneurial processes less bounded*". Companies A and B both recognized that adapting and optimizing the digital content of a website or digital marketing activities is relatively fast and thus, efficient. Company B especially noted that as digital marketing is an agile function, it is possible to easily adjust and test whether a product attracts demand in certain markets before seeking partnership opportunities. This is supported by Nambisan (2017, p. 1041), who refers these "*entrepreneurial experiments*" enabled by digital artifacts as favourably affecting cost-effectivity. Also, Strange and Zhuccella (2017, p. 179) state that testing and making improvements to the offerings before they are launched is enabled by digitalization through gaining access to direct customer feedback.

All companies practice digital marketing, which they consider as a significant component in reaching wide audiences in a cost-efficient manner. According to Company B this is a crucial advantage due to scarce resources, which must be deployed efficiently. Companies use paid search engine marketing (SEM), however, all companies also mention search engine optimization (SEO) as part of their marketing activities. "*SEO enables us to drive organic traffic to our site in significantly cheaper way compared to SEM*" (Company C, C1, 2022). This is in line with Erdmann et al. (2021, p. 650) stating that SEO has become a meaningful part of the companies' marketing combination. Ziakis et al. (2019,

p. 2) found that 56% of search engine user clicks flow to the top three search results, which further validates the companies' reasoning behind the usage of these digital marketing tools. Therefore, this study indicates that traditional companies as well should seek to apply digital marketing tools to improve their ranking in the search engine results page in order to generate traffic to their websites and thus enhance their revenue creation.

The topic of web analytics surfaced repeatedly during the interviews. Ability to understand through data which digital marketing activities work, and which do not, was deemed crucial by all the companies, as this allows companies to alter their strategies and thus, become more efficient in their marketing efforts. According to Järvinen and Karjaluoto (2015, p. 119), web analytics enable measurability in marketing. Saura et al. (2017, p. 7) further state that choosing relevant performance indicators can aid in understanding customer behaviour and guiding company's decision-making. Based on the case company findings, this logic can be considered to apply also to traditional SMEs.

Company A utilizes data analytics to understand their products' sensor data in order to remotely in a proactive manner monitor and manage products' functions as well as to improve their functionalities. This aligns with Narang and Shankar's (2019, p. 109) findings that analysing sensor data can aid in pre-emptive measures in terms of potential technical issues. The function of remote monitoring is also extended to the customers via Company A's mobile application. This seems to be a favourable decision as Ahrend et al. (2021, p. 2) state that customers have come to expect customized products and services. According to Cavusgil and Knight (2015, pp. 9–10), digitalization has enabled the personalization of product offerings often characterized by "*high-tech or superior quality*", which can be considered as the case with Company A's product. Findings from Company A suggest that digitalization can also benefit traditional SMEs in customizing their offerings, but also exploiting the opportunities presented by the IoT sensor technology.

Email marketing as a part of digital marketing activities was not often mentioned. However, it is possible that instead of not being utilized, the activity is considered as a basic digital marketing function. This though is not clear from the results. Company B found email marketing as one of the most effective tools in targeting customers as data can be utilized for email customization and email marketing automations. Zhang et al.'s (2017, p. 851) findings align with the Company B's experiences as email marketing is considered relatively profitable in terms of ROI. Goic et al. (2021, p. 118) further state that email marketing can also be used for personalized communication.

The importance of tracking the entire digital customer journey in order to gain understanding in which phase customers drop out of the sales funnel and how efficiently customer leads turn into acquired customers was emphasized by Company B and Company C. This was seen as a manner of gaining knowledge about the development opportunities in terms of marketing activities and product offerings. Company A also disclosed that they utilize CRM for marketing and sales automation.

Contrarily to Järvinen and Karjaluoto's (2015, p. 120) findings that SMEs tend to be less active in the usage of web analytics, the case companies seem to be all exploiting the opportunities of web analytics in varying stages. All companies state that they have been digital from the beginning, however, also stating that different technologies have been implemented gradually. For instance, Company B states that *"In the beginning the whole marketing was relatively traditional and purely storytelling, which was limited to social media. There was no structure"* (B1, 2022). Järvinen and Karjaluoto (2015, p. 125) state that having structured processes in place for utilizing the web analytics data is important.

According to Kannan and Li (2017, p. 28) and Ojala et al. (2018, p. 725), digital platforms connect buyers and sellers across the world in various ways. Company B has built their online stores on Shopify's e-commerce platform and gained access to two consumer food home delivery platforms to create additional revenue streams. Nambisan et al. (2018, p. 362) however, note that along with the favourable aspects associated with

digital platforms, there are also risks. According to Nambisan et al. (2018, p. 362), potential changes in the algorithms or policies of the digital platform, could damage the company's revenue creation, especially if the revenue sources are limited to only one or a couple of different sources. However, Company B did not consider this as an issue for their company.

Furthermore, Company A has utilized a crowdfunding platform to raise capital. Aldrich (2014) and OECD (2017, p. 116) state that crowdfunding can offer SMEs funding opportunities that do not involve the traditional financing participants. Nambisan (2017, p. 1035) and Brouthers et al. (2016, p. 513) acknowledge that digital platforms also enable value co-creation among its members. Company B emphasized the importance of customer dialogues, which they utilize to better respond to their customers' wishes.

All companies utilize social media platforms for digital marketing and customer engagement. However, the presence in the social media was considered as a relatively baseline practice. Company B mentioned social media as their storytelling channel, which they use to convey their values and brand image, engage with the customers, and evolve their offerings based on the feedback received from the customers. According to Li et al. (2020, p. 58) this approach seems to be on the level where the company can reach the highest collaborative customer engagement. The case company findings suggest that digital platforms can offer various opportunities in terms of global revenue creation, alternative financing, and company offering development. Therefore, this study extends the findings of the previous studies to include also traditional SMEs.

All companies deemed digital communication tools and especially video conferencing as important facilitator in conducting business with internal and external stakeholders. According to Company A and C, remote meetings have enabled faster and more efficient communication with customers but also among their employees. Company C also noted that nowadays the number of the company's feedback channels has increased as the company must be in the same communication channels with their customers. Company

A further highlighted the importance of digital spaces for internal collaboration and project management as well as for training and information sharing with their global partner network. Moreover, Company A and C utilize an enterprise resource planning system (ERP) to integrate and optimize operations, such as production and logistics. Nambisan (2017, p. 1032) refers to these digital tools as digital infrastructure, which OECD (2017, p. 116) recognizes as cost-efficient ways of working.

The fast-paced development of digital technologies has forced Company A to constantly plan updates to their offerings and stay alert on the developments that can impact their product life cycles when developing new product versions or updates. Both Company A and Company B also remarked that digital marketing has become crowded as it is an activity that most companies seem to be engaging with in some manner. This has materialized as increased costs and challenges in gaining visibility.

Customer behaviour in the digital setting was noted by Company A to have become relatively unpredictable, which pushes the company to constantly optimize and update their digital activities. Company C stated that nowadays companies must also be prepared to engage in public dialogues, also unpleasant ones, with customers and other stakeholders reaching out in a variety of social media platforms. Additionally, a shifted power-balance between the seller and customer in terms of information was noted by Company A. According to Company A, the customers seem to have become accustomed to finding information and comparing different offerings by themselves and thus, making purchase decisions without any seller interaction. Company C commented on the challenges brought by the General Data Protection Regulation (GDPR) requiring companies to comply with the regulatory guidelines, which can be a time-consuming task.

Despite the challenges that digitalization is posing, all companies have a positive attitude towards digitalization. According to Company B (B1, 2022), *“Digitalization is vital nowadays and it’s in the core of our consumer-focused strategy”* while Company C (C1, 2022) states that *“I see digitalization definitely more as an opportunity than a challenge”*. For

Company A, development of digital technologies has enabled altering their business model in terms of revenue creation from complex leasing contract model that did not provide an ideal user experience into a simple one-contract renting model, which was previously unattainable for smaller companies operating with limited resources. Yoo et al. (2010, p. 726) also remark that due to decreased costs and increased computer efficiency, digital technologies have become more widely accessible. This can be considered the case also in the future as technology matures and new innovations are introduced, which can present new opportunities also for traditional SMEs.

5.2 Internationalization of SMEs

Internationalization is described as a gradual process by Johanson and Vahlne (1977, p. 23–24), who state that the process often starts with exporting and later a subsidiary is formed into the foreign market. They consider the lack of knowledge an obstacle, and therefore, extending business operations to countries with high similarity to domestic market is usually preferred during the initial phase of the internationalization process (Johanson & Vahlne, 1977, p. 26). This aligns with the findings regarding Company A and Company B. Company A first expanded its operations in a form of a subsidiary to Sweden, a neighbouring country of Finland with high similarity in terms of culture and language, Swedish being the second official language of Finland. Company B begun its internationalization through exporting, and finally established a subsidiary to Germany due to perceived similarity to Finnish culture and a legislation that allows marketing and online sales of alcohol.

Unlike Company A and Company B, Company C globalized their business in an early stage via their global customers. Knight and Cavusgil (2004) and Cavusgil and Knight (2015) consider companies with this type of internationalization process as *born globals* while Oviatt and McDougal (2005) refer to them as *international new ventures*. Although, Oviatt and McDougal (2005, p. 29) state that fast internationalization happens often within the IT industry, Company C operates in the packaging material industry. Their ecological innovation is an alternative for plastic packaging, which has favourably affected the

company's global potential. According to Knight and Cavusgil (2004, p. 127), born globals tend to have a strong culture of innovation, which seems to be the paramount component in Company C's business and company culture.

Furthermore, Cavusgil and Knight (2015, p. 4) refer to the diverse motivations affecting the speed of the companies' internationalization, for instance, size of the domestic market, changing market conditions, and relationship networks. Many of these motivations can be considered having also impacted Company C's internationalization process as Finland is a small market with limited growth opportunities, and a pressure to decarbonize operations and to align with the Paris agreement can be acknowledged as a global trend extending over all industries, which are looking for new ways to incorporate sustainability into their current operations. Furthermore, Company C has received global attention through press coverage, which together with working with global customer accounts has most likely also expanded their relationship networks. Johanson and Vahlne (2009) also recognize the importance of relationship networks during the internationalization process.

The importance of opportunities is recognized by Johanson and Vahlne (2009, p. 1424) and Sarasvathy (2001, p. 243), who states that effectuation and causation processes are present in the companies' decision-making. This can be considered to extend also towards internationalization decisions. Company A's initial plan was to continue their internationalization from Sweden to other cities in Europe, but with the involvement of the North American investor they ended up altering their plans and expanded to the United States and Canada instead. Additionally, their expansion to South Korea happened due to the contacts from a local operator wanting to form a partnership with Company A. Sarasvathy (2001) refers this type of decision-making as effectuation. Galkina and Chetty (2015, p. 668) refer this as "*effectual networking*", which creates opportunities often affecting the SME's decisions regarding foreign market entries and modes.

Company C has had a relatively pragmatic approach towards internationalization as they have conducted market studies with strict criteria to evaluate the desirability of the foreign market in terms of internationalization. Sarasvathy (2001, p. 245) refers this as a causation process, although, noting that causation and effectuation are *“integral parts of human reasoning that can occur simultaneously, overlapping and intertwining over different contexts of decisions and actions”*. Even though, Company C employs causation in terms of the market selection criteria, effectuation can be considered to take place when different requests from customers are received and a market is selected due to that single customer contact, although, the market is simultaneously assessed on the basis of the selection criteria. Company B’s approach displayed elements of both causation and effectuation as the major cities, Berlin and London, were selected based on a pre-mediated plan, however, their exporting activities seemed to convey an effectual logic due to the inbound customer demand impacting the selection of the new export markets.

Johansson and Vahlne (1977, p. 28) consider especially experiential market knowledge paramount in terms of internationalization and when combined with general knowledge about business operations, growth becomes possible. Experiential knowledge and the process of learning, also emphasized by Johansson and Vahlne (2009, p. 1424), have affected especially Company A and Company B’s foreign entry modes. Company A changed their primary foreign market entry method to a partner model due to the experiential knowledge gained from the North American venture. Additionally, as their operations grew, transferring production from Finland to the Netherlands became sensible as they learnt about the opportunities the country provided in terms of developed infrastructure, which supported the production and logistics of plant distribution across Europe.

Company B further learnt from experience that in order to regain control over their value chain, brand message, and to reduce excess costs, they needed to remove the middlemen and seek direct contact with their local customers. With their selected customer engagement model, which combines digital and physical customer interactions, such as

events, tastings, and close cooperation with local customers, they assumed an internationalization model called “hyper local strategy”. This is supported by Johanson and Vahlne’s (2009) approach emphasizing the importance of business relationship networks. Company C on the other hand seems to possess a high level of planning, research, and appreciation of studies to prepare for the unexpected before it materializes.

5.3 The role of digitalization in the internationalization of traditional SMEs

This chapter concludes the findings and answers the research question “*How can digitalization advance the internationalization process of a traditional SME?*”.

According to the study’s findings, digitalization has an enabling role in traditional SMEs’ internationalization process in terms of:

- 1) decreased risks related to foreign market selection,
- 2) increased reach of wide audiences in a cost-efficient manner,
- 3) possibility to swiftly implement data-based marketing decisions to support revenue creation,
- 4) enabled remote operations create new international business opportunities,
- 5) possibility to generate direct international sales remotely, and
- 6) resource-efficient internal and external value creation.

Foreign market selection

Due to the internet-enabled access to information, which Kallinikos et al. (2013, p. 363) award to search engines and analytics, Company A and Company C have been able to conduct market studies remotely from Finland. This has been especially important for Company C as the nature of their product sets strict criteria for market selection. Moreover, Company A utilizes digital marketing tools to test product demand in foreign markets prior to making any market commitments. This is aligned with Neubert (2018, p. 52) stating that digitalization can enhance the selection of foreign entry-markets and thus, improve decision-making

These cost-efficient activities enabled by digitalization can be considered to reduce a risk often related to a foreign market selection. Nambisan (2017, p. 1030) states that “*digital technology tools and systems*”, such as data analytics can be utilized to support companies, while Strange & Zucchella (2017, p. 176) note the advantages of data analytics in remotely “*monitoring emerging trends and opportunities*” in foreign markets.

Reach of wide audiences

All companies noted that digital marketing tools enable wider customer reach and allow them to target global audiences in a cost-efficient manner. According to Company B (B2, 2022), it is impossible to replicate the digital reach by methods available in the physical world. Hervé et al. (2020, p. 33) refer this as “*border dematerialization*” caused by digitalization. All companies deploy paid search engine marketing (SEM), but also search engine optimization (SEO), which was considered a significant element in driving customer traffic to the company websites. Chan et al. (2011, p. 837) found that utilization of SEM was more effective than other online or offline marketing channels in terms of customer lifetime value.

The usage of SEO is supported by Ziakis et al. (2019, p. 2), who found that the top three search engine results receive 56% of user clicks. Companies further utilized digital platforms, such as social media, and e-commerce platforms to engage and generate international sales. This is supported by Kannan and Li (2017, p. 28) and Ojala et al. (2018, p. 725), who state that digital platforms can connect global customers and sellers.

Swift data-based decision-making

Web analytics deployed to analyse customer behaviour were considered as an influential tool by all companies as access to analysed real-time customer data enables prompt data-based decision-making. Chaffey and Patron (2012, p. 30) and Järvinen and Karjaluoto (2015, p. 119) note the significance of measurability, which is possible in digital marketing. Case companies applied this decision-making to quickly improving and

modifying digital marketing activities to yield better results and sales. This is supported by Kallinikos et al. (2013, p. 358), who state that editability is one of the characteristics of digital artifacts allowing digital objects to be repeatedly altered and adjusted. Furthermore, Nambisan (2017, p. 1041) recognizes cost-efficiency as one outcome of the characteristics of digital artifacts.

New business opportunities

Remote capabilities brought by digitalization have enabled new international business opportunities. Company A has incorporated sensors to their products, which they can remotely monitor and manage while collecting data for development purposes. These abilities have significantly decreased the number of physical maintenance visits and allowed the company to generate cost savings, and thus direct more resources into product development activities. This is supported by Ahrend et al. (2021, p. 2) stating that there are several trends increasing the demand of sensors. According to Company A (A3, 2022), *“This would be a very local business without digitalization”*. Hervé et al. (2020, p. 32) further add that accessing a niche market with an innovative product can be a competitive advantage among the local market peers. Digitalization can thus, allow also traditional companies to find new international business opportunities, which can aid in expanding their current operations.

Direct international sales

Sales conducted through online channels directly with local customers has enabled Company B to gain control over the company’s brand communication and increase their profit margins as they have been able to bypass the middlemen. This aligns with Hervé et al. (2020, p. 33), who state that targeting new markets online provides an efficient way to seek opportunities outside of home market. Support is also found from Coviello et al. (2017, p. 1153) stating that digitalization enables the creation of revenue streams from overseas markets without the need to invest in production facilities or local personnel. However, Gabrielsson and Gabrielsson (2011, pp. 89–90) remind about the potential

sales channel conflicts, when the company is generating direct sales from internet-based channels but also from local retailers.

Internal and external value creation

Video conferencing and other remote meeting tools were mentioned by all companies in terms of cost and time-efficient manners of engaging with internal and external stakeholders. Company A emphasized the significance of collaboration through digital workspaces and remote meetings due to decreased travelling and more efficient problem-resolution when stakeholders are scattered between various locations. Wittkop et al. (2018, p. 204) refer this as “*reduced asset and location specificity*”, which can be favourable in the companies’ internationalization process. Furthermore, digital communication tools have enabled Company A to expand their partner network faster than ever before as due to the pandemic, the adoption of digital tools has seemingly accelerated.

Entrepreneurial orientation, capabilities, and resources

However, the findings also show that digitalization alone is not sufficient, but SMEs must have entrepreneurial orientation, appropriate capabilities, and sufficient resources to conduct activities which need to be accompanied with the utilization of digital technologies. All companies stated that they had been digital since the founding and had gradually developed their capabilities to further expand the level of digitalization. The management of each case company has considered digitalization as an opportunity and sought to exploit that opportunity.

In Company C, the management has developed a “mobile first strategy” to align with the perceived increased usage of mobile devices to search for information and access websites. Company B considers digitalization as the core element of their strategy. Furthermore, Company A’s product contains a digital element, which they constantly develop together with the different processes around the product, such as sales, marketing, and other internal processes. According to Lumpkin and Dess (1996, p. 162), this type of innovative, independent, and proactive behaviour can be described as entrepreneurial

orientation. Penco et al. (2022) also highlight “*the role of the entrepreneur and their leadership style*” affecting the entrepreneurial orientation and thus, the outcome. The findings are also supported by Nguyen et al. (2015, p. 221) stating that the top management as well as the company culture are crucial for IT adoption.

Company B remarked that having an online store does not equal international sales because in order to drive customer traffic to the store and then to entice these customers to make purchases, specific capabilities and resources to make that happen are required. This finding aligns with Ziakis and al. (2019, p. 2) and Kallinikos et al. (2013, pp. 363–364), who also find that constant adaptation and optimization are required in terms of successful utilization of search engines. Therefore, the company must have capabilities and resources to allocate to these type activities.

Furthermore, Company A directed more resourcing to the digital development as they experienced cost-savings from decreased on-site visits due to the remote monitoring and management functions of their product. Additionally, Company C hired their Chief Marketing Officer with a solid background in global content and digital marketing attained when working for a global Cybersecurity company. This recruitment decision can be considered having enhanced Company C’s capabilities.

The findings are also supported by Hervé et al.’s (2022, pp. 332–333) findings that the materialization of the advantages brought by digitalization depend on how these digital technologies are applied. This is also supported by Proksch et al.’s (2021, pp. 18–19) study stating that the digital capabilities of the employees and the digital culture of the company impact the level of the company’s digitalization. The findings further align with Järvinen and Karjaluo (2015, p. 120), Taiminen and Karjaluo (2015, p. 14), and Econ-sultancy’s (2017, p. 76) studies, confirming the importance of appropriate resources in application of web analytics, which are an essential part of measurable digital marketing. This study further extends these previous findings to include traditional SMEs into the equation.

6 Conclusions

This chapter concludes the study's findings and presents the managerial implications. Furthermore, this chapter presents the study's limitations and provides recommendations for future studies.

The aim of the study was to examine the role of digitalization in the internationalization process of a traditional SME and answer the research question "*How can digitalization advance the internationalization process of a traditional SME?*". In order to answer the research question, a qualitative case study consisting of three companies fulfilling the research criteria was conducted. The case study's objectives were to identify the different technologies SMEs utilize in their business operations, to explore the general internationalization strategies of these companies, and to examine the relationship between digitalization and internationalization of the case companies.

Theoretical framework of the study supported the research by identifying the elements of digital technologies and exploring the relevant literature to answer the same questions examined also through the case study interviews. The literature review is based on the "*inductive approach*" (Dey, 2004, p. 90) and thus, the choice of the theoretical material was also impacted by the data that surfaced during the case interviews.

The study's findings show that digitalization has an enabling role in the internationalization process of a traditional SME. Digitalization can advance the internationalization process in terms of decreased risks related to foreign market selection, increased reach of wide audiences in a cost-efficient manner, and the possibility to swiftly implement data-based marketing decisions to support revenue creation. Additionally, remote operations enabled by digitalization create new international business opportunities and allow traditional SMEs to generate direct international sales. Lastly, digitalization enables resource-efficient internal and external value creation.

These findings are supported by Kallinikos et al. (2013) and Nambisan (2017), who describe the characteristics and opportunities presented by digitalization and digital technologies. Strange & Zucchella (2017) confirm the advantages brought by data analytics. Additionally, studies by Hervé et al. (2020), Chan et al. (2011), Ziakis et al. (2019), Kannan and Li (2017), and Ojala et al. (2018), confirm the different elements connected to the wide reach and global sales enabled by digital technologies. Furthermore, Chaffey and Patron (2012) and Järvinen and Karjaluoto (2015) provide support for the significance of web analytics in the decision-making related to digital marketing activities. Ahrend et al.'s (2021) study confirms the new business opportunities related to sensor technology.

The study's findings also show that entrepreneurial orientation, appropriate capabilities, and sufficient resources are required in order to exploit the opportunities presented by digitalization. These findings are supported by Penco et al (2022), who emphasize the impact entrepreneurial orientation has on the outcome, while Hervé et al. (2022) state that materialization of the advantages brought by digitalization depend on the application of the digital technologies. Additionally, Proksch et al.'s (2021) study highlights the significance of the digital capabilities and digital culture of the company in terms of the degree of the company's digitalization.

The study contributes to Hérve et al. (2020) research by supplementing the findings with empirical qualitative data to understand the role of digitalization in the SMEs internationalization processes. Furthermore, the study contributes to the field of the so-called traditional companies, where little research exists. The managerial implications of the study draw attention to the various manners traditional companies can utilize digitalization to gain efficiencies and to create competitive advantage during their internationalization process. Moreover, the study emphasizes the meaning of the company's entrepreneurial orientation, capabilities, and resources, which determine the breadth of the advantages digitalization can offer and therefore, provides potential development considerations for further strategic planning.

Although, the case study companies were selected based on the premediated criteria, there are limitations, which must be acknowledged. The companies are all based in Finland, which can limit the findings' applicability solely to the Finnish companies. However, many of the theoretical research validating the study's findings were conducted outside of Finland or as a collaboration of an international research group. Additionally, as the case study consisted of only three companies and six interviews, the results are not generalizable due to a "*small and unrepresentative number of cases*" (Saunders et al., 2007, p. 319).

Further limitations related to the case study can be caused by interviewer and interviewee biases, which were mitigated through continuous monitoring during the interview and data analysis process. Also, as five out of six interviews were conducted in Finnish and the findings as well as the direct quotes required translation from Finnish to English, there is a risk that the original tone of voice has to some degree been altered during the translation process. This risk has been mitigated through validating the tone of the translation to the tone of the interview recordings.

The study provides potential new avenues for future research in terms of increasing the sample size of the case study companies as well as expanding the study's geographical area to cover other countries outside of Finland. This would provide opportunities to examine whether similar qualitative results arise also in companies based in other geographical locations. Another research avenue would be to extend the empirical study to explore the drivers behind the adaptation of digital technologies more extensively. This would allow identifying specific actions and development areas to increase the adoption of digital technologies among the traditional SMEs. Digital commerce has significantly increased during the Covid-19 pandemic (Euromonitor International, 2021), which is also visible in the results of the case study interviews. Therefore, it can be considered necessary for the traditional SMEs to ensure their abilities to follow this development path and to secure their competitive advantage also in the future.

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Appendices

Appendix 1. Interview guide

Interview Guide	
1	<p>Introduction (3 min)</p> <ol style="list-style-type: none"> 1. Introduction of the topic and the terminology 2. Explaining the goal of the study 3. Total time of the interview approximately 33–53 min
2	<p>Background information (5–10 min)</p> <ol style="list-style-type: none"> 1. Interviewee's professional background 2. Company background
3	<p>Digitalization (5–10 min)</p> <ol style="list-style-type: none"> 1. How does the company utilize digital technologies in their business operations? 2. Has the company utilized digital technologies from the inception or gradually increased their involvement? 3. Has the introduction of digital technologies affected the company's original business model? 4. Has there been visible changes in the customer behaviour concerning the use of digital technologies?
4	<p>Internationalization (10–15 min)</p> <ol style="list-style-type: none"> 1. Company's internationalization stage and path 2. Why has the company chosen these specific markets? 3. What methods has the company used in internationalizing their business? 4. Which have been the greatest challenges in the internationalization process?
5	<p>Digitalization and internationalization (10–15 min)</p> <ol style="list-style-type: none"> 1. What role have digital technologies played in the company's internationalization process? 2. What kind of advantages has digitalization brought to the company, if any? 3. Does digitalization present any challenges, currently or in the future?
6	<p>End of the interview</p>

Appendix 2. Summary of the case-specific findings

	Company A	Company B	Company C
Founded	2012	2013	2016
Main product	Digitally enhanced green wall	Alcoholic beverages	Biodegradable packaging material
Number of employees	80	30	32
Number of countries	17	20	Global presence via customers' business operations, total number N/A
Digitalization	<ul style="list-style-type: none"> ▪ Main product digitally enhanced with IoT sensors ▪ Remote monitoring, remote management, & usage of sensor data ▪ Cloud-based ERP system to improve synergy & visibility of operations ▪ Crowdfunding platform to raise capital ▪ Marketing and sales automation & analytics via CRM platform ▪ Search engine optimization to improve website conversion rates ▪ Social media ▪ Video conferencing with internal & external stakeholders ▪ Augmented Reality & Virtual Reality to enhance customer experience ▪ Development of digital technologies enabled a leasing business model ▪ Digital workspaces for collaboration & project management 	<ul style="list-style-type: none"> ▪ Social media ▪ Digital tools to understand customer journeys & utilize data in marketing ▪ Personalized email marketing automation ▪ Shopify platform for an online store, inventory etc. ▪ Software to analyse customer behaviour on the website & request feedback ▪ Google analytics and advertising tools ▪ Search engine optimization to improve website conversion rates ▪ Presence in the consumer food home delivery platforms for distribution ▪ Video conferencing with internal & external stakeholders 	<ul style="list-style-type: none"> ▪ Marketing & sales data analytics via CRM ▪ Customer satisfaction measured digitally ▪ Cloud-based ERP system ▪ Search engine optimization to improve website conversion rates ▪ Social media ▪ Video conferencing with internal & external stakeholders ▪ Digital product materials used in sales ▪ Digital workspaces for collaboration and document governance
Internationalization	<ul style="list-style-type: none"> ▪ First expanded to neighbouring country Sweden, where a subsidiary was established ▪ Due to North American investor next expansions were the U.S. & Canada ▪ Decided to use partner model as primary entry model ▪ Expanded to South-Korea with a local partner ▪ Partner agreements were formed within Europe in countries such as, Germany, the UK, the Netherlands, the Czech Republic, Poland, & Denmark ▪ Production transferred from Finland to the Netherlands ▪ Internationalization model is "geo-exact" 	<ul style="list-style-type: none"> ▪ Internationalized through exporting, which extended to over twenty countries ▪ Germany was chosen as the main foreign market and business was at first conducted from Finland, then a founder moved to Germany to oversee operations and a subsidiary was established. ▪ Expansion to the U.K. & especially London ▪ Internationalization model referred to as "hyper local strategy" 	<ul style="list-style-type: none"> ▪ Globalized in an early stage via customers' business operations ▪ Company's products can be found through manufacturers in the U.S., Asia, Middle East, & Europe, where Europe is the biggest market ▪ Structured market study with strict criteria used as a basis for new foreign market selection ▪ The nature of the foreign market determines the chosen entry mode, such as entering the markets through local partners, establishing subsidiaries, or operating from Finland
The role of digitalization in the internationalization process	<ul style="list-style-type: none"> ▪ Digital part of the product enabled internationalization due to uniqueness, viability, and remote monitoring capabilities, which have significantly reduced maintenance costs ▪ Expanding partner network has become faster by using digital tools ▪ Web analytics enabled efficient marketing activities, and conducting market studies, & testing foreign market demand remotely from Finland before making market commitments ▪ Internal & external collaboration through digital workspaces and video conferencing have brought time and cost-savings 	<ul style="list-style-type: none"> ▪ Global online store has enabled sales approximately to twenty countries within Europe & Asia ▪ Selling through online store directly to customers has brought more control over brand communication & diminished costs ▪ Digital marketing tools have enabled geographically wider customer reach with a cost-efficient manner 	<ul style="list-style-type: none"> ▪ Digital marketing tools considered paramount in creating global awareness & building wider customer interest ▪ Data analytics considered as a powerful tool to be utilized in digital marketing and conducting market studies