



# **Internationalization of Finnish circular economy small and medium-sized enterprises**

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**Abstract**

The internationalization of Finnish circular economy small and medium-sized enterprises (SMEs) has become increasingly relevant lately, as demand for sustainability-driven innovation has expanded beyond just national borders. In addition to this demand, more and more SMEs are looking to expand globally. The aim of this research was to identify the main challenges these companies face during the internationalization process and to explore practical solutions that can support successful expansion. A theoretical framework was created by the author to guide the focus of the research and to help form the interview questions. The study was implemented as an empirical qualitative research project, consisting of three semi-structured expert interviews with professionals from a Finnish company that is actively involved in sustainability and circular economy work. The interview data was coded and analyzed to identify recurring patterns, trends and insights that emerged from the participants' responses.

The findings revealed that Finnish circular economy SMEs face various internal and external challenges in their internationalization process, including financial constraints, limited human resources, lack of market knowledge, complex regulations, cultural differences, and visibility issues. Despite these obstacles, a number of strategic solutions were identified through this research. These included utilizing government and union support, building local partnerships and collaborations, networking, adapting to the new market conditions, and using digital tools and storytelling to improve market positioning. The results aligned closely with prior research and literature while also offering practical, context-specific insights relevant to Finnish circular economy SMEs.

The study contributes to a deeper understanding of how circular economy SMEs can navigate international markets and highlights actionable strategies that business leaders and policymakers can apply to accelerate sustainable global growth.

**Keywords/tags (subjects)**

Internationalization, circular economy, sustainability, SMEs

**Miscellaneous (Confidential information)**

**Seppälä, Miisa**

## **Suomalaisten pienten ja keskisuurten kiertotalousyritysten kansainvälistyminen**

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### **Tiivistelmä**

Suomalaisten kiertotalouteen keskittyvien pienten ja keskisuurten yritysten (PK-yritysten) kansainvälistyminen on noussut yhä ajankohtaisemmaksi, kun kestävyteen pohjautuvan innovaation kysyntä laajenee kansallisten rajojen yli. Tämän kysynnän lisäksi yhä useammat PK-yritykset haluavat laajentua maailmanlaajuisesti. Tutkimuksen tavoitteena oli tunnistaa keskeiset haasteet, joita nämä yritykset kohtaavat kansainvälistymisprosessin aikana, sekä kartoittaa käytännön ratkaisuja, jotka voivat tukea onnistunutta laajentumista. Teoreettinen viitekehys laadittiin tutkimuksen ja haastattelukysymysten muodostamisen tueksi. Tutkimus toteutettiin empiirisenä kvalitatiivisena tutkimuksena, joka koostui kolmesta puolistrukturoidusta asiantuntijahaastattelusta. Haastateltavat olivat ammattilaisia suomalaisesta yrityksestä, joka toimii aktiivisesti kestävä kehityksen ja kiertotalouden parissa. Haastatteluaineisto analysoitiin koodaustekniikalla, ja analyysin pohjalta tunnistettiin toistuvia teemoja, trendejä ja havaintoja haastateltavien vastauksista.

Tulokset osoittivat, että suomalaiset kiertotalous-PK-yritykset kohtaavat kansainvälistyessään sekä sisäisiä että ulkoisia haasteita, kuten rahoitusrajoitteita, rajallisia henkilöstöresursseja, puutteellista markkinatuntemusta, sääntelyn monimutkaisuutta, kulttuurisia eroja sekä näkyvyyteen liittyviä ongelmia. Näistä haasteista huolimatta tutkimuksessa tunnistettiin useita strategisia ratkaisuja, kuten julkisten tukien hyödyntäminen, paikallisten kumppanuuksien rakentaminen, yhteistyö ja verkostoituminen, markkinatilanteeseen sopeutuminen sekä digitaalisten työkalujen ja tarinankerronnan käyttö markkina-aseman vahvistamiseksi. Tulokset olivat linjassa aiemman tutkimuskirjallisuuden kanssa, sekä tarjosivat samalla käytännönläheisiä, kontekstisidonnaisia näkökulmia suomalaisille kiertotalous-PK-yrityksille.

Tutkimus syventää ymmärrystä siitä, miten kiertotalousyritykset voivat navigoida kansainvälisillä markkinoilla, ja nostaa esiin konkreettisia strategioita, joita yritysjohtajat ja päätöksentekijät voivat hyödyntää kestävä globaalin kasvun edistämiseksi.

### **Avainsanat (asiasanat)**

Kansainvälistyminen, kiertotalous, kestävä kehitys, PK-yritykset

### **Muut tiedot (salassa pidettävät liitteet)**

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# 1 Introduction

## 1.1 Background

Internationalization is becoming increasingly more appealing for firms as there are many benefits in venturing to the international markets; it can be vital for small business growth and survival, as well as the country's international reputation and economic well-being (Dar & Mishra, 2019). However, the process might include facing some challenges along the way, especially for small and medium-sized enterprises (SMEs) in Finland, internationalization brings up challenges and barriers to overcome, and requires thorough planning and strategy to execute successfully and thrive in the new markets (Asemokha et al., 2021). SMEs are already at a disadvantage compared to bigger firms, with the likely lack of resources such as finances, technology (Sanyal et al., 2020, p. 284) and networking connections, as building and maintaining profitable business relationships is vital in today's globalized world (Torkkeli, 2013). Larger enterprises might already acquire these types of resources along with knowledge and experience, holding a competitive advantage in the internationalization process. However, according to researchers, companies' successful performance is directly linked to internationalization and global market expansion (Dar & Mishra, 2019).

That being said, companies including SMEs should consider pursuing international operations, despite potential arising challenges. Internationalization will likely bring the company new resources, new market reach and other valuable assets that will help them acquire competitive advantage against other SMEs (Dunning, 2008). Dar and Mishra (2019) have noted that SMEs' successful performance is directly connected to their active international involvement and new market expansion through internationalization.

The topic will be analyzed from the perspective of Finnish SMEs. Finland is geographically a fairly small country with the total land area of 303 890 km<sup>2</sup> (Worldometer Finland, 2021), and a current population of 5,5 million people. It is a Nordic country located in the Northern Europe that shares land borders with Sweden, Russia and Norway. Finland's economy is highly industrialized with per capita gross domestic product of \$50 811 USD (OECD, 2021a). International trade is significantly important, but the key economic sector in Finland is manufacturing. The main industries include wood, metals, engineering, telecommunications, and electronics, with forestry being an important

export industry. Finland especially excels in exporting technology and promoting startups on sectors such as communications technology, gaming, cleantech, and biotechnology (Finland Economy Profile, 2021). These are very crucial part of Finnish firms' internationalization, as successful export performance is directly linked to achieving international market penetration (Welch, Benito, Petersen, 2008, 3).

Sustainability is a huge global megatrend in today's economy and circular economy is a great opportunity for businesses to apply this megatrend into their business activities. Circular economy is a rather new concept that has great potential to enable multiple value creation mechanisms and therefore contribute to a significant change in the economic system and a more sustainable society (Pádua Pieroni, Blomsma, McAloone, & Pigosso, 2018, p. 179). It is an economic model to optimize the system and help fight against the root causes of climate change while eliminating waste and the decrease of natural resources. Finland is one of the first countries to have implemented circular economy into practice via different projects and created a roadmap with a plan towards a sustainable future of the country. Additionally, Finnish Innovation Fund Sitra has compiled a guide to help other countries take the same actions and join the global transition to circular economy (Sitra, 2021).

Internationalizing circular economy SMEs in Finland is held in high importance to the Finnish economy. SMEs represent 99.7% of the total number of enterprises in Finland and employ 64.7% of the labor force (European Commission, 2021). Major growth drivers for SMEs in Finland have been IT services and the flourishing gaming industry, which is one of the largest in Europe (European Commission, 2019). Finland also boasts a lot of other innovative SMEs and startups, and has ranked first on 'SMEs with product or process innovations' and on 'SMEs innovating in-house' on The European Innovation Scoreboard in 2020. Business Finland even created a funding programme in 2020 for Finnish SMEs to help them access the foreign market knowledge they lack. However, exports seem to be challenging for Finnish SMEs compared to the European Union (EU) average. In 2018, they covered 35% of the value of total exports in comparison to EU's 38%, according to Eurostat (European Commission, 2021).

## **1.2 Motivation for the research**

### **Society perspective**

As we live in a world with an increasing climate crisis, transformative change and reforming of the world economy is needed. Change is inevitable and circular economy plays a huge part in moving forward with the transformation (Sitra, 2021). It is also relevant to research and analyze the circular economy as a concept, as it is becoming increasingly more prevalent and trendy topic in discussion of literature, for instance the Green Economy Action Plan that has been developed by the European Commission in order to tackle climate change (European Commission, 2020a). The research topic is especially relevant and important from the society's viewpoint because internationalization of circular economy companies is paving the way to a more sustainable and environmentally friendly world, as circular economy is a significant enabler of change in the economic system and contributor for the development of a more sustainable society. The research on the topic of circular economy is also necessary in order to create knowledge and spread awareness for acknowledging opportunities and facilitating sustainable consumer desires (Pádua Pieroni et al., 2018, p.180).

### **SME perspective**

From the perspective of SMEs in Finland, internationalization raises more opportunities for the already small-scale market. It creates international exposure and leads to more exports to other countries, which will convert into profit and value back to Finland. SMEs are an important segment of the economy in Finland, as they account for 99.7% of the total number of businesses and employ 64.7% of persons employed in Finland (European Commission, 2021).

SMEs play a crucial role in advancing the economic growth in the European Union and especially Finland, and as it is considered a relatively small country, the potential for growth in the domestic markets is limited for Finnish firms and SMEs. They create new jobs, open new market sectors and develop new innovative products and services, which all bring value and benefits Finland's economy (Kontinen & Ojala, 2010).

Therefore, this research will especially benefit SMEs in Finland which are starting their process, are already in the process, or have a desire of internationalization in the future, helping them identify possible challenges and providing solutions to avoid failure and further advance their global

expansion. While Finnish SMEs will benefit from this research, desirably so will managers with similar situations or backgrounds.

### **Personal motivation**

From the author's point of view, with the interest in international business and global markets, as well as having a passion for solving and preventing environmental issues and living a more sustainable lifestyle, the topic is exceptionally relevant and important in terms of personal life along with professional and academic path. These research topics open great potential career opportunities on the field of international business and economics, so obtaining information, knowledge and firsthand experience of local SMEs' internationalization will provide immense value and support for the future.

### **1.3 Research objectives and questions**

The purpose of this research study is to discover what kind of challenges Finnish circular economy SMEs face in their internationalization process and providing viable solutions to overcome the challenges in order to successfully internationalize the firm's operations. The aim is to identify and analyze the specific factors that create barriers for Finnish circular economy SMEs' internationalization by interviewing experts and/or professionals that have experience on the subject. The research is done to better understand the SMEs' internationalization process through qualitative interviews, and therefore aims to obtain answers to the following research questions:

- What are the key challenges for Finnish circular economy SMEs in their internationalization?
  
- How can they overcome these challenges?

In order to answer the research questions, a research design was created for guidance, which is visualized in Figure 1. below. To reach accurate answers and gain broader insights to the research questions, the aim is to interview a few representatives, who are working on the industry of Finnish circular economy and/or are helping SMEs internationalize, and who are able to provide information from their own professional experience. The representatives will be interviewed with

a semi-structured approach, from which the primary data will be gathered from for the research. The data will then be analyzed with a coding technique for the final results. A theoretical framework is derived for guidance and structure which will be implemented in the interviews as well as the thesis report. More in-depth explanation on how the research will be conducted and executed is presented in the methodology chapter.

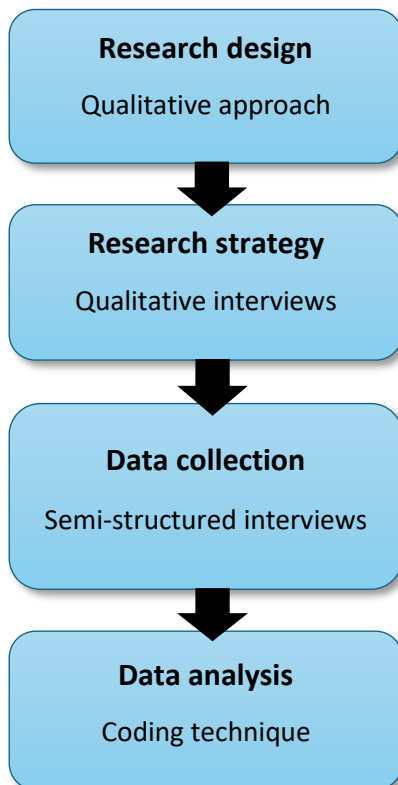


Figure 1. Research design

### The structure of the thesis

In the following literature review chapter, will be detailed information, examination and theories of the main topics of the research, obtained from existing literature. It also includes the theoretical framework designed to guide the research onwards. Chapter three contains the briefly mentioned methodology of the research providing a more profound view of the research approach and context, as well as information on how the data was collected and analyzed, with verification of the result and ethical solutions at the end. Chapters four and five include the results and discussion about the answers to research questions, with an analysis of the findings derived from the primary data, while taking into account practical and managerial implications as well as

existing literature. Including limitations of the research and suggestions for future research in chapter five. At the end of the report can be found the list of references and appendices.

## **2 Literature review**

This chapter includes insight to the main topics of this research which are circular economy and internationalization. The author also continues to explain the five different circular economy business models, as well as internationalization in context of SMEs. Information is retrieved from existing literature from various peer reviewed sources found via online libraries and databases, using keywords such as circular economy and internationalization of SMEs. The literature review was done to help the researcher and reader to understand said topics holistically and thoroughly. A theoretical framework was created at the end of the chapter to guide the research and to support answering the initial research questions.

### **2.1 Circular economy & business models**

The main goal of circular economy has been described to be economic prosperity and environmental quality, but it also has an impact on social equity and future generations which are more rarely mentioned in the business context (Kirchherr et al., 2017). It is recognized in the international level, that overconsumption of natural resources, climate change and loss of biodiversity are currently alarming problems. The circular economy aims to actively provide solutions to these problems (Sorasahi & Sinervo, 2019). Enterprises that have acquired a circular economy business model are essentially working towards having very minimal negative effect on the global environment by increasing the quota of renewable and recyclable resources whilst reducing raw materials and consumption. This will lead to the reduction of emissions and utilization of resources as efficiently as possible (Salmela, 2016).

Circular economy is currently a popular and trendy concept, especially whilst being promoted by the European Union, several governments, and businesses around the globe (Korhonen et al., 2018), particularly in Finland. Finland's aiming point is to promote circular economy, be a pioneer in the field and it also "was the first country in the world to prepare a national road map to a circular economy in 2016, under the leadership of The Finnish Innovation Fund Sitra." The road

map compiles all the essential operations, changes and actions required for the transition towards circular economy by 2025, according to key operators at Sitra. (Sitra, 2016)

Sustainable development is the goal for most businesses in today's world and circular economy is viewed as an operationalization for them to be able to implement this concept in their business models (Kirchherr et al., 2017, p. 221). In order to move towards circular economy a full systematic change and innovation is needed, businesses need a whole new way of thinking and new business models to implement (Seppälä et al., 2016).

According to Antikainen and Valkokari (2016), the aim of circular business models is to reduce resource consumption and to keep resources in circulation for as long as possible. These models intend to replace scarce resources with recyclable, renewable and biodegradable alternatives. The difference between a circular and a linear business model is that the circular business model concentrates on creating value for a more broad range of stakeholders, and it also takes into consideration the societal and environmental perspectives (Antikainen & Valkokari, 2016). With reusing, repairing and recycling of existing products and materials, the circular model ensures that resources return to the value chain after usage (Abou Taleb, 2018). Figure 2 illustrates the difference between linear and circular economy business models.

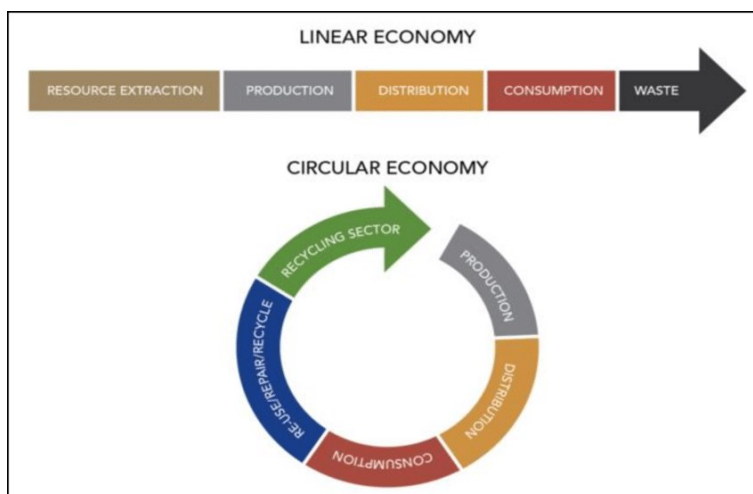


Figure 2. Linear vs. circular economy models (Abou Taleb, 2018)

Companies could achieve great competitive advantage by implementing circular business models and by concentrating more on efficient material circulation and service-based models (Seppälä et al., 2016) along with social and environmental benefits, and new business possibilities (Antikainen & Valkokari, 2016). Five different circular economy business models are presented in the following segments.

### Product as a service

Rather than conducting a one-time sell of a product, manufacturers are finding ways to sell their product as a service, it is more about selling solutions and outcomes to the customers instead of a tangible product. Product as a service is a complete opposite of the traditional linear models, which has a simpler lifecycle of take-make-waste. With a linear model, after the customer is done with their product, it ends up being discarded, but with a circular economy model it returns back to the producer and can be given a new life. In this model, companies can for example recycle the materials and remanufacture the components when they are no longer in usage (Lacy & Rutqvist, 2016), as can be seen in the Figure 3 below.

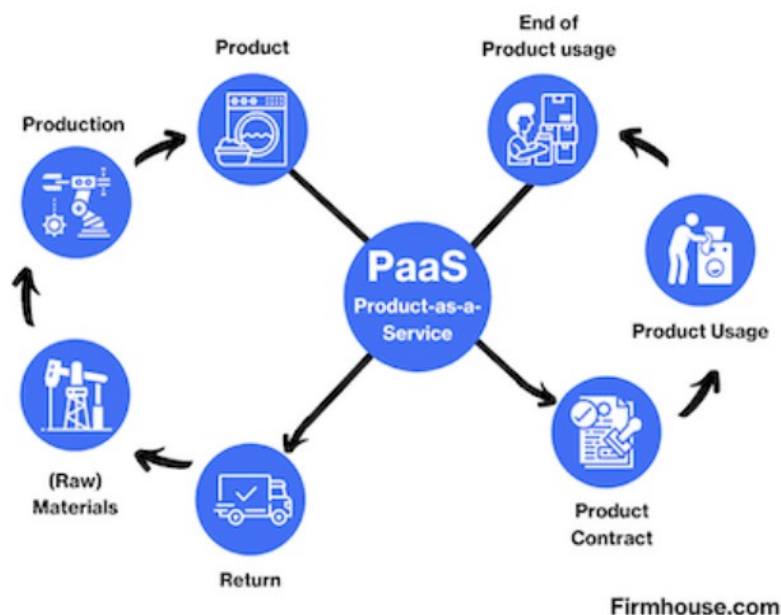


Figure 3. Product as a service (Quijano, 2020)

## Product-life extension

Nowadays, products are being used for increasingly shorter times, and the goal in circular economy is to keep a product in usage for as long as technically and economically possible. Product-life extension business model can be used by companies that for example maintain and improve their products or product components by repairing, upgrading, remanufacturing or remarketing them, while also making profit from these functions. In this model, product characteristics such as durability, quality and functionality are highly valued. (Ovaska et al., 2016.) The companies are extending the product lifecycle while also saving in material costs and manufacturing, as well as natural resources and energy, therefore saving the environment (Sorasahi & Sinervo, 2019). In the Figure 4 below, is presented a visual example of product-life extension and the phases a product goes through in its lifecycle.

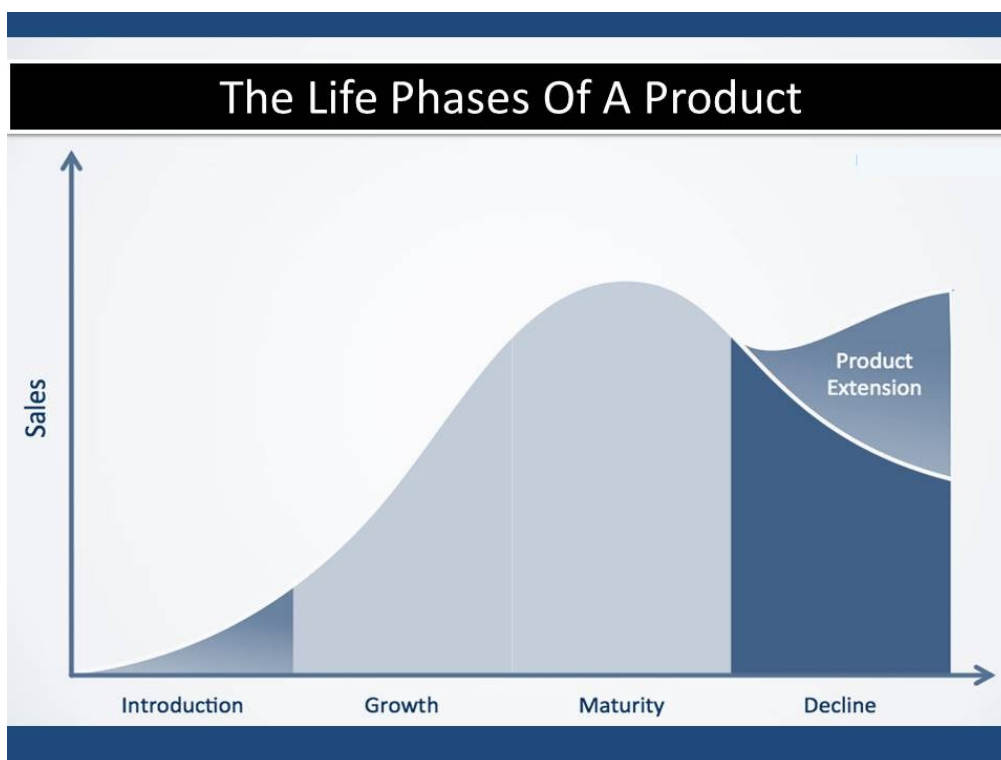


Figure 4. The life phases of a product (K S Rao & Team For Business Minds Today, 2016)

## Renewability

Another goal for circular economy is to phase out the use of scarce resources, such as oil, coal and plastic (Ovaska et al., 2016), as well as to fully abandon oil as a raw material or energy source. Companies that use the renewability business model aim to replace their currently used materials, many of which are toxic, polluting and non-recyclable, with materials that are renewable, recyclable and biodegradable. When using renewable resources, the company is no longer as dependent on expensive raw materials made from our world's limited amount of unrenovable resources. Consumers also increasingly value and prefer eco-friendly, recyclable products made from renewable materials. (Sorasahi & Sinervo, 2019).

### Resource efficiency and recycling

Resource efficiency and recycling form the basis of circular economy. This business model focuses on repairing and recovering the embedded value in products through innovative upcycling and recycling techniques and technologies. Upcycling in this context means turning an old product into something new and retain or even increase the value of the product. One example of this technique would be industrial symbiosis between companies, where waste of one company becomes a valuable input for another, as seen on Figure 5 below. This business model would therefore be convenient for companies that produce large volumes of by-product or ones that can effectively gather and reprocess waste materials from their products (Ovaska et al., 2016). Recycled raw materials can also originate from consumers along with the industries. Companies can ask their customers to return their used products back, and thereby acquire more raw materials for future manufacturing (Sorasahi & Sinervo, 2019).

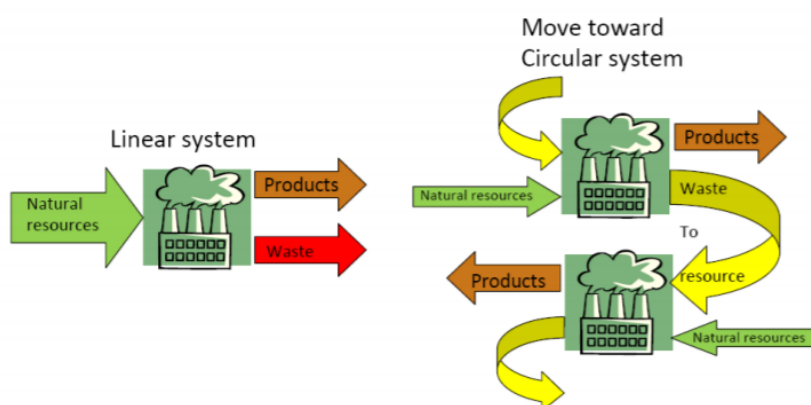


Figure 5. Industrial symbiosis (Ala'Eddin, 2020)

## Sharing platforms

Many individuals and companies have items in their possession that they rarely use. Sharing platforms help existing products to be more efficiently used, among a larger amount of people. These businesses are basically digital or physical services, which enable the used items to be rented or borrowed by others. This business model is especially beneficial to customers, since they will not have to buy a new product for temporary use for example, and instead can get a suitable product with a lower cost. By sharing, less products are needed in the world, and production takes up less natural resources which saves the environment. Ideal examples of this business model are second-hand shopping and online flea market platforms, such as Tori.fi (presented in Figure 6) in Finland and Vinted, which operates all across Europe and the USA. They are a great way to extend the lifecycle of products and contribute to circular consumption. (Sorasahi & Sinervo, 2019)

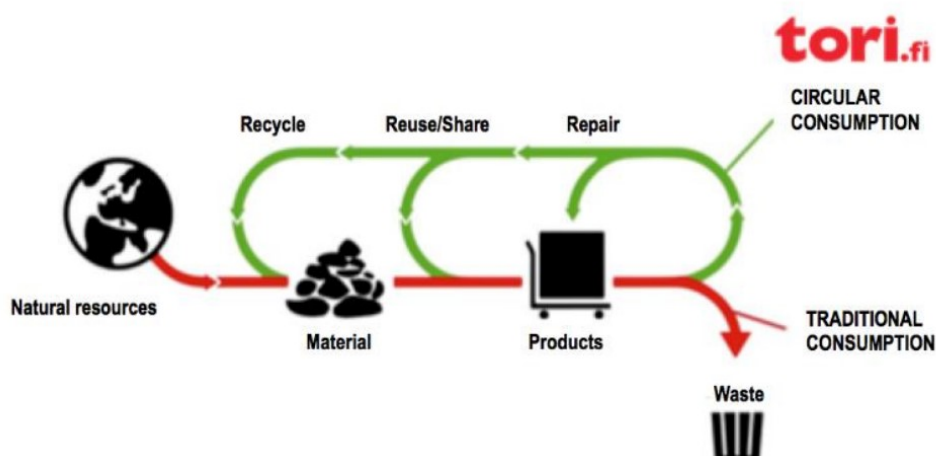


Figure 6. Tori.fi as a sharing platform (Sitra, 2019)

## 2.2 Internationalization of SMEs

There have been several studies in the field of international business that indicate internationalization of firms being a process in which the firms gradually increase their international involvement (Johanson & Vahlne, 1977). However, internationalization is rather a broad concept and definitions of it can slightly vary between different authors. According to

Johanson and Vahlne (1977), internationalization is the process of successfully expanding a firm's operations into a foreign country and gradually acquiring, integrating and using knowledge about foreign markets and operations. Similarly to Johanson and Vahlne's, from Welch and Luostarinen's (1988, p. 84) point of view internationalization is being described as "the process of increasing involvement in international operations". While these are just a few examples of all differentiating definitions of internationalization by different authors, it can be agreed on that the process is significantly more challenging to SMEs than it happens to be for multinational enterprises (MNEs).

While talking about internationalization of SMEs specifically, it is important to be able to define them. SMEs are independent enterprises and are defined by the number of employees, and in some cases, by their turnover or balance sheet total (European Commission, 2003). Inside the EU, a firm with under 250 staff headcount is considered an SME, however in some countries this number varies from 200 to 500. Firms with under 50 staff headcount are defined as small businesses, and ones with under 10 staff headcount are considered micro-enterprises (OECD, 2005). SMEs are generally the backbone of Europe's economy, and they represent 99% of all businesses in the EU. They bring innovative solutions to current problems like climate change, resource efficiency and social cohesion, and therefore are crucial to the EU's transition towards a sustainable and digital economy. (European Commission, 2020b)

So why do firms have the aim to pursue internationalization strategies? There are multiple opportunities that could motivate firms to internationalize, however there are also challenges to overcome, in order to achieve the goal. More of the latter will be discussed in the theoretical framework chapter below. The motivations that drive firms to expand their business abroad include seeking new markets, resources, (strategic) assets and efficiency (Dunning, 2008).

Initially, firms most likely invest in their internationalization in order to acquire natural resources and to gain access to new markets (Dunning, 2008). Companies that are mainly resource-seeking, venture abroad to access resources that might not be available in their home country, or they can be acquired at a lower cost elsewhere (Benito, 2015). The resources can be physical, such as mineral fuels or agricultural product, they can be the need for large amounts of labour that may be cheaper in another country for instance, or thirdly, the need for technological capabilities, expertise in marketing or management and organizational skills, the so called 'intellectual

property' (Dunning, 2008). Market-seeking companies are aiming to expand their operations abroad mainly to access new customers and to be able to supply goods and services in that specific area (Dunning, 2008).

After already venturing abroad and increasing the level of multinationality of the firm, they might want to use their international business activities as an advantage to further improve their global market position by raising their efficiency and/or accessing new strategic assets and therefore also raising their competitive advantage (Dunning, 2008). Efficiency-seeking companies are seeking to lower their costs of performing economic activities or make their already existing operations more efficient by expanding into various locations (Benito, 2015). The intention behind the efficiency-seeking is to take advantage of different offerings of those areas, such as culture, institutional arrangements, demand patterns, economic policies and market structures, by concentrating their production in a limited number of locations to supply multiple markets simultaneously (Dunning, 2008). Strategic asset-seeking companies aim to obtain either tangible or intangible strategic assets, which might be crucial for their long-term strategy but are not available at the home country (Benito, 2015). Ultimately, the goal is to sustain or further advance their global competitiveness. Like the efficiency-seeking companies, the strategic asset-seekers also aim to capitalize on the benefits of the common ownership of diverse activities and capabilities in diverse and potential environments. (Dunning, 2008)

After defining internationalization and understanding the motives behind it, begins the actual process of internationalization, there are variety of models and theories explaining internationalization of firms. A few of them are going to be introduced in the following subchapters, including the well-known Uppsala internationalization process model, Born global theory, and Network theory of internationalization.

### **Uppsala internationalization process model**

The first and original Uppsala internationalization process model was created by Johanson and Vahlne in 1977, which is based on their empirical observations from international business studies at the University of Uppsala. They found that Swedish companies often tend to develop their internationalization in small steps, rather than making large investments in foreign markets all at

once. It is also typical for this model that firms start exporting to a foreign country through an agent, then later create a sales subsidiary, and perhaps eventually start productions in the host country. (Johanson & Vahlne, 1977, p. 24)

The Uppsala internationalization process model focuses on acquisition, integration and the use of knowledge about foreign markets (Moen, 2002). It is based on the state aspects which are market knowledge and commitment, and change aspects which include commitment decisions and current business activities (Johanson & Vahlne, 1977, p. 26). The basic mechanism of these aspects is illustrated below in Figure 7.

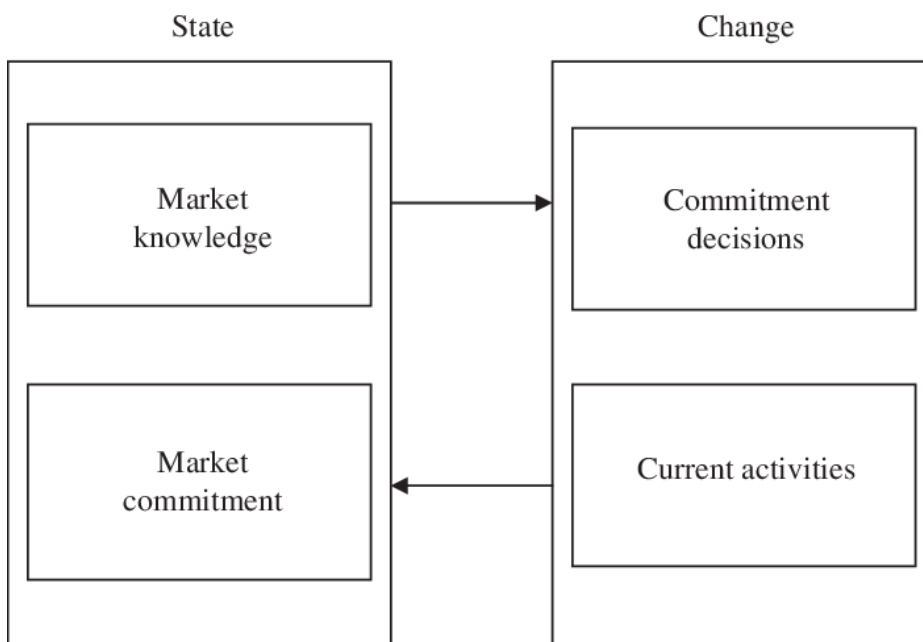


Figure 7. The basic mechanism of internationalization – state and change aspects (Johanson & Vahlne, 1977, p. 26)

The Swedish researchers have faced some criticism over the time about their Uppsala model for instance due to its limitations in the new era of globalization. Some limitations that have been found include not showing consideration to management incentive or its effects on decision-making. Also, when introducing the four-step market entry, they ignored some other forms of market entries such as franchising, licensing and strategic alliance. The Uppsala model also does not discuss the reason behind foreign direct investment (FDI) and why it is a goal for the firms development. (Zohari, 2008)

This model has since been revisited by the original authors Johanson and Vahlne in 2009 due to rapid changes in the global business environment. They found that networking relationships have an impact on foreign market selection, and therefore influence internationalization. The researchers then developed a new model combining their original process model and networking approach. The new developed model highly concentrates on increasing the importance of business networks and relationships, but keeping the same contents and structure as they presented in 1977. While it is notably developed further, the aim is still to consider the original Uppsala internationalization process model that emphasizes the importance of knowledge and internationalization still being a step-by-step process. (Johanson & Vahlne, 2009)

### **Born global theory of internationalization**

This slightly newer theory of internationalization was firstly presented in a form of combined literature by Oviatt and McDougall in 1994, called the born global theory. They describe a born global as a business organization that seeks to obtain competitive advantage from the use of resources from multiple countries, at the formation of the firm (Moen, 2002). These firms are often reported to start international activities right from their birth (Osarenkhoe, 2009), or in the first two years of operating (Knight & Liesch, 2016) to enter distant markets and multiple countries right away, sometimes without prior experience (Osarenkhoe, 2009). Born globals are smaller and mostly technology or research and development (R&D) concentrated firms with a lack of tangible resources to help them in the internationalization process (Knight & Liesch, 2016).

The explanation for the choice of international market entry for born global firms is claimed to be increasingly global conditions, and new developments of transportation and communication technologies. In addition to those, the rising number of people with international experience, networking and entrepreneurial capabilities of the owners of the firms are reasons to seek this method of internationalization. (Osarenkhoe, 2009).

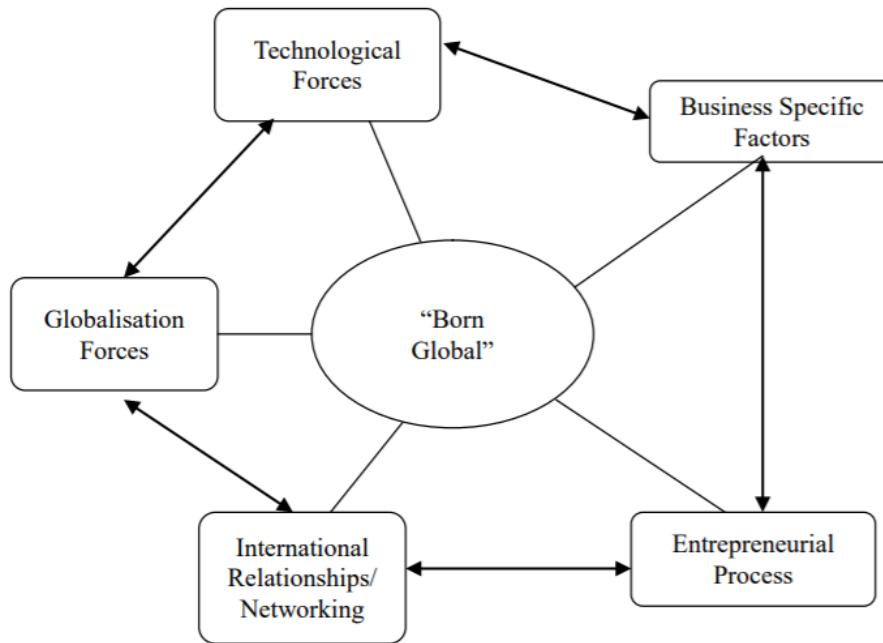


Figure 8. The enablers of born global internationalization (Osarenkhoe, 2009, p. 299)

The Figure 8 above presents the factors that enable and encourage born global firms to internationalize. Technology has a huge role in the process of internationalization as continuously rapid developments of internet and technology are leading firms to new opportunities globally. The access to these resources lowers the cost of internationalization, which is a key benefit especially for smaller firms. The ongoing market globalization removes barriers between markets and enables knowledge to be transferred with ease across distances. While the barriers between markets are being removed, there is room for smaller niche firms that are innovative and able to differentiate their firms and products from competitors, and therefore will access new markets and industries easier. Networking, which is discussed later in the literature review, has an important role in internationalization as well. Firms use their networks and relationships to access resources, learn new skills and to improve their strategic positions and legitimacy on the industry. In favour of the entrepreneurial process, the executive managers of born global firms are often great risk-takers and have an explicit global vision, making no distinction between the domestic and international markets, and viewing the whole world as their marketplace. (Osarenkhoe, 2009).

## **Network theory of internationalization**

Networking as a concept has been brought up recently and the term 'network' has been appearing in literature, international conferences and research projects increasingly more often (Vinuesa, 2016, p. 62). According to Gibson et al. (2014), one of the first empirical definitions of networking was provided by Gould and Penley (1984), in which they described it as "the practice of developing a system or 'network' of contacts inside and/or outside the organization, thereby provided relevant career information and support for the individual." More recently however, Forret and Dougherty (2004) defined networking as a tool for career development, and similarly, Wolff and Moser (2009) described it as "behaviors that are aimed at building, maintaining, and using informal relationships that possess the (potential) benefit of facilitating work related activities." (Gibson et al., 2014). From a mathematical perspective, the definition is as simple as "a set of nodes and the ties that unite them", the nodes being the subject of the analysis (Vinuesa, 2016, p. 63).

Studies have shown that a broad network is essential for firm growth (Vasilchenko & Morrish, 2011), and having multiple relationships instead of just one is extremely beneficial because different resources can lead to direct or indirect opportunities for other resources (Aaboen et al., 2011, p. 43). Some other benefits firms can gain from networks include (market) knowledge, greater assets for identifying global opportunities, and supplier and customer contacts (Vasilchenko & Morrish, 2011).

As networks are essential to firm growth, they also have a significant role in the internationalization of firms. The networking theory of internationalization was introduced in 1988 by Johanson and Mattsson, and it has since become one of the main studied frameworks for internationalization. From a network approach perspective, internationalization is described as a firm aiming to establish a position in a foreign business network and therefore to create new relationships with business partners from abroad. This approach views markets as webs of networks and the goal for firms entering the market is to engage and develop long-term relationships within the network (Johanson & Kao, 2010, p. 4). Johanson and Mattsson defined internationalization as a gradual process that is divided in three stages: Market expansion, market penetration and market integration (Hosseini & Dadfar, 2012, p. 187). While still discussing the

internationalization of SMEs, networks are especially important for smaller and newer companies as networks might provide resources they would otherwise not have access to, therefore influencing their company growth and internationalization on the market (Tang, 2011, p. 374).

## **2.3 Theoretical framework**

In this qualitative research study, the theoretical framework has been derived from the researched literature, and is based on the foremost research question about challenges in internationalization of SMEs, then finding potential solutions to said challenges in the research study.

As stated before, SMEs face a larger number of challenges during their internationalization process compared to bigger firms. There are internal barriers that are related to resources and capabilities within the firm, and external factors that come from the environment (Singh et al., 2010, p. 158). It has been studied that for SMEs, the internal barriers are more significant in the matter of internationalization (p. 159). The most common challenge for SMEs is usually the lack of resources, such as finances. A lot of SMEs can struggle with rejected loan applications due to higher risks correlated with the small-scale sector, or with being unable to get the credit from banks due to high credit risk, which are needed in order to expand and export (Sanyal et al., 2020, p. 283). Finance issues are directly linked to possibly having too high transportation and communication costs to export, depending on the location and desired destination (Chandra et al., 2020, p. 326). Also mildly related to this issue of finances, different monetary currencies and policies can make internationalization more challenging for firms (Sani et al., 2019).

When it comes to financing issues, there are several sources of support for SMEs to help them grow, innovate and internationalize. Some of these include loans and guarantees, crowdfunding, growth stock markets, venture capital and business angels.

Even though it is already established that SMEs can struggle with getting loans from banks, there are public and private guarantee institutions that can grant guarantees which will help compensate the lack of collateral or creditworthiness by reducing the risk for banks. The Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME) program is one example that improves access to loans and equity finance for SMEs in the EU. COSME has been

available since 2014 to support SMEs and entrepreneurs with innovation, digitalization, internationalization and upskilling, in particular. (European Commission, n.d.)

Crowdfunding is an emerging type of financing for SMEs which offers an alternative to more traditional financing sources. It involves relying on the public, usually via internet platforms, to fund projects with the incentive of a reward. (European Commission, n.d.)

Growth stock markets offer listing opportunities for firms that cannot or do not want to be listed on the main stock markets, therefore potentially providing them with access to a larger base of equity-investors. This because growth stock markets provide the investor with an exit point to transfer their investment, therefore freeing up funds to be able to further invest in other ventures. (European Commission, n.d.)

Venture capital is a form of equity financing for start-ups and SMEs in which investors provide funds for them and obtain equity in return. SMEs usually utilize venture capital for expanding, new market entries and growing faster. However, new businesses are often highly risky and cost-intensive to invest into, so investors will have to believe in the firms' potential to grow in order to make the investment. (European Commission, n.d.)

A business angel is a private individual investor with a high net-worth and usually some business experience. Angel investors provide capital by investing a part of their assets in new start-ups and growing SMEs. Not only that, but they also provide business management advice, skills and networking contacts for the newly established entrepreneur. (European Commission, n.d.)

Human resources and business environments can also raise challenges for SMEs that aim to internationalize their operations. Latest information on the markets and the newest advanced technology might not be available for such small firms, and whatever little is available can be too expensive for them to obtain (Sanyal et al., 2020, p. 284). The lack of innovation and creativity can also be a barrier for SMEs, since it can increase competition and the bigger firms in the same niche will presumably dominate the market, leading the SME to a competitive disadvantage (Yoshino & Taghizadeh-Hesary, 2016).

As of on the topic of HR, hiring skilled and experienced management and accounting professionals can be a difficult task for SMEs, as they are often unable to provide salary as high as big private companies offer. Another obstacle for hiring talented workforce is the lack of career planning and job security. When the company's HR-policy is not well planned, it can lead to unloyalty of the workers. Also, to hire the best suppliers and maintaining a long-term relationship with them is a challenge with the lack of skills and resources of SMEs. This is important for business growth because increased customer base and product lines will mean more suppliers or supplier capacity increases are needed. (Sanyal et al., 2020, p. 284).

The firm's own capabilities such as entrepreneurial capacities, management expertise and skills are vital for SMEs expansion and growth overseas, and a lack of these can negatively affect the firm's internationalization strategy and performance. An experienced management with an ability to form networks, relationships and collaborations, and overall owning a global mindset are key internal capabilities that an SME should have before venturing abroad (Sanyal et al., 2020, p. 284). Additionally, the lack of marketing research techniques and knowledge of marketing and R&D can be limiting to the firm's ability to internationalize (Chandra et al., 2020, p. 326). SMEs might also have the disadvantage of lacking skills and knowledge on newer marketing tools like social media platforms to gain attention for their products, and this will lead to competitive disadvantage since nowadays successful marketing efforts are crucial for the company's success (Sanyal et al., 2020, p. 285).

Solutions for HR and other internal challenges, more specifically for limited managerial skills and knowledge, are available in some countries. For example, in France, programs like the 18-month export coaching course that is offered by UbiFrance, and the French Agency for International Business Development. Along with many others like the mentioned, these programs help support and redress SMEs' lacking managerial capacity barriers for internationalization. They help equipping SME entrepreneurs with key skills and attributes for internationalization promotion, such as growth orientation and access to valuable network links (OECD, 2009).

External barriers and challenges include conflicting socio-economic issues, corporal and governmental differences between the host country and destination country. Such are different cultures, rules, regulations, languages, business practices, as well as possible political risks,

economic policies, overall different customer bases and consumer tastes (Gao et al., 2017). When venturing abroad, firms meet new individuals who likely originate from various different backgrounds, which may cause challenges in communication and opinions, that could diminish the level of trust and credibility between the new business associates (Sani et al., 2019). These may lead to challenges that could kill the company's internationalization efforts, however if managed sufficiently and correctly, the firm may gain the needed capacity to hold competitive advantage over other SMEs pursuing internationalization (Gao et al., 2017).

Solutions for socio-economic issues and other external factors include for example investing in cross-cultural communication training for employees to improve understanding of local norms, etiquette, and business practices. Partnering with local businesses or hiring local representatives can also provide insights into the market, ease cultural adaptation, and help establish trust with customers. For differing customer bases, conducting thorough market research to understand the preferences, needs, and buying behaviours of consumers in each target market will help while expanding the firm to those markets. (Gao et al., 2017).

Lastly, especially during the current times, it should be noted that the internationalization process became more challenging for SMEs because of the COVID-19 pandemic and the possible recession following it in the future as well. While abruptly blocking most economic and business activities in the world, the crisis has hit especially hard on the international trade and FDI flows. (Marinov & Marinova, 2020)

It is relevant to mention that the possible challenges that COVID-19 has brought for SMEs also include aforementioned financing issues. That being said, there are funding aid programs for businesses that are struggling due to COVID-19. For example, in 2020, the European Investment Fund mobilized a financial support system to help SMEs through the COSME program amidst the troubling times of the pandemic. (European Commission, n.d.)

On another note, the COVID-19 crisis also helped push businesses towards digitalization and those already operating mostly online have been able to adapt on a timely manner, therefore most likely sustaining their activities and revenue moderately through the pandemic (OECD, 2021b). Moving

the business online can further facilitate internationalization in the sense of being more easily accessible for a wider audience.

Below seen table 1 has been derived based on aforesaid challenges and (indirect) solutions or suggestions, demonstrating the theoretical framework of this research study. The theoretical framework is being utilized as the base for this research.

Table 1. Challenges and solutions of internationalization for SMEs (Adapted from Chandra et al., 2020, European Commission, n.d., Gao et al., 2017, Marinov & Marinova, 2020, OECD, 2009, OECD, 2021b, Sani et al., 2019, Sanyal et al., 2020, Singh et al., 2010, Yoshino & Taghizadeh-Hesary, 2016)

Challenges of internationalization for SMEs	Solutions
<b>Internal challenges</b>	
<p><b>Finances:</b></p> <ul style="list-style-type: none"> <li>- rejected loan applications</li> <li>- transportation and communication costs too high</li> </ul>	<ul style="list-style-type: none"> <li>- guarantees for loans</li> <li>- crowdfunding</li> <li>- growth stock markets</li> <li>- venture capital</li> <li>- business angels</li> </ul>
<p><b>Human resources:</b></p> <ul style="list-style-type: none"> <li>- latest information and newest technology not available or too expensive</li> <li>- lack of innovation and creativity</li> <li>- hiring skilled talents and best suppliers out of reach</li> <li>- lack of marketing research techniques and knowledge of marketing and R&amp;D</li> <li>- lack of skills and knowledge of newest tools</li> </ul>	<ul style="list-style-type: none"> <li>- export coaching programs</li> </ul>
<b>External challenges</b>	
<p><b>Socio-economic:</b></p> <ul style="list-style-type: none"> <li>- different cultures, rules, regulations, languages, business practices, monetary currencies and economic policies</li> <li>- different customer bases and consumer tastes</li> <li>- possible political risks</li> <li>- challenges in communication and opinions</li> </ul>	<ul style="list-style-type: none"> <li>- cross-cultural communication training</li> <li>- thorough market research</li> </ul>
<p><b>Others:</b></p> <ul style="list-style-type: none"> <li>- COVID-19</li> </ul>	<ul style="list-style-type: none"> <li>- COSME and other financial aid programs</li> <li>- Implementing digitalization strategies, serving as a catalyst for driving internationalization efforts</li> </ul>

### **3 Methodology**

The methodology chapter includes discussion about the research approach, research context, data collection, data analysis, verification of the results and ethical solutions. The objective of this research is to identify challenges and find solutions to the internationalization of Finnish circular economy SMEs. As mentioned before, the research questions are “What are the key challenges for Finnish circular economy SMEs in their internationalization?” and “How can they overcome these challenges?”. To find accurate answers to the two research questions, a qualitative approach is used as the methodology for this thesis.

#### **3.1 Research approach**

The terms qualitative and quantitative are widely used to differentiate the data collection techniques as well as data analysis procedures in business and management research. One way to differentiate between the two approaches is by focusing on whether the data is numerical or non-numerical. Generally speaking, quantitative methods typically refer to data collection techniques or data analysis methods that produce or utilize numerical data, such as surveys or statistical graphs. Whereas qualitative methods are commonly associated with data collection techniques or analysis procedures that generate or work with non-numerical data, such as interviews. The researcher may also opt to integrate both approaches, resulting in a mixed-methods approach. (Saunders et al., 2009)

For this research study, the qualitative approach is deemed as the most appropriate method, because the research is focusing on understanding experiences and perspectives in depth rather than measuring or quantifying them. As mentioned, with this approach, accurate answers can be found to the “what” and “how” questions of this research. The qualitative approach allows a broader exploration of the complexities of the topic more thoroughly than a quantitative approach would. For example, because this study seeks to explore how Finnish SME managers perceive and experience the process of internationalizing their circular economy businesses, by using a qualitative approach, the study can capture the subjective decision-making processes and the strategic reasoning behind these internationalization efforts.

According to Saunders et al. (2009) there are two main research approaches: deductive and inductive. In a deductive approach, a theory and hypothesis (or hypotheses) are formulated, and a research strategy is designed to test the hypothesis. On the contrary, in an inductive approach, data is collected first, and theory is developed based on the analysis of said data. These two approaches can be combined or mixed, called an abductive approach, which is often advantageous to the research as stated by Saunders et al. (2009). Although this study is guided by a theoretical framework from the literature, it follows an inductive approach in which the findings are mainly extracted from the primary data. The theoretical framework provides context and comparison points to help explain or interpret the emergent themes rather than to impose predetermined concepts. While the thesis primarily follows an inductive approach, there is also an element of abductive reasoning, as the research remains open to refining or revising this framework based on new insights that might emerge during interviews.

### **3.2 Research context**

This chapter presents the context of this research which is Finnish circular economy SMEs. As explained before in chapters 1 and 2, Finland was the first country to create a national circular economy road map compiled by Sitra (2016), and therefore is a pioneer in the field, creating an interesting research perspective for this thesis. SMEs also make up an important segment of Finland's economy and are crucial in advancing its economic growth (Kontinen & Ojala, 2010), which strengthens the importance of this research.

This research focuses specifically on the niche sector of circular economy SMEs in Finland. Finland is recognized as a global leader in sustainability, and its government has actively promoted the transition to a circular economy through national strategies and policies. SMEs in Finland play a critical role in driving innovation and implementing sustainable practices, particularly within the circular economy framework (Sitra, 2016). This shows that Finnish SMEs operate in a supportive environment with strong government backing, making it a unique context for circular economy research.

While Finland provides a favorable environment for circular economy businesses, internationalization presents both opportunities and challenges for SMEs in this sector. Navigating

foreign markets comes with significant obstacles for SMEs, and this research study is focused on specifically the challenges Finnish circular economy SMEs face and the solutions to said challenges.

The research context of this study is thus defined by the intersection of Finland's leadership in the circular economy, the innovative role of SMEs in advancing sustainability, and the unique challenges these businesses face as they internationalize. This background provides a strong setting for exploring how Finnish circular economy SMEs navigate the complexities of internationalization in a globally competitive and increasingly sustainability-focused market.

### **3.3 Data collection**

Data sources are generally divided into three categories: primary data (such as interviews or questionnaires), secondary data (such as books, journal articles or newspapers) and tertiary data (such as encyclopedias or dictionaries). Most research questions can be answered by using some combination of these three sources of data. (Saunders et al., 2009)

This qualitative research solely uses primary data to answer the research questions. The primary data for this research was collected through interviews. Interviews can be unstructured, semi-structured or structured according to Saunders et al. (2009). In a semi-structured interview there are predetermined questions prepared, however there is room for additional questions and conversations. Semi-structured interviews were used in this research to allow participants the flexibility to express their views in detail, while still providing the structure necessary to address the key research questions.

The interviews conducted for the purpose of this research were carried out via Microsoft Teams, and audio recorded as well as transcribed and proofed with the help of the Microsoft Word transcribe tool. The author gained access to the participants through the website of The Finnish Innovation Fund Sitra, and found professionals with significant experience in the field of circular economy. The participants were contacted via email and were provided with the context of the research before the interviews took place. In order to avoid the questions or data being misconstrued in the process of translating, the interviews were agreed to be held in English by all participants. Confidentiality of any sensitive data as well as anonymity of the participants was also

promised to the interviewees. The interview questions were designed based on the theoretical framework and can be found below in Appendix 1. Three interviews were held in total with three different participants, and they took place between August and October 2024. The interviews lasted approximately 20-30 minutes, varying slightly due to their semi-structured nature.

### **3.4 Data analysis**

This chapter outlines the process of analyzing the collected primary data for the research. In this qualitative content analysis, even though a theoretical framework has been developed as the base of the research, it follows an inductive approach in which the findings are derived from the data collected through interviews. According to Saunders et al. (2009) there is no standardized procedure for analyzing qualitative data, however the data can be grouped to different types of processes: summarizing, categorization and structuring. All of these procedures were used in a combination for this data analysis.

As mentioned before in the previous chapter, the raw data was collected from interviews which were transcribed into text form with the Microsoft Word Transcribe tool and later proofed by the author. This way, the qualitative data is in a form in which it can be analyzed.

Qualitative content analysis is defined as an approach of empirical analysis of content (usually text) within the context of communication, often based on interviews (Drisko & Maschi, 2016). This study employs a qualitative content analysis to systematically analyze the data collected through the semi-structured interviews with representatives and experts of Finnish circular economy SMEs. The focus is on identifying key themes, trends and patterns related to the internationalization process, rather than providing detailed case-specific analyses. This approach enables the study to provide broader insights into internationalization challenges and solutions, as it allows generalization of the findings to other Finnish (or similar countries) circular economy SMEs.

The technique used for the data analysis is called coding technique. In a content analysis, it is important to create labels (codes) that can be applied to the data in order to organize it into meaningful categories for analysis and interpretation (Blair, 2015). The codes in this analysis are

abbreviations of challenges and solutions derived from the research questions and the theoretical framework. The codes and explanations can be seen in Table 2 and 3 below. They were used to categorize both the theoretical framework and primary data, and then connected to the text from the data sheet along with analysis insights. The tools used to structure, process and analyze the data were Microsoft Word and Excel. A sample page of the analysis can be found in Appendix 2.

Table 2. Codes and explanations from the theoretical framework

<b>From the theoretical framework</b>	
<b>Code</b>	<b>Explanation</b>
<b>C1</b>	Finances
<b>C2</b>	Human resources
<b>C3</b>	Socio-economic factors
<b>C4</b>	Covid-19
<b>S1a</b>	Guarantees for loans
<b>S1b</b>	Crowdfunding
<b>S1c</b>	Growth stock markets
<b>S1d</b>	Venture capital
<b>S1e</b>	Business angels
<b>S2a</b>	Export coaching programs
<b>S3a</b>	Cross-cultural communication training
<b>S3b</b>	Thorough market research
<b>S4a</b>	COSME and other financial aid programs
<b>S4b</b>	Implementing digitalization strategies

Table 3. Codes and explanations from the primary data

<b>From the primary data</b>	
<b>Code</b>	<b>Explanation</b>
<b>C5</b>	Logistics
<b>C6</b>	Lack of market awareness
<b>C7</b>	Lack of local market knowledge
<b>C8</b>	Different/inconsistent regulatory environments
<b>C9</b>	Competition
<b>C10</b>	Cultural differences
<b>C11</b>	Positioning
<b>C12</b>	Finding trusted partners
<b>C13</b>	Consumer expectations
<b>C14</b>	Prioritization
<b>C15</b>	Visibility
<b>C16</b>	Bureaucracy
<b>S1f</b>	Government and EU programs
<b>S1g</b>	Targeted funding
<b>S1h</b>	Gradual expansion
<b>S2b</b>	Educating and advocating
<b>S5a</b>	Support for scaling supply chain networks
<b>S5b</b>	Local partnerships
<b>S6a</b>	Educating and advocating
<b>S6b</b>	Leveraging digital tools
<b>S6c</b>	Storytelling
<b>S7a</b>	Networking
<b>S7b</b>	Local partnerships
<b>S8a</b>	Adapting to the target market
<b>S8b</b>	Local partnerships
<b>S9a</b>	Building a solid value proposition
<b>S9b</b>	Storytelling
<b>S10a</b>	Local partnerships
<b>S10b</b>	Adapting to the target market
<b>S10c</b>	Educating and advocating
<b>S10d</b>	Regional clustering
<b>S11a</b>	Leveraging digital tools
<b>S11b</b>	Building a solid value proposition
<b>S12</b>	Networking
<b>S13a</b>	Adapting to the target market
<b>S13b</b>	Storytelling
<b>S14</b>	Gradual expansion
<b>S15a</b>	Leveraging digital tools
<b>S15b</b>	Storytelling
<b>S16a</b>	Regional clustering
<b>S16b</b>	Local partnerships
<b>S16c</b>	Government and EU programs

### **3.5 Verification of the results**

#### **Validity**

In qualitative research, validity refers to the accuracy and truthfulness of the findings. Validity of a research study can be divided into internal and external validity. Internal validity refers to the extent to which the findings accurately represent the participants' perspectives, and external validity refers to generalizability of the results (Saunders et al., 2009). In this case, internal validity was enhanced with triangulation by comparing responses across different interviewees to ensure the findings are consistent and reflective of varied perspectives. The findings were also interpreted and analysed in alignment with the theoretical framework, further supporting the validity of the findings.

In terms of external validity, while this qualitative study does not aim for broad generalizability, the findings can provide valuable insights that may apply to similar settings. The results can only be directly applied and generalized in the context of Finnish circular economy SMEs, but the findings may also be relevant for managers or SMEs in comparable markets, such as Scandinavian countries with similar sustainability goals.

#### **Reliability**

Reliability in qualitative research refers to the consistency and dependability of the research process and findings (Saunders et al., 2009). Reliability was addressed in this research by using a semi-structured interviews to maintain a consistent line of inquiry across participants, to ensure that all participants were asked similar questions, allowing for a consistent approach while accommodating follow-up questions based on individual responses. All interviews were audio-recorded and transcribed to ensure an accurate representation of participants' responses, and the data was organized in a systematic way to minimize errors. Additionally, consistent coding practices were followed, with key themes reviewed to ensure stability and consistency in data interpretation. The interviewees were carefully selected based on their qualifications and experience on the field, and can therefore be seen as a reliable source of information. Theoretical

framework and other external information was gathered from various sources of peer reviewed literature and government regulated websites where reliability is not in question.

### **Objectivity**

Objectivity in qualitative research is the avoidance of bias and subjectivity during the collection, analysis and reporting of research (Saunders et al., 2009). To enhance objectivity, the author actively worked to prevent any personal or confirmation biases by practicing reflexivity and setting aside preconceived notions throughout the analysis, and by making conscious efforts to stay neutral during interviews. Interview questions were carefully designed to be open-ended and neutrally phrased, this neutral questioning technique ensured that participants could freely share their views without being influenced by the researcher's expectations or the theoretical framework. Since qualitative analysis often includes the researcher's interpretative lens, these conscious efforts are necessary to enhance neutrality and objectivity of the research.

### **3.6 Ethical solutions**

This chapter details the ethical considerations taken throughout the study, including measures for treating participants' personal data with respect and creating data management plan to ensure secure handling, storage, and eventual disposal of the research data.

Interview participants were informed that their responses would be treated confidentially, and any identifying information, such as names and specific job titles, were anonymized in all documentation and reporting. In line with ethical research guidelines, the author employed a strategy of using codes when referring to the interviewees to protect promised confidentiality of the participants. Each participant gave verbal consent for audio-recording of the interview, usage of data and publication of the results. They were also informed of their right to withdraw at any time.

To safeguard participant confidentiality and manage personal data responsibly, a data management plan was implemented. All interview recordings and transcripts were treated as sensitive data and stored securely throughout the process and after. Each file was labelled with a

unique identifier code rather than participants' names or other personal identifiers. Access to these files is restricted and only managed on password-protected devices, ensuring that the data remains secure. The data will be correctly disposed of after the retention period of two years or earlier upon participant request. All of these measures have been taken into place to reinforce the ethical responsibility and transparency of this research.

## 4 Results

In the results chapter, the facts from the empirical research study are presented following the adapted theoretical framework that was created for the purpose of this research. The chapter is divided into the main themes of the theoretical framework and the two main research questions. The first part focusing on the challenges and second part on the solutions of internationalization of Finnish circular economy SMEs.

### Challenges

The first part of the results chapter will present answers to the first research question "What are the key challenges for Finnish circular economy SMEs in their internationalization?".

As discovered in the theoretical framework, there are varying financial challenges for SMEs when internationalizing. The extent of these financial challenges got expanded through the empirical research. The most common one amongst the interviews was found to be the initial investment costs, including market research, hiring new personnel, legal requirements etc. This challenge was mentioned by all 3 participants. Another related challenge that arose was the access to financing, as stated by interviewee 1:

*"SMEs often struggle to secure loans or investments for international projects, especially when their business models are innovative but not yet proven profitable in certain markets."*

In addition to limited capital, interviewee 2 brought up other financial challenges: variable revenue cycles and marketing costs. Circular solutions, like leasing or pay-per-use models, often mean income comes in slower compared to traditional sales. This can make cash flow harder to manage. Interviewee 2 stated that:

*“...international markets sometimes have higher upfront marketing costs because you’re essentially teaching a new audience about circularity.”*

The last financial challenge was discussed during interview 3 as well. Explaining the challenge of maintaining cash flow, as payment terms can sometimes be longer than those typically encountered by SMEs in Finland, it can lead to longer waiting times.

The next challenge that was also already established in the theoretical framework but further enforced by all 3 of the interviewees, was human resource related challenges, such as lack of skilled workforce, finding and hiring individuals with the mix of local knowledge and sustainability expertise as well as aligning the team around the company’s sustainability vision. Interviewee 1 also brought up the possible challenge of overworked or overburdened teams, as Finnish SMEs usually operate with smaller teams, the internationalization process may end up straining their human resources to a breaking point.

Interviewee 2 mentioned logistical challenges that can slow down international operations for Finnish circular economy SMEs, stating as following:

*“Circular business models sometimes rely on returning or repurposing materials, but in international markets, setting up those reverse logistics chains can be tricky and expensive.”*

The lack of market awareness was highlighted by all 3 interviewees as a challenge of internationalization. They all collectively stated that many international markets lack awareness of circular economy and its benefits, which can therefore hinder the process and increase the burden on SMEs to educate their stakeholders.

Another challenge that was mentioned by interviewees 1 and 2 is the lack of local market knowledge. This was stated to be a critical barrier for SMEs, as it affects their ability to adapt to the new markets cultural and regulatory differences, and consumer preferences.

A substantially common challenge that all 3 interviewees emphasized, are the differing regulatory environments of the new markets SMEs are looking to expand to. Interviewee 2 stated as following:

*“...every country seems to have its own way of defining waste, recycling, or just different environmental standards, it’s like learning a new language every time you enter a new market.”*

Competition is also a challenge that was brought up by 2 interviewees. They explained that larger competitors have advantages, and the competition might make it difficult for SMEs to position their circular economy solutions effectively.

A common sentiment across interviewees was that cultural attitudes toward sustainability vary widely, possibly making market adaptation challenging. Cultural differences can pose challenges for SMEs in various ways. In some regions, the concept of circular economy is less understood or prioritized, making market entry challenging. On the other hand, cultural differences amongst stakeholders can complicate the partnership and make collaboration challenging or lead to misunderstandings. Different cultures also mean different consumer tastes, which is another aspect of the challenge in new markets.

Positioning the product or service was also a challenge mentioned by interviewee 2. Positioning a circular economy solution within the established systems of a target market can be complex, which also ties into the aforementioned differences between Finland and the target country. SMEs need to clearly demonstrate how their solutions integrate seamlessly with existing supply chains, regulations, and consumer habits.

Finding trusted partners was also found to be a challenge by interviewee 2. This challenge highlights the importance of assessing potential partners carefully and ensuring shared values and long-term commitment to sustainability. According to interviewee 2:

*“Another challenge is finding trusted partners who share the same commitment to sustainability. Some partners might say the right things but then prioritize cutting costs over circularity in practice.”*

Another challenge brought up by interviewee 2 was different consumer expectations. He stated that:

*“In Finland, people value durability and sustainability, but in some markets, low price still tops everything else. This can call for rethinking your messaging, or even your product or service offering.”*

One major challenge according to interviewee 3 in prioritization. SMEs with limited resources cannot afford to expand to multiple markets simultaneously, therefore needing to prioritize appropriate markets first. Choosing the wrong market can lead to wasted resources, delayed growth, and missed opportunities in more promising regions.

Visibility is another challenge for Finnish circular economy SMEs to overcome when expanding to new markets. Oversaturation makes it difficult for new brands to gain visibility and traction, particularly when competing against more familiar or traditional firms. SMEs also have limited resources to compete with larger companies that invest heavily in marketing and advertising. In regard to this, interviewee 3 stated that *“Many SMEs struggle to make their brand stand out, especially in competitive or oversaturated markets.”*

Bureaucracy of the target country is also a significant barrier that requires consideration before internationalization. On that topic, interviewee 3 stated that:

*“...foreign markets often have a lot of government regulations and bureaucracy, whether it’s customs regulations, product certifications, or environmental permits etc. These can be time consuming and expensive to navigate, especially for a smaller team.”*

These processes can strain limited resources and delay market entry for SMEs. Failure to meet the regulatory standards can result in fines, product rejections, or even bans from entering the market.

Like in the theoretical framework, the challenges are categorized into internal and external challenges. They are visualized as following in Table 4.

Table 4. Challenges of internationalization for Finnish circular economy SMEs

Challenges of internationalization	
Internal challenges	External challenges
Finances	Lack of market awareness
Human resources	Different regulatory environments
Logistics	Competition
Lack of local market knowledge	Cultural differences
Positioning	Consumer expectations
Finding trusted partners	Visibility
Prioritization	Bureaucracy

## Solutions

Having outlined the key challenges Finnish circular economy SMEs face during internationalization, this second section of the results chapter presents practical solutions identified through the research. It provides the results regarding the second research question “How can they overcome these challenges?”.

In this empirical study, the author found that there are multiple possible solutions for one challenge, and vice versa, one solution can help overcome a few different challenges. The solutions are presented by connecting them to the challenges in the same order as the first part of this chapter.

For the financial challenges, there were various solutions suggested by all 3 interviewees. They all stated that there are several grant programs for SMEs to utilize provided by the government and also the EU. Interviewees 1 and 3 also mentioned that there are some targeted funding opportunities tailored for internationalization purposes, however also stated that there should be more targeted grant programs for specifically within the circular economy space. On the topic of funding solutions, interviewee 1 said:

*“There are also many government and EU programs: leveraging grants, support programs, and export promotions offered by Business Finland or EU bodies for example.”*

Interviewees 1 and 2 also suggested gradual expansion as a solution for financial barriers. By starting small and testing the business idea on a smaller-scale, nearby market at first, SMEs can possibly save their limited resources without overcommitting too prematurely.

For human resource related challenges, it was found that the most effective solutions are local partnerships and education. Hiring personnel locally who have existing knowledge of the target country’s operational aspects, while also educating and advocating the team about sustainability and the company vision is a productive combination for these challenges according to the participants.

Local partnerships were also found to be a solution for the logistical challenges SMEs might face, for example collaborating with local distributors. Interviewee 3 also mentioned that there are companies who offer support for scaling logistics solutions, however also continued that these should be more tailored as well, as some logistical solutions might be conflicting with the sustainability values of a circular economy business, and these support programs are not always designed with circularity in mind.

The lack of market awareness of the target country requires educating and advocating according to interviewee 1. She stated that:

*“...conducting workshops or campaigns to educate stakeholders in new markets about the value of circular economy solutions should help bring awareness and create market gaps.”*

Leveraging digital tools and storytelling via social media, for example, was also suggested to spread awareness about sustainability and the company mission in general.

For the challenge of local market knowledge, local partnerships was brought up again as a solution. Interviewee 1 suggested collaborating with local businesses and agencies etc. to gain some market insights as well as networking to establish credibility in the process.

Solutions for regulatory differences also include local partnerships. Partnering up with local experts like regulatory consultants or legal experts to ensure compliance will make the process of market entry smoother. Additionally, adapting to the target market and its regulatory landscape is essential sometimes to meet the local laws and standards, according to the participants.

Interviewee 2 has experienced that SMEs often underestimate the competition, and offered the following advice for this challenge: *“Build a solid value proposition that balances sustainability with practical benefits like cost savings or convenience.”* Also, sharing the company vision and mission through storytelling might resonate with consumers and help gain market share with similar competitors in the market.

For cultural differences, local partnerships like experts and mentors will help mitigate the risk of running into problems. Also educating and advocating, such as arranging cross-cultural communication training for employees and raising awareness about the circular economy's value in regions where sustainability is underprioritized were suggested as a solution by interviewee 1. With differing cultures, it is also important to adapt and tailor offerings to the specific needs and cultural contexts of the target market, according to interviewee 1. Additionally, if the SME is wishing to minimize the risk of cultural or regulatory barriers, interviewee 3 offered the following advice:

*“One effective approach is regional clustering, expanding into regions with shared regulatory frameworks or similar cultural values. For example, the Nordic or Baltic markets often make a good starting point.”*

For positioning challenges, interviewee 2 suggested utilizing digital tools and online platforms to showcase the product or service and at the same time educate international audiences about circularity. As this can be executed before actual market entry and doesn't require physical presence, it can be a really cost-efficient solution for SMEs. Building a solid value proposition will also help integrate the product or service to the new market and audience.

The challenge of finding trusted partners was tricky for participants to have solutions for, since it significantly varies from case to case. Other than active networking and conducting proper

research on possible partners, it is difficult to name a definite solution for this conceptual challenge.

Two effective solutions for consumer expectation related challenges were found to be adaptation to the new market and storytelling. Interviewee 2 stated that: *“You’ve got to adapt to the market, whether that means adjusting your product or the way you communicate about it.”* Storytelling in this instance will help the consumers connect with your messaging and product or service offerings.

For prioritization challenges, gradual expansion and regional clustering were suggested as solutions by one participant. If an SME is struggling with prioritization, they need to evaluate markets based on criteria like demand for circular solutions, regulatory compatibility, competitive landscape and ease of entry. Based on this evaluation, the SME can make an informed decision to gradually expand to those compatible areas first.

For gaining visibility in the new markets, leveraging digital tools for marketing and storytelling have been successful solutions according to interviewee 2. Gaining a larger audience through social media, for example, can mitigate the visibility barriers when internationalizing.

Bureaucracy challenges had a few solutions posed by the participants. Interviewee 3 explained that SMEs can reduce the risk of these challenges by partnering with local experts or consultants who specialize in regulatory compliance. She also stated that exploring some government support programs can help when navigating these requirements. For this challenge as well, regional clustering might help avoid these challenges altogether, by narrowing down the expansion to areas that have similar government regulations, customs rules and laws.

Some other, general advice for internationalization challenges the interviewees provided included developing a clear internationalization strategy with measurable goals and timelines, engaging with peers in the Finnish circular economy space and talk to similar firms that have already gone international. Interviewee 3 added the advice to keep the strategy flexible, as international markets are constantly changing, you might need to adapt quickly to respond to new regulations or trends.

For visualization and organization purposes the following table was conducted by the author. The results of the study are presented, and the solutions are connected to the corresponding challenges. Table 5 below was adapted from the primary data of this research.

Table 5. Solutions for challenges of internationalization for Finnish circular economy SMEs

<b>Solutions to challenges of internationalization</b>	
<b>Challenge</b>	<b>Solution(s)</b>
Finances	<ul style="list-style-type: none"> <li>• Government and EU programs</li> <li>• Targeted funding</li> <li>• Gradual expansion</li> </ul>
Human resources	<ul style="list-style-type: none"> <li>• Educating and advocating</li> <li>• Local partnerships</li> </ul>
Logistics	<ul style="list-style-type: none"> <li>• Support for scaling supply chain networks</li> <li>• Local partnerships</li> </ul>
Lack of market awareness	<ul style="list-style-type: none"> <li>• Educating and advocating</li> <li>• Leveraging digital tools</li> <li>• Storytelling</li> </ul>
Lack of local market knowledge	<ul style="list-style-type: none"> <li>• Local partnerships</li> <li>• Networking</li> </ul>
Different regulatory environments	<ul style="list-style-type: none"> <li>• Local partnerships</li> <li>• Adapting to the target market</li> <li>• Regional clustering</li> </ul>
Competition	<ul style="list-style-type: none"> <li>• Building a solid value proposition</li> <li>• Storytelling</li> </ul>
Cultural differences	<ul style="list-style-type: none"> <li>• Local partnerships</li> <li>• Adapting to the target market</li> <li>• Educating and advocating</li> <li>• Regional clustering</li> </ul>
Positioning	<ul style="list-style-type: none"> <li>• Leveraging digital tools</li> <li>• Building a solid value proposition</li> </ul>
Finding trusted partners	<ul style="list-style-type: none"> <li>• Networking</li> </ul>
Consumer expectations	<ul style="list-style-type: none"> <li>• Adapting to the target market</li> <li>• Storytelling</li> </ul>
Prioritization	<ul style="list-style-type: none"> <li>• Gradual expansion</li> <li>• Regional clustering</li> </ul>
Visibility	<ul style="list-style-type: none"> <li>• Leveraging digital tools</li> <li>• Storytelling</li> </ul>
Bureaucracy	<ul style="list-style-type: none"> <li>• Regional clustering</li> <li>• Local partnerships</li> <li>• Government and EU programs</li> </ul>

## 5 Discussion

This chapter presents the conclusions of the research, summarizes the main findings, and evaluates the results in relation to practical/managerial implications and existing literature. It provides answers to the research questions “What are the key challenges for Finnish circular economy SMEs in their internationalization?” and “How can they overcome these challenges?”. Finally, the chapter discusses the research limitations and offers recommendations for future studies.

### 5.1 Summary of the main findings

The objective of this research study was to identify the key challenges faced by Finnish circular economy SMEs during their internationalization process, along with practical solutions to address these barriers. The findings reveal that the challenges are diverse, including financial limitations, operational hurdles, cultural differences, regulatory complexities, and market-related issues.

Limited access to funding was found to be a significant barrier, making international expansion difficult. Solutions such as utilizing government and EU programs, securing targeted funding, and pursuing gradual expansion were identified as effective ways to overcome financial constraints.

SMEs often struggle with human resources, aligning teams and managing supply chain complexities. Some suggested solutions for managers are to educate their teams about international goals, build partnerships locally, and to seek support for scaling supply chain networks to solve any logistical issues.

A lack of market awareness and difficulty in positioning were also found to be common issues. Participants of the research emphasized the importance of leveraging digital tools, sharing stories with their community, and building a solid value proposition to increase visibility and explain the value of circular economy solutions to target markets.

Navigating different regulatory environments and cultural attitudes toward sustainability posed significant barriers for Finnish circular economy SMEs. Solutions such as local partnerships,

adapting to the target market, and participating in regional clustering emerged as effective strategies to tackle these issues.

SMEs often deal with preconceived expectations from consumers, and tough competition from larger companies offering cheaper, more traditional solutions. Addressing these challenges requires strong messaging through storytelling, and adaptation of the offering to meet local consumer expectations in countries/areas where price often outweighs sustainability values. For SMEs to differentiate themselves from the competitors, they should focus on their unique value propositions, such as their commitment to sustainability, innovation and creativity.

Determining which markets to prioritize and increasing brand visibility were additional concerns. Solutions like gradual expansion, networking, and leveraging digital tools were identified as crucial for overcoming these challenges.

The burden of government regulations, certifications and bureaucracy was another challenge, especially for SMEs with limited resources. Participants recommended teaming up with local partners, possibly utilizing regional clustering, and seeking support through government and EU programs.

In summary, the findings highlight that Finnish circular economy SMEs can overcome internationalization challenges through forming strategic partnerships, utilizing targeted financial and logistical support, practicing effective communication, and making localized adjustments. These solutions emphasize the importance of adaptability, collaboration, and resource optimization in navigating foreign markets successfully.

## **5.2 Practical/managerial implications**

The findings of this study provide actionable insights for managers and decision-makers of Finnish circular economy SMEs seeking to expand internationally. Addressing the identified challenges effectively requires a combination of strategic planning, resource allocation, and adaptability.

Building partnerships with local organizations, suppliers, and networks can tackle multiple challenges at once, such as logistical issues, lack of market knowledge, and regulatory barriers. Managers should prioritize finding trusted partners who share the same values and commitment to sustainability and can offer local expertise and guidance through the process of internationalization.

To improve market visibility and positioning, managers should utilize digital tools for marketing and customer engagement. Communicating the value and impact of circular economy through storytelling can differentiate SMEs from competitors and appeal to markets where sustainability awareness is still growing.

Managers should explore government and EU funding programs to overcome financial constraints. Gradual and strategic expansion, rather than rapid worldwide growth, allows SMEs to manage costs effectively while mitigating risks associated with international markets.

Adjusting business models, messaging, and offerings to suit local market preferences and regulatory requirements is also critical for SMEs to integrate seamlessly to the new market. Managers need to assess and adapt to cultural attitudes, consumer expectations, and regulatory environments early in the market entry process to avoid any costly mistakes.

Ensuring that internal teams are aligned with the company's sustainability vision is important for SMEs' international success. Managers should look into educating, training and advocating for their teams, to ensure they understand and support the company's internationalization goals.

Active participation in networking with peers and organizations like Business Finland and Sitra, as well as industry forums like attending international sustainability expos can provide valuable insights, networking opportunities, connections, and support to navigate different regulations and build credibility in front of new audiences and markets.

By implementing these practical strategies, managers of Finnish circular economy SMEs can strengthen their capacity to overcome internationalization challenges, enhance their competitiveness, and achieve sustainable growth in foreign markets.

### **5.3 Assessment of the results in the light of literature**

The findings of this study align closely with existing literature on the internationalization of SMEs on the general scale. However, the existing literature rarely highlights the specific context of circular economy businesses. Previous research highlights that SMEs in general often face financial constraints, limited resources, and market-entry challenges due to their smaller scale and capacity compared to larger firms (Sanyal et al., 2020). The results of this research reinforce the previous literature, and suggest solutions like targeted funding, local partnerships and government and EU programs to overcome these barriers.

The study reflects earlier findings on the significance of local partnerships and networking in navigating foreign markets, as previously suggested by Johanson and Vahlne (2009). Literature on international business expansion highlights the role of local collaboration in addressing regulatory, cultural, and operational barriers. Similarly to the literature, the results of this research show that partnerships are essential for tackling challenges such as logistics, regulatory differences, and the lack of knowledge on the new markets.

Overall, the findings of this study support and expand upon existing literature by providing contextual solutions specifically tailored to Finnish circular economy SMEs. The results reinforce key theoretical frameworks on general SME growth and usual internationalization strategies, while also adding the unique perspective of circular economy businesses that are looking to or already are expanding to global markets from Finland or a similar country.

### **5.4 Limitations of the research**

While this study provides valuable insights into the challenges and solutions for Finnish circular economy SMEs in their internationalization process, it is not without limitations.

Firstly, the small sample size of only three interviewees limits the generalizability of the findings. The collected data is therefore subjective, and only reflects the individual experiences, opinions and perspectives of the selected interviewees. For this reason, the results may not fully capture

the diversity of challenges faced by all Finnish SMEs in the circular economy sector, nor does it offer all possible solutions to overcome them.

Secondly, the study focuses specifically on Finnish SMEs, which means the results are somewhat context dependent. Cultural, regulatory, and policy-related factors unique to Finland are not guaranteed to apply to SMEs from other countries or regions.

Additionally, the research primarily relies on qualitative data, which, while great in detail, may lack the statistical aspect of quantitative methods. This approach also leaves room for potential biases when interpreting the interview data. By having the theoretical framework as the basis of conducting the research, it has the potential to enforce confirmation bias, where the author might subconsciously look for specific answers aligned with the preconceived ideas.

While acknowledging these limitations, this research offers meaningful insights that could serve as a great starting point for filling the gaps in a more extensive future research or other developments on the field of circular economy SMEs and internationalization.

## **5.5 Recommendations for future research**

To build on the findings of this study, future research should consider a broader sample size to increase the generalizability of the results. Since this research only explored the perspectives of three individual experts from the same company, a more diverse sample and a larger number of interviewees from various Finnish circular economy SMEs could add more viewpoints and insights on the topic. Possibly also including the perspectives of stakeholders such as policymakers, industry experts, and customers, would provide a more comprehensive understanding of internationalization challenges and solutions.

Additionally, future studies could consider adopting a mixed-methods approach, combining qualitative interviews with quantitative data. This would allow for a more comprehensive analysis. With the help of statistics and more numerical data, identifying trends, patterns, and correlations across different businesses and markets will become an easier process.

Further research could also explore the long-term impacts of internationalization strategies on SME performance, sustainability goals etc. A longitudinal study tracking SMEs over time would provide deeper insights into the effectiveness of the solutions proposed, and how businesses adapt to evolving challenges and changes in the global market.

By addressing these areas, future research could contribute to a more nuanced and applicable understanding of how Finnish circular economy SMEs can successfully expand and succeed internationally.

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## Appendices

### Appendix 1. Interview questions

1. What are the main challenges Finnish circular economy SMEs face in their internationalization process?
2. Can you describe any specific barriers or obstacles that Finnish circular economy SMEs usually face when entering foreign markets?
3. From your perspective, what are the financial challenges that Finnish circular economy SMEs encounter during the internationalization process?
4. What human resources related challenges do Finnish circular economy SMEs typically face when expanding internationally?
5. In your experience, what are the main cultural or regulatory differences that Finnish circular economy SMEs need to navigate when expanding internationally?
6. Can you provide examples of effective strategies or approaches that Finnish circular economy SMEs have used or should use to overcome these internationalization challenges?
7. In your opinion, what support mechanisms or resources are lacking for Finnish circular economy SMEs seeking to expand internationally?
8. What are the common mistakes or pitfalls that Finnish circular economy SMEs should avoid when pursuing internationalization?
9. Any other advice, connections or further reading to recommend regarding this topic?

## Appendix 2. Sample of the analysis

Code	Text from data sheet	Location of text	Analysis/comment
C1	The most common ones are probably initial investment costs.	Interview 1 page 1	Requires substantial upfront costs for market research, regulatory compliance, and establishing a presence in the new market
C1	Also the access to financing is often a struggle,	Interview 1 page 1	Struggle to secure loans or investment for international projects
C1	Expanding abroad means spending on market research, hiring locally, navigating legal stuff etc., it adds up fast.	Interview 2 page 1	Multiple different initial investment costs for limited capital
C1	SMEs often underestimate the cost of market entry.	Interview 3 page 1	Surprising additional costs for a smaller scale budget
C1	Another challenge is maintaining cash flow, when you're waiting for international clients to pay since payment terms can sometimes stretch longer than what SMEs are used to in Finland.	Interview 3 page 1	Highlights the risk SMEs face with delayed international payments.

C2	<p>Finding skilled workforce with those previously mentioned funding issues.</p> <p>...finding people with the right mix of skills...</p> <p>Recruitment is a major issue.</p>	<p>Interview 1 page 2</p> <p>Interview 2 page 2</p> <p>Interview 3 page 1</p>	<p>Recruiting individuals with the right expertise can be challenging for SMEs, especially with the limited capital. A frequently mentioned challenge, by all 3 participants.</p>
C2	<p>Another mention worthy challenge is overburdened or overworked teams.</p>	<p>Interview 1 page 2</p>	<p>Finnish SMEs typically operate with smaller teams, which means internationalization can stretch their human resources to a breaking point somewhere in the demanding process.</p>
C2	<p>there's the challenge of aligning the team around the company's sustainability vision.</p>	<p>Interview 2 page 2</p>	<p>Possible differing priorities or understanding of circular principles, especially in markets where sustainability isn't a top priority.</p>
C5	<p>Another often overlooked barrier is logistics.</p>	<p>Interview 2 page 1</p>	<p>Issues like reverse logistics, cross-border transportation, and supply chain complexity can create costs and efficiency issues.</p>