UNIVERSITY OF TURKU

ABSTRACT

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Abstract

Across the world, healthcare sector is growing due to reasons such as aging populations and growing middle class. At the same time, new technological innovations are changing healthcare, making health-tech a rapidly growing industry. Finland has a great reputation as a country for producing good quality healthcare products, and in fact, over 80% of Finnish health-tech products end up being exported. Saudi Arabia is a growing market for health-tech companies as the market is investing constantly more to healthcare because of growing population size and increasing amount of lifestyle diseases. Finland and Saudi Arabia have already begun establishing cooperation in healthcare sector. However, as Finland and Saudi Arabia are markets distant to each other, both geographically and culturally, there are some challenges the Finnish health-tech companies internationalizing to Saudi Arabia may encounter.

The objective of the study was to find out what are the main barriers Finnish health-tech companies encounter when entering the Saudi Arabian market. More closely, the study aimed to find out what are the internal barriers and external barriers the companies encounter during the internationalization process. The study was performed as a qualitative research, collecting data by interviewing managers from three Finnish health-tech SMEs, all of which have currently ongoing business operations in the Saudi Arabian market.

The results suggested that the main internal barriers are related to finding the right partner in Saudi Arabia, lack of human resources and lack of relevant knowledge of the Saudi Arabian business culture and regulations. Main external barriers were found to be related to the difficult host-country economic and sociocultural environments as well as to the complex government regulations.

Based on the findings, some recommendations were provided for managers of health-tech SMEs heading to the Saudi Arabian market. The recommendations include focusing on finding the right partner, investing time in acquiring knowledge on the Saudi Arabian culture and regulations, and focusing on applying secure payment methods. Finally, some suggestions for further research were made.

Key words	internationalization, internationalization barriers, health-tech, high-tech
Further information	

TURUN YLIOPISTO

TIIVISTELMÄ

☐	Kandidaatintutkielma
■	Pro gradu -tutkielma
☐	Lisensiaatintutkielma
☐	Väitöskirja

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Ohjaaja(t)	KTT & Ph.D. Kari Liuhto ja KTM Teemu Itälinna		

Tiivistelmä

Terveydenhuoltoala on maailmalla jatkuvassa kasvussa suurenevan keskiluokan ja vanhenevan väestön vuoksi. Samaan aikaan terveydenhuolto on muutoksessa, kun teknologiset innovaatiot valtaavat alaa terveysteknologian muodossa. Terveysteknologia on Suomessa nopeimmin kasvava korkean teknologian vientiala. Jopa yli 80% suomalaisesta terveysteknologiasta viedään ulkomaille. Saudi-Arabia on nouseva terveysteknologian markkina-alue maan nopeasti kasvavan väestöluvun ja laajalti levinneiden elintapasairauksien vuoksi. Suomi ja Saudi-Arabia tekevät jo nyt yhteistyötä terveydenhuoltoalalla, mutta kasvupotentiaalia yhteistyölle löytyy vielä paljon. Maat ovat hyvin kaukana toisistaan, niin maantieteellisesti kuin kulttuurillisestikin, minkä takia suomalaiset terveysteknologiayritykset saattavat kohdata haasteita pyrkiessään Saudi-Arabian markkinoille.

Tutkimuksen tavoitteena oli selvittää, mitkä ovat suurimmat haasteet, joita pienet ja keskisuuret suomalaiset terveysteknologiayritykset kohtaavat kansainvälistyessään Saudi-Arabian markkinoille. Tavoite jaettiin kahteen alatavoitteeseen, joista ensimmäisessä selvitettiin yrityksen sisäisistä toiminnoista kumpuavia haasteita, ja toisessa yrityksen ulkopuolisesta ympäristöstä johtuvia haasteita. Tutkimus suoritettiin laadullisena tutkimuksena kolmea suomalaista terveysteknologiayritystä haastatellen. Kaikilla haastateltavilla yrityksillä on tällä hetkellä liiketoimintaa Saudi-Arabiassa.

Tutkimuksen tuloksista selvisi, että yritykset kohtasivat Saudi-Arabian markkinoille pyrkiessään sekä sisäisiä että ulkoisia haasteita. Suurimmat sisäiset haasteet olivat tiedonpuute Saudi-Arabian toimintaympäristöstä, yrityksen henkilöstövaje sekä sopivan paikallisen kumppanin löytäminen. Suurimmat ulkoiset haasteet taas liittyivät Saudi-Arabian taloudelliseen ja sosiokulttuuriseen ympäristöön sekä maan monimutkaisiin terveysteknologiaa koskeviin regulaatioihin.

Tulosten pohjalta tehtiin käytännön suosituksia terveysteknologiayrityksille, jotka suunnittelevat Saudi-Arabian markkinoille menemistä. Suosituksia ovat esimerkiksi paikallisen kumppanin huolellinen valinta, Saudi-Arabian liiketoimintakulttuuriin ja regulaatioihin tutustumiseen panostaminen, sekä turvallisten ja luotettavien maksutapojen käyttö. Tutkimuksen pohjalta annettiin lopuksi ehdotuksia jatkotutkimukseen.

Asiasanat	kansainvälistyminen, terveysteknologia, korkeateknologia
Muita tietoja	

UNIVERSITY OF TURKU
Turku School of Economics

BARRIERS TO HIGH-TECH SME INTERNATIONALIZATION

Finnish health-tech companies entering Saudi Arabian market

Master´s Thesis
in International Business

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Turku

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1 INTRODUCTION

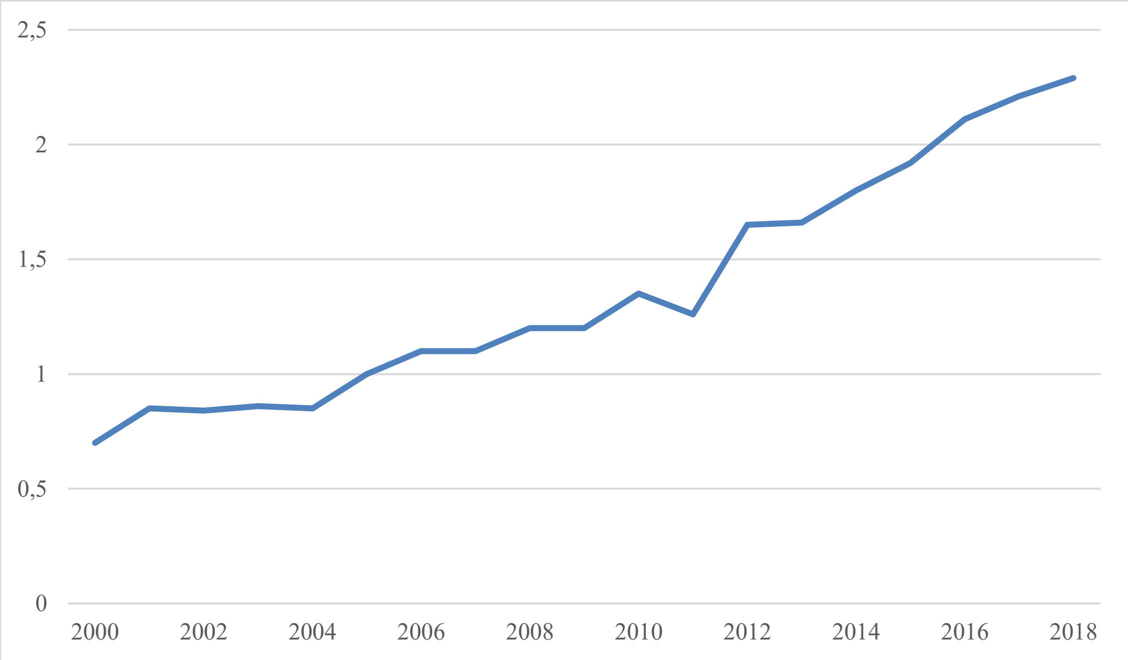
1.1 Growing need for Finnish health-tech in Saudi Arabia

Healthcare sector is going through major changes worldwide as new technologies and digitalization have surfaced and their role in healthcare has become more significant. These new technologies are one of the main reasons why global healthcare sector is growing rapidly. In 2017, global healthcare sector expenditure was nearly 7,000 billion EUR and in 2022 it is expected to exceed 9,000 billion EUR, meaning an annual growth rate of 5.4% between the years 2017 and 2022. This is almost twice the 2.9% growth rate the spending grew in 2013-2017. In addition to the new technological innovations in healthcare, the rapid growth of the sector is due to such reasons as aging populations and expansion of healthcare coverage in emerging markets, as well as the growing size of the middle class. (Deloitte 2019.) Health technology is important in tackling these issues, as it can offer patients better care, help for the healthcare professionals, and make healthcare more effective in terms of productivity and cost efficiency. In Finland, especially the aging population and the declining birth rates are making health technology more needed now and in the future. (Healthtech Finland 2019.)

Health technology industry, or health-tech, is an important part of healthcare sector next to pharmaceuticals and public and private healthcare services. Health-tech is one of Finland's fastest growing industries, with over 300 companies and over 13,000 employees. (Junko 2018; Healthtech Finland 2019.) Finland itself is a small market for health-tech – even too small. Finnish municipalities that are in charge of the healthcare-related procurements do not have enough motivation to buy new and innovative health-tech products that are usually more expensive than traditional products. Consequently, Finland as a country is highly dependent on exporting, and this can be seen in health-tech as well: over 80% of Finnish health-tech products end up being exported. (Healthtech Finland 2019.)

Health-tech makes up over half of Finland's high-tech exports. Health-tech is also one of the fastest growing high-tech export industries in Finland, and it has grown fivefold in the last two decades. In 2017, Finland's health-tech exports were worth 2.2 billion EUR, growing 5.3% from the previous year. At that year, overall high-tech exports were approximately four billion EUR. In 2018, a new record was made, with exports worth 2.3 billion EUR. Between 1996 and 2018, the average growth rate of health-tech exports has been 5.7%. The growth of Finnish health-tech exports is illustrated in Figure 1. Furthermore, during last two decades, Finland's health-tech surplus has grown tenfold, being 12 billion EUR in 2018. (Healthtech Finland 2019.)

Figure 1 Finland’s health-tech exports (billion EUR)



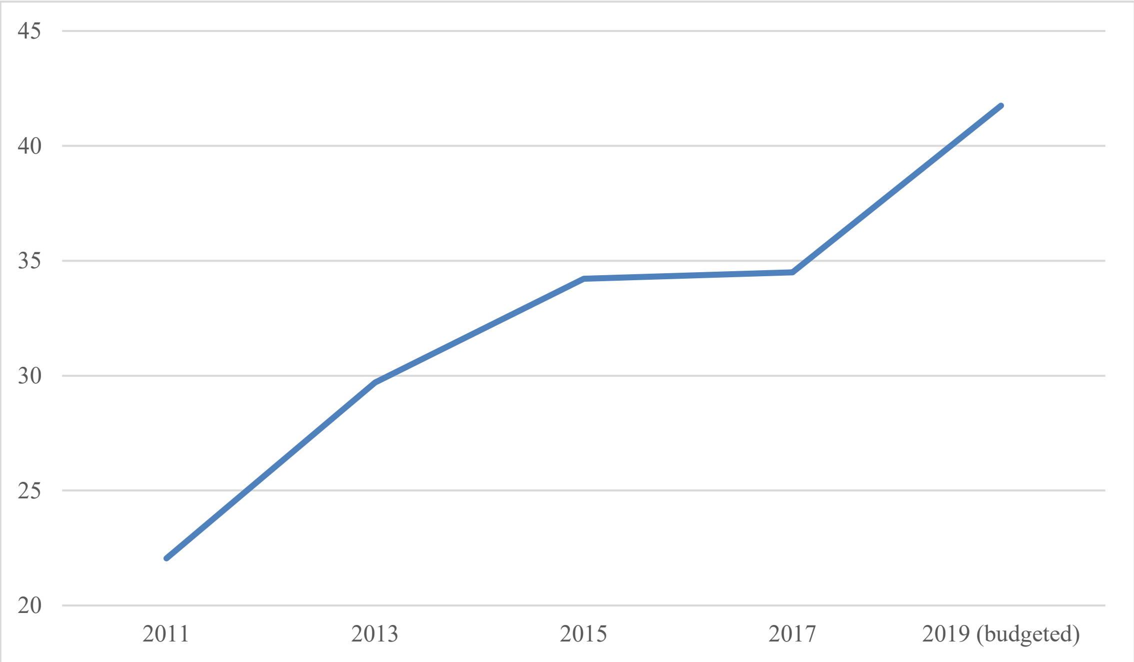
Source: Healthtech Finland (2019, 6).

According to EvaluateMedTech (2019), the global growth rate for health-tech is expected to be at 5.6% annually, meaning that Finland is keeping up well with the global growth pace. In 2024, the global health-tech market is expected to be worth nearly 600 billion EUR.

Finnish healthcare has an excellent reputation all over the world and that is one reason why Finnish healthcare companies still have an enormous amount of growth potential globally. In addition, Finnish product quality overall is known and respected internationally. It is important to note that health-tech is a sector, in which products and services must meet high standards and stiff regulations, and these regulations vary greatly between countries. Knowledge of local quality standards and official regulations is essential when entering foreign markets with health-tech products. (Healthtech Finland 2018.)

In 2018, approximately 38% of Finnish health-tech exports were directed to the United States, thus making it the largest health-tech exporting market for Finland. North America as a whole made up for about 41%, Europe being the second largest market with a little over 34% of the total exports. In 2018, only 1.6% of the exports were made to the Middle East. (Healthtech Finland 2019.) Out of the Middle East, the most exports overall were made to the United Arab Emirates, and the second most to Kingdom of Saudi Arabia (Finnish Customs 2018). However, Kingdom of Saudi Arabia (Saudi Arabia in this thesis) is by far the leading spender in the healthcare sector within the Gulf Cooperation Council countries, spending 34 billion EUR in healthcare in 2015. United Arab Emirates was the second highest in spending, with a considerably lower 11.6 billion EUR. In 2017, Saudi Arabia's healthcare expenditure was almost 60% of the total GCC healthcare spending, with United Arab Emirates second with only an approximate 21%. (Statista 2019.) In 2018, the Saudi Arabian government allocated over 35 billion EUR to the healthcare and social development sector, which is over 10% more than it did in the 2017 (U.S. Department of Commerce 2018). The growth of Saudi Arabia's healthcare spending is illustrated in Figure 2.

Figure 2 Saudi Arabia's healthcare spending (billion EUR)



Source: Statista (2019, 12), U.S. Department of Commerce (2019).

The Saudi Arabian healthcare sector will keep growing in the future as the government is heavily emphasizing the sector. In 2016, the Saudi Arabian government laid out a Vision2030 –plan to greatly improve many industries in the country, in order to diversify the economy away from oil and gas. One of the main focus sectors of Vision2030 is healthcare, in which health-tech plays a key role. For example, Saudi Arabia's Ministry of Health has established a national eHealth strategy as a part of the Vision2030. Overall, the Ministry of Health is expected to spend 64 billion EUR between years 2015 and 2020. The focus is on projects such as building new hospitals, improving preventive healthcare, decreasing smoking and obesity, and increasing the amount of digital healthcare innovations, to name a few. (Ministry of Health KSA 2019.)

The reason why Saudi Arabia is highly concentrated in the development of their healthcare sector in particular is the rising amount of lifestyle diseases, such as cardiovascular diseases and diabetes in the country. Approximately 20% of the adult population have lifestyle diseases. Furthermore, in 2016, over 35% of the Saudi Arabian adults were obese. These issues are mainly due to rising incomes of the middle class, poor dietary habits, tobacco usage and lack of exercise. Furthermore, Saudi Arabia's population is growing. In 2018, the country's population was at nearly 33 million people, but it is expected to grow fast in the next decades, even doubling by the year 2050. (Colliers 2018.) The population growth means that there will be a large need for new healthcare facilities in order to avoid overcrowding the hospitals. Saudi Arabia will need to increase the number of hospital beds by at least 5,000 by 2020, and by 20,000 beds by 2035, just to keep up with the population growth. (Global Health Exhibition 2019.) Especially population over the age of 60 will expand as the life expectancy continues to rise, which demands for new attention to geriatric care and home care services (U.S. Department of Commerce 2018). In addition, Saudi Arabia has a large amount of religious travel, expected 30 million people by 2030, which requires healthcare around the holy cities (Global Health Exhibition 2019). This vast growth, in addition to the already existing lifestyle diseases, means constantly rising demand for healthcare. In the future, Saudi Arabia will demand for more investments in all of the areas of healthcare. (Colliers 2018.) To make the Saudi Arabian market more attractive to foreign investors, the country has raised companies' foreign ownership limit from 20% to 49% in 2016 (Al-Ghalayini 2018). However, in December 2018, Saudi Arabian Council of Ministers has added an amendment, which allows foreign ownership in healthcare sector to be up to 100% (Global Health Exhibition 2019).

Overall, Middle Eastern people have become more health conscious in the recent years, simultaneously becoming more open to new technologies in healthcare. For example, a survey of 800 Middle Eastern people indicates that over one third of the population is open to the use of artificial intelligence and robots in medical treatment, which makes the country a good potential market for health-tech products and services. (Statista 2019.) However, Saudi Arabia has recently become a strictly regulated market for medical devices, meaning that all medical devices must acquire a Saudi Food and Drug Authority (SFDA) market authorization (Global Health Exhibition 2019). Regardless of the SFDA regulations, approximately 90% of the medical devices in Saudi Arabia are imported, making it a strongly import-driven industry (Invest Saudi 2019a).

Finland is already involved in helping Saudi Arabia develop its healthcare sector. In 2018, the Finnish government signed a cooperation agreement with the Saudi Arabian government regarding the healthcare sector. The plan is to work together in sharing knowledge, building capacity and introducing new health technologies and digital services. (Khan 2018.) In the recent years, the Finnish government and companies have made several healthcare-related cooperation and export promotion trips to Saudi Arabia, and vice versa. The Ministries of Health of the two countries have signed a comprehensive

Memorandum of Understanding (MoU) to drive the collaboration in the healthcare sector, especially between private sector companies. (STM 2018.) Furthermore, in 2018 some Finnish health-tech companies have already signed MoU's with the Saudi Arabian government, which emphasizes the demand of Finnish health-tech in the Saudi Arabian market (Metropolia 2018; VideoVisit 2018). The Finnish – Saudi Arabian cooperation is especially focused on preventive healthcare, an area in which digitalization and new technologies are crucial (Team Finland 2019).

Even though there has been some success in Finnish companies establishing business in Saudi Arabia, the two countries remain enormously different, causing potential challenges in cooperation. The countries are distant to each other both geographically and culturally, and the political, economic and social environments of the two countries are very different. Thus, for a Finnish company to conduct business successfully in Saudi Arabia, it is important to understand the business environment in Saudi Arabia.

Saudi Arabia is the largest economy in the Arab world with a GDP of over 700 billion EUR (Invest Saudi 2019b). Due to its enormous oil resources, the country has risen from being a poor desert country to considerably greater wealth. Over 17% of the world's oil reserves are under the Saudi Arabian soil and this brings along significant political power. Only Venezuela has larger oil reserves in the world. (BP 2019.) Saudi Arabia is also the world's largest crude oil exporter. Oil and gas, or hydrocarbon economy, make up approximately 43% of the country's GDP, making oil and gas significant influencers in the Saudi Arabian economy. However, the turbulence of the oil market is slowing down Saudi Arabia's economic growth, thus making it important for Saudi Arabia to try to reform its economy and diversify away from the hydrocarbon economy. (Azhar and Rashad 2019.)

It is difficult to forecast Saudi Arabia's economic growth, as the oil prices fluctuate continuously. As of September 2019, economists have forecasted only slight growth or even shrinkage of economy for the year. According to Jones and Hodari (2019), a research has found the median growth forecast of ten economists to be 1.4% for the year 2019, clearly lower than 2.2% estimation made a year ago. However, it is forecasted that the non-hydrocarbon economy will grow at 2.0% rate this year because of government spending, which includes for instance spending in healthcare. As the government is investing heavily in non-hydrocarbon economy, the country offers many possibilities to other sectors. (Azhar and Rashad 2019.) It needs to be noted that the information on the Saudi Arabian economy varies vastly between different sources and everything needs to be read critically. Lack of reliable information is due to the Saudi Arabian government widely filtering the content they publish for the public (BBC News 2019).

The oil politics also cause instabilities in the area. For example, recently in September 2019, there was a drone strike targeted to one of Saudi Arabia's largest oil production facilities. The Saudi Arabian government blamed Iran, its traditional rival in economy, as well as religion and culture, for the assault, causing tensions and political instability between the countries. (Westall et al. 2019.)

Above all, Saudi Arabia is an absolute monarchy, meaning that the political power is held by the Al Saud family dynasty (BBC News 2019). According to the Economist Intelligence Unit's Democracy Index (2018), Saudi Arabia is the 8th most authoritarian country out of the 167 countries in the index. Currently, the king of Saudi Arabia is Salman bin Abdulaziz Al Saud. However, crown prince Mohammad bin Salman is considered to be the de facto ruler of the country, stepping into power in 2017. The crown prince Mohammad bin Salman also laid out the Vision2030 –plan. The crown prince has been praised for wanting to open the economy and for loosening the social restrictions in Saudi Arabia; there have been anti-corruption campaigns as well as reforms concerning foreign business ownership in the country, to name a few. (BBC News 2019.) Socially, Saudi Arabia is trying to undergo changes. For instance, in the past decades, women's rights have been extremely poor in Saudi Arabia. Women have not been allowed to take part in politics – or even drive. Recently, women's rights activists have provided the pressure to force reform in some of these issues. Nowadays, women have a right to drive cars and there have been two women acting as deputy ministers. As of August 2019, women do not need to have a male guardian with them at all times – earlier they needed a permission from the guardian just to leave the house. However, it takes time before the views of social norms and gender roles change in the country. Recently some of the women's rights activists have been arrested and undergone trial due to their actions, which indicates that freedom of speech is not highly enforced in the country. (Rashad and Kalin 2019.) In addition, first time in the Saudi Arabian history, the ban on movie theatres has been removed and cinemas can now operate in the country (CIA 2019).

Moreover, religion is a major part of the Saudi Arabian society and identity, and it affects the everyday life in the country. Saudi Arabia is an Islamic state, which practices Wahhabism, a strict and conservative interpretation of Sunni Islam. The punishments for crime in Wahhabism are extremely harsh and they include for example public beheadings. Religion affects the law of the country, as the legal system used in Saudi Arabia is Sharia law (Islamic law). Furthermore, the de facto constitution of the country is Quran, the central religious text of Islam. (BBC News 2019.)

Even though Mohammed bin Salman has tried to accomplish a reputation of being a reformist leader, he has recently faced also controversies. One of the largest of the kind was the assassination of the Saudi journalist Jamal Khashoggi in October 2018 inside the Saudi embassy in Turkey. Khashoggi fell out of the crown prince's favor after criticizing his reform program. Consequently, Saudi Arabia's human rights have been under scrutiny, including issues such as imprisonment of human rights activists and critics, a rise in executions since the crown prince came to power, and a large number of civilian deaths in Yemen, where Saudi Arabia has taken the government's side in the ongoing civil war. (Al-Jazeera 2018.)

1.2 Earlier empirical research on barriers to high-tech SME internationalization

This section will go through existing research, and the methodology and key findings of the research, on barriers to high-tech SME internationalization, in order to get a better understanding of what is already known about the topic. The earlier empirical studies have been listed in Table 1.

There has been an extensive amount of research on the barriers to SME internationalization, but there has been notably less research on the barriers to high-tech SME internationalization. As there are special qualities that differentiate high-tech SMEs from traditional SMEs, it is important to further fill this gap and research barriers in high-tech SME internationalization as well.

Most of the empirical research done on the topic of high-tech SME internationalization barriers rely on the theoretical framework suggested by Leonidou (1995; 2004), who put together the framework by reviewing studies on SME exporting and assessed the reported challenges. Leonidou (2004) divides barriers into two categories, internal and external, which is the commonly used framework. Karakaya (1993) has formed another commonly used division on internationalization barriers, and it divides the barriers into internal, operational and external barriers.

There has been some earlier research on the barriers that healthcare companies encounter during internationalization. Barnes et al. (2006) researched the export marketing activity of healthcare SMEs, by doing a survey of over 100 healthcare SMEs. In their research, it was concluded that finding a key partner was the main barrier in healthcare SME exporting activity. Later, Hed and Malmström (2010) researched the internationalization of medical technology SMEs by doing a multiple case study of three Swedish companies exporting to Norway. The findings indicated that the laws, regulations and certifications of the host market, as well as the cultural differences between home market and host market were the main obstacles for the medical technology company's internationalization.

Furthermore, there has been research on the barriers other high-tech companies experience, outside of healthcare sector. Financial barriers have been found to be significant barriers for high-tech companies. Bell (1997) researched Finnish, Irish and Norwegian small computer software companies' export problems by doing a survey of nearly 100 companies. The research concluded that financial barriers are major challenges for these small software companies. Similar results were found later, when Richardson

(2011) conducted a survey of approximately 40 Malaysian SMEs to find out the export barriers in high-tech sector in a less developed country. The study concluded that financial barriers are the most important for high-tech companies.

In addition, Ojala and Tyrväinen (2007) conducted a multiple case study on the entry barriers software SMEs face in the Japanese market. The study concluded that most of the barriers are company-specific, and are related to the company's resources and capabilities to operate in the host market. More recently, Cahen et al. (2016) studied the managerial perceptions of barriers in internationalization within Brazilian new technology-based companies. The study was conducted as a research on prior qualitative research data, as well as a quantitative survey. The study suggests that most important barriers for technology-based companies are related to the institutional and organizational capabilities. The researchers did not find any studies on the internationalization barriers of health-tech or other high-tech SMEs entering the Saudi Arabian market, thus there is a clear research gap, which this research tries to address.

In conclusion, the earlier research has found that there are various barriers during the internationalization process of high-tech SMEs. The findings in earlier research have indicated that there are barriers in both a companies' internal capabilities as well as in the companies' external environment. However, the findings in the earlier research have not been quite consistent and there needs to be more studies done to address this issue.

Table 1 Earlier empirical research on barriers to high-tech SME internationalization

Author(s) (year)	**Objective**	**Method**	**Findings**
Bell (1997)	To study the export problems of small-sized computer software exporters in Finland, Ireland and Norway	A survey of 98 SMEs	Finance-related problems present exporters with the greatest difficulties
Barnes, Chakrabarti and Oalihawadana (2006)	To investigate the export marketing activities of SMEs operating in international healthcare markets	Mail survey, 112 SMEs	Finding an appropriate partner was a key barrier for healthcare SMEs

Ojala and Tyrväinen (2007)	To study entry barriers of small and medium-sized software companies in the Japanese market	Multiple case study	Most of the barriers are company-specific and mainly related to companies' resources and capabilities to operate in the host market
Hed and Malmström (2010)	To study the internationalization of SMEs within the medical technology industry	Multiple case study	Laws, regulations, certifications, as well as cultural differences were the greatest obstacles for the medical technology company's internationalization
Richardson (2011)	To study perceptions of export barriers in a high-tech sector in a less developed country: A case of ICT SMEs in Malaysia	A survey of 36 SMEs	Financial barriers are a problem for companies in high-tech industries
Cahen, Lahiri and Borini (2016)	To study managerial perceptions of barriers to internationalization: An examination of Brazil's new technology-based companies	Research of qualitative research data, and quantitative survey of 92 companies	The most important barriers in new technology-based companies were institutional and organizational capabilities barriers

1.3 Objective and structure of the study

The aim of the study is to find out what are the barriers high-tech SMEs face during their international market entry process. The study will specifically focus on Finnish health-tech SMEs that are entering into the Saudi Arabian market. The main research question is as follows:

What are the barriers Finnish health-tech companies encounter when entering the Saudi Arabian market?

In order to answer the main research question, the thesis will answer the following sub-questions:

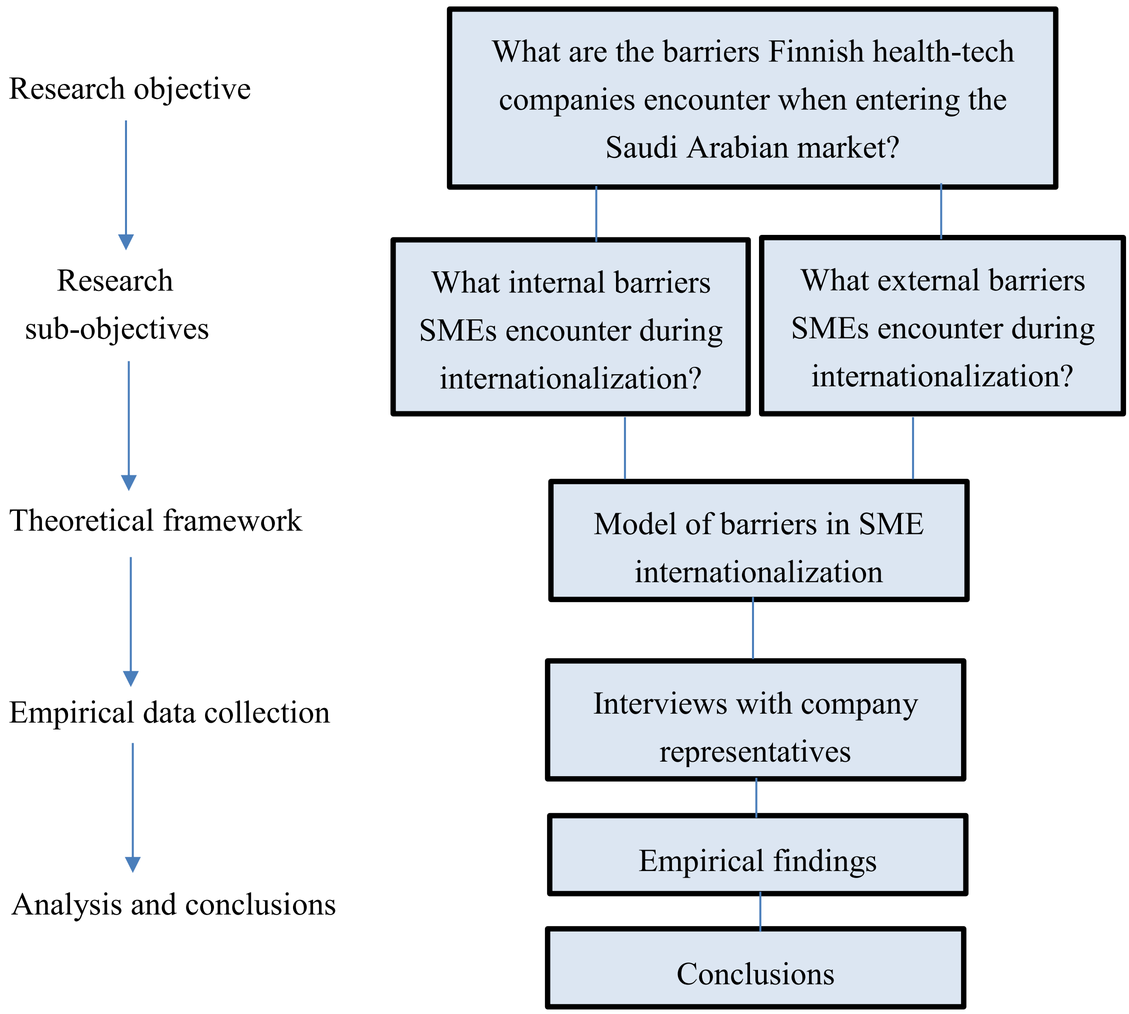
- What internal barriers health-tech SMEs encounter during internationalization?
- What external barriers health-tech SMEs encounter during internationalization?

The study will focus on market entry process of companies, from the planning stage all the way to having established business in the host market, and the barriers the companies face during the entire process of health-tech SME internationalization to the Saudi Arabian market. The internationalization barriers will be divided into two categories: internal and external barriers.

Figure 3 shows the structure of the study. Chapter 2 will be introducing the theoretical framework of the study. Chapter 2.1 will first introduce high-tech SME internationalization and the most common theories behind the phenomenon. The Chapter 2.1 will also explain how traditional SME internationalization and high-tech SME internationalization differ from one another. This will be followed by Chapter 2.2, which will give a thorough introduction of barriers to SME internationalization. In Chapter 2.2, the thesis will also introduce the theoretical model for the study and answer the sub-questions 'What internal barriers SMEs encounter during internationalization?' and 'What external barriers SMEs encounter during internationalization?'

The empirical evidence will be gathered through semi-structured interviews, interviewing Finnish health-tech companies that have established business in Saudi Arabia. The methodology will be further explained in Chapter 3, after which Chapter 4 will display the empirical findings of the research. Finally, Chapter 5 will present the conclusions of the thesis, as well as give managerial recommendations and suggestions for further research.

Figure 3 Structure of the study



1.4 Key definitions

This thesis will focus on small and medium-sized enterprises, also known as SMEs. OECD's (2005) definition of SME in the European Union can be seen in Table 2. OECD (2005) defines SMEs as companies that employ less than 250 people. Small companies should have less than 50 employees and micro companies less than 10. There are also financial measurements to define a SME: the turnover of an SME should be under 50 million EUR and the balance sheet should be under 43 million EUR. In the case of small and micro companies, turnover and balance sheet should be less than 10 million (small) and 2 million (micro) EUR. Most of the Finnish health-tech exporting companies are SMEs (Healthtech Finland 2018).

Table 2 SME definition in the European Union

	Micro	Small	Medium
Employees	less than 10	10 – 50	50 – 250
Turnover (million EUR)	less than 2	less than 10	less than 50
Balance sheet (million EUR)	less than 2	less than 10	less than 43

Source: OECD (2005, 17).

High-technology SMEs, or HTSMEs, are defined as small and medium-sized companies with advanced knowledge and capabilities in technology, an educated and technologically oriented workforce, and the ability to adapt quickly to fast changing environments (Crick and Spence 2005). These companies have a relatively large amount of innovation activity and they invest highly in research and development (R&D). Sectors with over 7.0% R&D intensity can often be categorized as high-tech sectors. Various different industry sectors can be identified as high-tech sectors and currently, these include for example aerospace, computers, medical devices and pharmaceuticals. (OECD 1997; 2005.)

Health-tech is a healthcare-related sub-category of high-tech. Health-tech is a very wide concept, with many segments. These include traditional segments such as diagnostics, imaging, laboratory solutions and monitoring, as well as more modern segments, such as artificial intelligence, eHealth, genomics, robotics and telemedicine. Health-tech also includes segments that one might not think as health-tech: hygiene, logistics, rehabilitation and services. (Healthtech Finland 2018.) Health-tech is developed to improve quality of lives by solving health-related problems (WHO 2019).

Internationalization is the activity of companies expanding their business internationally, to other markets than their home market. Barriers to internationalization refer to the constraints that affect a company's ability to initiate, develop, or sustain business operations in foreign markets. (Leonidou 2004.)

2 BARRIERS TO HIGH-TECH SME INTERNATIONALIZATION

2.1 High-tech SME internationalization

To get a better understanding of the context in which the internationalization barriers appear in this study, the thesis will now introduce the common theories behind high-tech SME internationalization. High-tech SME internationalization process is often different from the process of a more traditional SME, and thus many of the traditional internationalization theories are not applicable to high-tech SME internationalization. Many of the traditional theories, such as the Uppsala internationalization model (Johanson and Vahlne 1977), are stage theories, suggesting that internationalization of a company is a result of incremental learning, meaning that the international involvement of a company increases in stages over time as a company keeps learning. This may be due to reasons such as initial lack of knowledge on foreign markets or risk aversion. The assumption in the stage theories is that all companies have succeeded in the domestic market first, and only then they start committing to international markets. Internationalization is progressed stage by stage, first starting from markets similar to the home market and gradually expanding to more geographically and culturally distant markets. (Bell et al. 2001.) By internationalizing in stages, a company can gradually gain knowledge that over time makes the risks and uncertainties of entering foreign markets less significant (Madsen and Servais 1997).

The traditional theories have been criticized for not taking into account the full complexity of internationalizing SMEs, for instance not considering the constantly changing environmental factors, nor people or company contexts. In addition, the traditional theories mainly address the internationalization of larger manufacturing companies. Furthermore, as the traditional internationalization theories were already shaped decades ago, they represent different times with more significant internationalization barriers affecting most companies. In the more recent years, market conditions have changed dramatically, and consequently some of the barriers to internationalization have vanished or become less significant for reasons such as globalization, technological advances and better infrastructure, to name a few. (Crick and Spence 2005.)

There are some characteristics that separate high-tech SMEs from SMEs of lower technological intensity, and those features drive the fast internationalization of the HTSMEs. High-tech SMEs often operate in a specifically defined market niche and produce a narrow scope of products, which means that the companies cannot afford to operate only in their home market, especially if the country is a small market, as the companies cannot reach their critical mass of customers at home. Thus, the narrow market niches drive the fast internationalization of HTSMEs. In addition, the research and development expenses in the pre-sales stage are usually significant given the nature of high-tech products. This means that the companies must grow quickly to reach profitability, and consequently international expansion is essential. As technology is advancing fast, new innovations are constantly emerging and competition is tightening, it also shortens the high-tech product life cycle in comparison with products of more mature industries. Thus, to make the most of a high-tech product in a relatively short window of opportunity, the international markets are extremely important for the economic success of HTSMEs. In addition, patents play a very central role within high-tech industries due to the intellectual property they protect. The difficulty in obtaining patents, combined with the short life cycles of products, make the commercial window for high-tech products short. Furthermore, HTSMEs must often act fast after detecting an opportunity to fight competition by imitation. (Saarenketo et al. 2004.)

Karagozoglu and Lindell (1998) argue that the two main reasons for HTSME internationalization are strategic opportunities in foreign markets and inquiries from foreign markets. HTSMEs are known to act quickly when an international opportunity arises and usually there is no time to form actual strategies. This is also referred as having a reactive strategy, which is affected by many internal and external factors. Consequently, HTSMEs do not always internationalize to the most obvious foreign markets, but may internationalize to markets that seem random. (Crick and Spence 2005.) It has been established that companies with an entrepreneurial spirit use these windows of opportunity more effectively (Karagozoglu and Lindell 1998).

Due to the different characteristics of SMEs of more traditional industries and HTSMEs, there has been growing amount of evidence suggesting that HTSMEs often do not follow the incremental stage by stage learning path of traditional internationalization theories, but target the international markets already from the birth of the company (Saarenketo et al. 2004). However, in their study, Crick and Jones (2000) found that even though generally HTSMEs internationalize rapidly, the internationalization paths of the companies differ with each other, and there is yet no universally accepted theory behind HTSME internationalization. Next, the section will discuss some of the theories suggested to explain HTSME internationalization and the special characters of HTSMEs that may lead to the unsuitability of traditional theories.

Saarenketo et al. (2004) argue that HTSME internationalization can be explained with born global theory. Bell et al. (2001) have made similar findings, suggesting that born global theory is often used to explain the rapid internationalization of small and medium-sized and technology-intensive companies. Born global companies, also known as international new ventures, are companies that strive to international markets from their birth, sometimes even skipping domestic sales and starting international operations straightaway. This can be due to past international experience or education of the company's managerial team pushing the internationalization, or demand from foreign buyers pulling to international markets. (Bell 1997.) The born global companies may raise capital, manufacture, market, and sell their products in multiple countries. Born globals are highly represented in high-tech industries, as they are characterized by quality-orientation and value-creation for competitive strategy in their technology and design. (Oviatt and McDougal 1994; Madsen and Servais 1997.) HTSMEs are also faster in their international expansion, as well as more involved in international networking and collaborating compared to non-high-tech companies, likewise characteristics of the born globals. (Saarenketo et al. 2004.)

Boter and Holmquist (1996) argued that innovative company's international expansion is the result of entrepreneurial culture, short-term goal setting and opportunistic strategies, features almost opposite to traditional theories of internationalization. In born global internationalization, entrepreneurial characteristics play an important role. For example, the prior personal experiences and knowledge base of the entrepreneur have significant effect in the internationalization decisions of a company. Vast amount of earlier international experience can shrink the psychological distance to target markets and thus make internationalization faster. Furthermore, high-technology entrepreneurs often have higher level of education, which can also promote earlier internationalization. (Crick and Spence 2005.) In addition, international networks of the entrepreneur can promote the internationalization. Born globals often have limited resources due to their small size and young age. Thus, networks are essential for building and directing the international sales and marketing activities. (Madsen and Servais 1997.)

There has been growing amount of evidence suggesting that in addition to born global and traditional internationalization theories, there is also a phenomenon called born-again global, which can be used to explain the internationalization of entrepreneurial and knowledge-intensive companies (Bell et al. 2001). However, there is no universal definition for born-again global company. For instance, Schueffel et al. (2014) define born-again globals as companies that initially only operate in their home market. After they begin internationalizing, which can be due to multiple reasons such as changes in the management team or strategic changes, the internationalization is fast and after few years a notable percentage of the sales are from exporting activities. Schueffel et al. (2014) found that there are two main reasons why domestically focused companies can suddenly shift to being a born-again global: a small home market, which pushes a company to start doing business globally, and a motivated and committed manager, who actively searches for international opportunities.

In addition to the more recently formed theories explaining HTSME internationalization, the internationalization has been explained with some more traditional theories, such as the resource-based view. The theory suggests that a company has some rare, valuable and inimitable resources that drive the internationalization. In case of high-technology companies, these resources can be for instance managerial qualities, patents or R&D driving the internationalization of the company. (Crick and Spence 2005.)

While stages theories suggest that internationalization is a gradual process catalyzed by organizational learning, HTSMEs often internationalize in reaction to detection of an international opportunity. Whereas traditional internationalization models suggest the importance of learning by doing, high-tech SMEs often move to international markets quickly to be there before the competitors, and thus there is no time for slow incremental process of learning by doing. In addition, market knowledge can quickly become irrelevant, which means that continuous and adaptable learning is more important for HTSMEs. HTSMEs can surpass the learning by doing by several ways. One approach is learning through networking, meaning that a company acquires partnerships or networks that possess the necessary knowledge that the company itself does not have. Another way is learning by imitating, meaning that a company replicates the actions of another company in a similar situation. Furthermore, learning by searching means actively probing information from for instance the Internet, to get a better understanding of the customer habits, cultural characteristics, and other significant features of the targeted market. (Saarenketo et al. 2004.)

There are also significant challenges in the internationalization of high-tech companies. These may include, for example, the limited resources in management or finances, as well as strict regulations for products. (Laurell et al. 2010.) Furthermore, some of the international opportunities for HTSMEs lie in underdeveloped markets, causing challenges in exploiting high-technology products (Crick and Spence 2005). SMEs often experience more challenges during internationalization than larger companies, which is why it is important to study the barriers they encounter (Katsikeas and Morgan 1994). Next, Chapter 2.2 will further introduce the barriers SMEs come across while internationalizing.

2.2 Barriers to SME internationalization

Leonidou (2004) has defined barriers to internationalization as the constraints that hold back a company’s ability to initiate, develop and sustain business in a foreign market. Barriers can be attitudinal, structural or operational in their nature. Barriers can shape a company’s internationalization process and determine its internationalization strategy. However, barriers alone will not prohibit or inhibit a company’s internationalization progress, and other factors are needed for the barriers to become operational. The perception of barriers is very situation-specific and varies between companies depending on the managerial and organizational characteristics, as well as operating environment. Thus, different companies experience and react to barriers differently. Whereas one company's perception of barriers can result in withdrawal from the international operations, another company's perception does not. Furthermore, the same company can experience and react to barriers differently during different times and in different host markets. Moreover, barriers are market-specific which means that a company exporting to several markets may experience different sets of market-specific barriers. (Leonidou 2004.)

The managerial characteristics affecting a company's perception of barriers are related to the managerial attitudes, competency and experience. In case a company's manager is incompetent or has no prior international experience, the company is more likely to perceive the barriers more intensely and as more severe obstacles to internationalization. On the other hand, if the manager of the company has vast international experience or even experience in the target market, it is more likely the barriers are considered lower when entering the market. In addition to competency and past experience, managerial attitudes towards internationalization, as well as managerial networks can affect how the barriers are experienced. (Leonidou 2004.)

Organizational characteristics influencing how barriers are experienced include company's size and international experience. There has been evidence showing that small-sized and young companies perceive barriers as more considerable challenges than companies that have more experience or more resources. (Leonidou 2004.) It has been studied that small-sized companies often perceive barriers related to limited resources, operating difficulties and trade restrictions (Katsikeas and Morgan 1994). However, if a small company has previous international experience, it most likely perceives less barriers than a company without any international experience (Leonidou 1995). There have been multiple ways of measuring a company's international experience: stage of internationalization, stage of exporting, number of years in the international markets, and percentage of exports from sales (da Silva and da Rocha 2001). Moreover, Bilkey and Tesar (1977) found in their study that companies actively exporting and with international experience perceive less barriers than companies that are not actively involved in exporting.

Environment affects the barriers in two ways: the home-market environment can be the source for the barriers, or the host-market environment can create barriers. Furthermore, one host market can introduce very different challenges than another, for instance depending on the regulations and bureaucracy. In addition, resource-related challenges may be higher when the home country is a developing market. (Leonidou 2004.) The differences between the host- and home-market environments influence how the barriers are perceived. For instance, if the institutional environments are very different, the barriers most likely are experienced to be higher. (Kahiya 2018.)

Export barriers can affect internationalizing companies in four ways (Kahiya 2018):

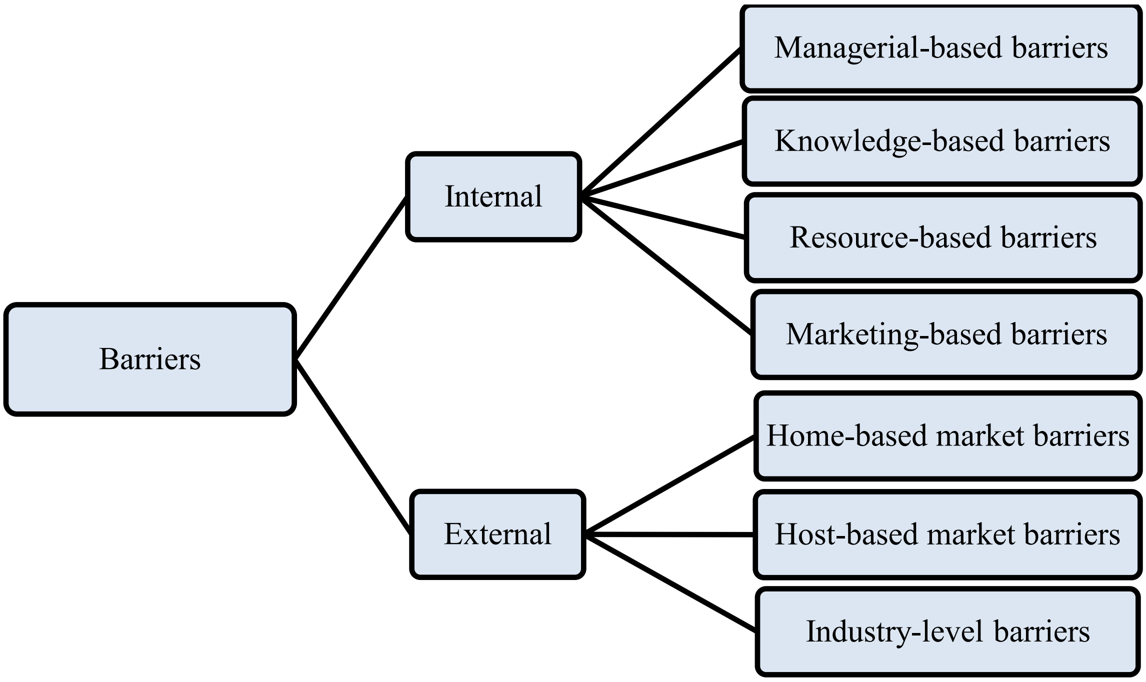
1. They discourage non-exporters from internationalizing, even to the extent of withdrawal from exporting. A comprehensive planning in the pre-exporting stage can help overcome the barriers.
2. They hinder the ongoing international expansion of current exporters, as the barriers limit the strategic options available.
3. They encourage de-internationalization.
4. They discourage ex-exporters from re-engaging international markets.

Barriers exist and can be experienced at all stages of internationalization but the nature and relevance of the barriers can vary depending on the stage (Bilkey and Tesar 1977). Bell (1997) finds in his study that the barriers companies encounter during pre-exporting stages are related to the attitudes within the company, motivation, and the exporting knowhow. Bilkey and Tesar (1977) report identification of foreign market opportunities as a pre-export stage challenge. On the next stage, the most significant challenges are caused by the lack of information on a specific target market, or lack of exporting resources. If a decision to enter a specific market is made, the experienced barriers are related to the market entry, for example finding suitable representation. (Bell 1997.) Bilkey and Tesar (1977) recognize finding an adequate representation also as a challenge in the initial export stage. Finally, on the last stage the barriers are mostly related to the international operations, marketing and financing, to name a few (Bell 1997).

Non-exporters, current exporters and ex-exporters all perceive barriers differently. Non-exporters do not have real experiences of exporting, so their experiences of barriers are just subjective perceptions of possible problems, whereas active exporters have actual experiences of the barriers. Ex-exporters have both, real experiences and perceptions. In addition, between these three types of exporters, the type and severity of barriers are different. (Leonidou 1995.) It has been widely studied that non-exporters perceive more barriers than active exporters (Kahiya 2018). As the barriers and their nature as well as perceptions differ among these three groups, the researcher decided to focus on the barriers current exporters perceive.

As there is no universally accepted division for internationalization barriers, a division into internal and external barriers is chosen (see Figure 4), as it has been widely used in studies related to HTSME internationalization barriers (Tesfom and Lutz 2006). These two categories will be further explained next in Chapter 2.2.1 and Chapter 2.2.2.

Figure 4 Classification of barriers



Source: Modified from Kahiya (2013, 6).

2.2.1 Internal barriers

Internal barriers are constraints that originate from the internal operations of a company. Internal barriers are often associated with insufficient organizational resources or capabilities for internationalization. (Leonidou 1995.) These barriers rise from matters that are controllable from within the company (Barnes et al. 2006). In the internationalization barrier literature, there has been a number of ways to break down internal barriers into more specific categories. However, even though the categorization of barriers varies between studies, typically the same barriers are included within the category of internal barriers when studying SME internationalization, albeit labeled differently (Arteaga-Ortiz and Fernandez-Ortiz 2002). For instance, Tesfom and Lutz (2006) have divided internal barriers into two categories, company barriers and product barriers. Leonidou (2004) has used division into functional, informational and marketing barriers. Kahiya (2013) has further divided internal barriers to managerial-related barriers, knowledge-related barriers, resource-related barriers, and marketing-related barriers. The researcher decided to use Kahiya's (2013) proposed four categories in this study, as it is a clear division into four types of barriers, all relevant to HTSME internationalization. For instance, managerial-related characteristics are important in HTSME internationalization and resources can be scarce with SMEs, both being categories that have not been specified in the other two mentioned divisions. Table 3 shows the categories of internal barriers used in the thesis, as well as presents the more specific barriers related to each category.

Table 3 Internal barriers

Category	Barriers related to
Managerial-related barriers	• Managerial experience • Managerial characteristics • Managerial time
Knowledge-related barriers	• Unfamiliarity with export practices • Unfamiliarity with host-market environment • Unfamiliarity with external financing • Unfamiliarity with export assistance
Resource-related barriers	• Financial resources • Human resources • Production resources
Marketing-related barriers	• Market entry • Marketing mix

Source: Leonidou (2004), Kahiya (2013).

First, **the managerial-related barriers** arise from managerial capabilities and experiences that affect the company's internationalization decisions. Management may simply lack adequate prior experience, knowledge, and skills needed for international business success. Relevant skills can include cultural understanding, language competence, and suitable education. In addition, manager's attitude towards internationalization in general or specifically towards the market in question can act as either a barrier or a positive influence. Other factors that possibly influence internationalization are manager's risk taking tendencies or risk aversion due to unrealistic fears about the business risks or host-market environment. In addition, lack of managerial time can act as a barrier, especially in small companies where the decision-making might rest on a single manager's shoulders, as the manager might not have the time to deal with international activities. (Leonidou 2004.) According to Korth (1991), the managerial-related barriers fall into five categories:

1. Lack of ambition. Managers might think there are sufficient opportunities in the home market.
2. Abundance of problems in the home market – managerial time and energy is spent in tackling problems at home.
3. Lack of opportunity or effort to gather information about new markets and opportunities.
4. Manager's prejudices or misperceptions about a certain market, leading to skewed analysis of the export potential into the market.
5. Lack of proper effort and enthusiasm – giving excuses not to internationalize, blaming insufficient resources for instance financial, human or technical.

Second, **knowledge-based barriers** are related to the lack of relevant knowledge within a company. To succeed in internationalization, a company must have knowledge of export planning and processes, as well as understanding of different strategies and stages of internationalization. The lack of relevant knowledge can act as a barrier especially in early stages of internationalization. (Leonidou 2004.) Furthermore, Barnes et al. (2006) discovered that problems with lack of knowledge are more frequent with companies possessing limited experience in exporting. Insufficient knowledge on customs procedures, documentations, and logistics, to name a few, are frequently encountered. The knowledge-based barriers can be overcome gradually as the company learns, or they can even be non-existent due to managerial experience (Kahiya 2013). Moreover, without adequate knowledge on customs and documentations, the paperwork related to internationalization can be rather time consuming (Tesfom and Lutz 2006). In an earlier study, export knowledge has been positively linked to resource commitment to exporting (Bilkey and Tesar 1977). In addition, perceived high barriers may include lack of knowledge on foreign business practices, difficulties in identification of foreign business opportunities, and lack of information on the opportunities suiting the product portfolio of the company (Leonidou 2004). Bilkey and Tesar (1977) found in their study that one of the greatest challenges internationalizing companies face is the identification of foreign business opportunities. The general lack of knowledge on the target-market environment can turn out to be a considerable barrier, as acquiring the necessary information can be time consuming and costly, burdening the limited resources (Arteaga-Ortiz and Fernandez-Ortiz 2010).

Lack of knowledge on export assistance and external financing has been found to act as barrier to internationalization (Kahiya 2013). Poor awareness of export assistance programs or export financing may hinder international expansion of the small and young companies, in particular. Furthermore, lack of knowledge on the financial benefits international operations can generate may act as a barrier to internationalization. Managerial perceptions on the benefits versus hardships of export amplify the significance of these barriers. However, nowadays, it is easier to overcome knowledge-related barriers due to the availability of information on the Internet. (Saarenketo et al. 2004; Arteaga-Ortiz and Fernandez-Ortiz 2010.)

Third**, the resource-related barriers** are connected to company's internal resources, and more specifically, to the limitations in the resources (Kahiya 2013). In their study, Ojala and Tyrväinen (2007) found that the most challenging barriers small and medium-sized companies face are often related to company's internal resources. In the case of SMEs, internal resource limitations frequently are due to the small size of the company, also referred as the liability of smallness (Hannan and Freeman 1984). Limited resources originate from the lack of financial resources, lack of human resources, and limited production capabilities to meet the internationalization demands (Kahiya 2013).

Internationalization of an SME requires sufficient financial resources for multiple tasks. When financing international operations, it is usually important to acquire enough short-term funding. First, financial resources are needed to cover the cost of research on the target market, as well as the exporting processes. Second, the company manager and export personnel are very often required to travel and spend time in the target market to visit potential customers or form relationships with middlemen. It might even be that the company needs to hire additional personnel or acquire more production capacity to be able to enter a foreign market. In addition, there are various other exporting expenses related to acquiring permits, setting up logistics, and initiating business in a foreign country. (Leonidou 2004; Barnes et al. 2006.) SMEs often perceive financial barriers as major challenges in exporting (Bell 1997; Richardson 2011). Luckily, in addition to regular sources of financing, there are export specific sources for funding international operations, such as government export subsidies and letters of credit (Leonidou 2004).

Human resources-related barriers include shortage and inadequate competence of personnel, both able to limit the internationalization capability of a company. Lack of personnel may result in time limitations to conduct research of target markets, as well as to plan and operate the internationalization activities. Especially small companies have had challenges with the lack of human resources to plan and manage the internationalization activities. (Leonidou 2004.)

Similarly to managers, export personnel may lack adequate prior experience, knowledge, and skills for internationalization. Personnel inadequacy can be the result from the lack of knowledge on internationalization procedures, such as documentations and logistics, or lack of language skills to cope with foreign country procedures. Personnel inadequacy can cause delays in the internationalization as the company lacks the general knowledge to go forward with the processes. (Leonidou 2004.) In addition, there might be difficulties in finding, hiring and retaining competent personnel with adequate experience and expertise in exporting activities and internationalization (Leonidou 1995).

The most researched barrier related to production resources is the lack of production capability, which can limit the company's ability to expand its production to satisfy international markets (Arteaga-Ortiz and Fernandez-Ortiz 2010). Instead, a company might decide to focus its production resources to domestic markets. In addition, many small companies only start internationalizing if they have excess production capacity. In a situation where there is no excess capacity, exporting may not even be considered. Thus, lack of excess production capacity can also be a barrier to internationalization. (Leonidou 2004.)

Last, **marketing-related barriers** are associated with company's challenges regarding their product, pricing, logistics, distribution and promotional activities abroad. Marketing barriers can be further divided into two categories: market entry barriers and marketing mix-related barriers. (Kahiya 2013.)

The market entry barriers include problems in identifying foreign business opportunities, finding foreign partners, generating new sales leads, gaining access to distribution channels, maintaining control over middlemen, and generating repeat business (Kahiya 2013). Multiple studies argue that especially finding a trustworthy foreign partner is a major barrier to SME internationalization (Leonidou 2004; Barnes et al. 2006). The foreign partner or representative must meet certain structural, operational and behavioral requirements important for the company. Structural requirements include having sufficient territorial coverage, enough financial strength and physical facilities in the host country. Operational requirements contain suitable product mixture, logistical arrangements and warehousing. Last, behavioral requirements are the possible partner's good reputation, satisfactory relationship with the government and a cooperative attitude. (Leonidou 2004.)

The marketing mix-related barriers have been researched in more detail. These barriers include differentiating products to the host-market environment, pricing the product and choosing a correct promotional approach. Especially market-specific differentiation of products can turn out to be a challenge for SMEs, simply due to limited resources. For a product to enter a market, it must meet the local quality standards and regulations, as well as the special packaging requirements of the host market. However, some of the barriers related to product differentiation are due to language gap or unfamiliarity of the official market requirements. (Tesfom and Lutz 2006.) In addition, the right promotional approach depends greatly on the host-market culture. A company might have to differentiate for instance the promotional materials or advertisements, as those directed to the home market may be deemed inappropriate according to the host-market standards. (Leonidou 2004.)

Exporting companies might also experience difficulties in offering the host-market customers a satisfactory price. There may be significant additional costs involved when differentiating a product and packaging to the host-market standards, as well as other additional costs related to exporting such as administrative costs, cost of logistics or extra taxes. In addition, companies might experience difficulties in matching the competitor pricing. This can be due to for instance higher costs of raw material and labor in the company's home market compared with competitor's home market, or differences in product quality, or even the fluctuation of exchange rates of currencies. (Leonidou 2004.) Furthermore, a long geographical distance between the company's home market and the host market may cause difficulties in setting up aftersales services for the products. This is especially true within SMEs, as proper aftersales service usually requires significant investment in human and financial resources. (Crick 2002; Leonidou 2004.)

2.2.2 External barriers

External barriers are constraints that originate from the outside environment of a company. External barriers can be experienced in both the home-market and the host-market environments. (Leonidou 2004; Tesfom and Lutz 2006; Kahiya 2018.) The nature of the external barriers can differ depending on the home- and host-market characteristics, as well as on the industry characteristics (Tesfom and Lutz 2006). According to Kahiya (2013), external barriers cause some of the most challenging obstacles experienced by companies undergoing internationalizing. Kahiya (2013) has further divided external barriers to home-based market barriers, host-based market barriers and industry-level barriers. Further descriptions of the three categories are listed in this section. Table 4 shows the used categories of external barriers, as well as the more specific sub-categories.

Table 4 External barriers

Category	Barriers related to
Home-based market barriers	• Government export assistance • Government export incentives • Restrictive regulatory framework
Host-based market barriers	• Economic environment • Political environment • Sociocultural environment • Legal and regulatory framework
Industry-level barriers	• Industry structure • Industry competition

Source: Leonidou (2004), Kahiya (2013).

Home-based market barriers are the obstacles experienced by companies in their own home market. Typically, the barriers are related to the institutional environment and more specifically to the home government's inaction to provide assistance with companies' internationalization activities. Home market-related barriers may be further subdivided into two main areas: lack of government export promotion, or the export promotion being insufficient or not correctly serving companies' needs, and restrictive regulatory framework of the home government. (Leonidou 2004.)

Government export promotion refers to the government policy and actions designed to enhance exporting activity from a company, industry or national perspective. Government export promotion can be further divided into export marketing assistance and export incentives. Export marketing assistance can have an important role in assisting small and medium-sized companies in their internationalization activities, as they in most cases do not have the same resources as large companies. The export assistance agencies can help internationalizing companies in various ways such as informing companies about international opportunities, providing loans for internationalization-related operations, or publishing basic market data regarding potential markets. Government export assistance can also include organizing export promotion trips to target markets in order to meet possible partners, or organizing visits and exhibitions at trade fairs around the world. In addition, the export assistance can include helping in their initial entry into a new host market. (Seringhaus 1986.)

Government export incentives, on the other hand, can mean structural measures by the government, such as tax incentives for exporters or support in technological innovation to help in international expansion. Government may also provide financial help in the form of offering insurance-like export guarantees for export sales, in promotion of international activities of the companies. Government export incentives and assistance can reduce the risks connected to the international operations. Moreover, home government can provide a company with important and difficult to acquire knowledge and resources needed in entering a new market. This is especially significant for SMEs struggling with shortage of internal resources. (Seringhaus 1986.)

Rigid regulatory framework of the home market can act as a barrier to internationalization by creating restrictions for companies to export. These restrictions may include prohibiting foreign sales to certain countries that the home government classifies as hostile. Government might also restrict sales of products or components that are significant from the viewpoint of the government foreign policy or national security. (Leonidou 2004.)

Other home-based market barriers include isolated geographical location, which might cause difficulties when transporting products to the host market (Kahiya 2013). Furthermore, lack of properly functioning home-market logistics infrastructure can be experienced as a challenge, as products need to be transported to the host country in a timely manner, which is difficult without a functioning infrastructure. In addition, strong currency fluctuations of the home market have been considered to be a barrier in some cases. (Tesfom and Lutz 2006.)

Host-based market barriers are the obstacles that arise from the host-market environment. Host-based market barriers can be further subdivided into the operating conditions of the host market, and the laws and regulations of the host market. (Kahiya 2013.) Leonidou (2004) has found that most host-market barriers derive from the economic conditions and market regulations.

Operating conditions of the host market can be further categorized into barriers related to the economic, political and sociocultural environments of the host market, and furthermore in the instabilities and differences of these environments. Barriers related to the economic environment of the host country include obstacles such as low income level or unfavorable inflationary trends. Low income rates can affect a company, as the people of the host country might not have enough purchasing power to acquire or use the company’s products. Moreover, when doing business in a country with different currency from the home market, there are always foreign currency exchange rate-related risks, which most commonly include unstable exchange rates and devaluation of the host-market currency. There might also be a lack of local banks with international expertise in the host market, which means that the local banks cannot sufficiently offer services to support international business affairs. (Leonidou 2004.)

In addition, slow collection of payments in a foreign country and difficult payment methods can be considered as economic barriers. Slow collection of payments implies practice of customers paying with significant delay due to different reasons, which can be related to the host-market business culture, or difficult payment methods. It has been researched that customers with which a company has no prior experience with and which are located in a geographically distant market, present substantial credit risks. Using more reliable payment methods or getting government export assistance can help with reducing the risks related to payment collection. (Korth 1991.)

According to Karakaya (1993), political instabilities are likely to cause significant host-market barriers when entering a foreign market. Political instabilities are the result of economic, societal and political dynamics in the country. These factors include all the economical and sociocultural barriers mentioned, as well political factors such as a presence of an authoritarian regime, including military control, and an ongoing conflict with a neighboring country. Unstable political environment can lead to problems related to closing or suspending of activities, repatriation of earnings or even seizure of property. The more a company has operations in a politically unstable country, the more the possible instabilities affect the company’s success. (Leonidou 2004.) For instance, companies entering a market with unstable political environment often prefer exporting as a way of market entry, as they may not want to keep a large inventory inside a turbulent country (Karakaya 1991).

Sociocultural environment as a barrier to internationalization has been researched extensively and it has been found to affect various aspects in the new market entry. Sociocultural features may include such seemingly less significant aspects as preferences in product design or the habit of including family members in the sales process. Moreover, barriers related to the sociocultural environment are important, as they may create other types of barriers. For instance, if the sociocultural environment of a host country demands for different product design, the differentiation requires resources and thus it may result in the formation of resource barriers. (Karakaya 1993.) Sociocultural barriers stem from differences in attitudes, cultural values, customs, education, manners, religion, and social organization. Furthermore, sociocultural barriers can be caused by societal instabilities, such as religious fundamentalism, ethnic tensions, and high level of corruption. (Leonidou 2004.)

Differences in business cultures between the home and host market, and furthermore, the unfamiliarity with the host-market business culture, can cause problems when conducting business in a foreign market. Different business cultures can affect communications, importance of networks, and power distance, to name a few. For instance, in some countries the role of informal networks and personal relationships are essential when doing business, whereas in other countries more formal structures are present and more rigid practices need to be followed. Furthermore, negotiation tactics differ vastly between different cultures. For instance, in Western cultures, inaction during negotiations is seen as a negative sign, whereas in Oriental cultures it can be seen as the opposite. (Leonidou 2004.)

Insufficient or infrequent communications with the host-market partners or customers are usually due to the geographical and psychological distance between the home market and host market. Communication may also be affected by lack of adequate communications channels and infrastructure in the host market, especially within developing markets. Challenges with communications may lead to delays in decision-making, misunderstandings, or poor control over foreign activities. (Leonidou 2004.)

Sociocultural challenges in the host market can also be caused by verbal and nonverbal language differences. The most obvious barrier is the one caused by different host-country language. The skillful use of the host-market language can have significant positive effects in building and upholding business contacts. Minimal language-based misinterpretations in verbal and even nonverbal communication, for example due to substandard language skills or ignorance of cultural peculiarities, may lead to permanent damages in business relations. (Leonidou 2004.) Language affects exporting process in many of its stages from product branding, packaging and promotion, to the communication with the distribution channel. (Karakaya 1993.) In addition, nonverbal communication, including features such as body language and time perception, is important to understand and synchronize with the host-market culture (Leonidou 2004).

Sociocultural traits of a foreign country can also result in the company having to differentiate its product and promotional material to match the host-country environment. Every country has its specific set of customer habits and attitudes due to reasons such as education level, income level, manners and customs, and technical skills, to name some. Consequently, the promotional material as well as product packaging and labeling must only include pictures, symbols and colors that meet the host-country customer habits and expectations. (Leonidou 2004.)

Host-market laws and restrictions, caused by the host-country government policies and legal framework, can create a significant barrier category. Government policies include all of the rules and restrictions that government has set for businesses, in particular for foreign businesses. Government rules and restrictions can result in high costs of initial setting up of business, additional tariffs, unfamiliar licensing requirements, complexity of documentation, and rigid cross-border transaction bureaucracy. (Leonidou 2004.) Licensing requirements for products may act as a barrier as they may force a costly adaptation of a product to meet a set of specific requirements (Arteaga-Ortiz and Fernandez-Ortiz 2010). According to Leonidou (2004), small companies often find host-market customs documentations and other export bureaucracy difficult and time consuming to manage. Paperwork related to the import procedures can be very complex and thus they can be experienced as barriers when entering the market. Strict foreign country rules and regulations can, in addition, include entry restriction for foreign products, price controls, special tax rates or exchange controls, as well as high tariff and nontariff monetary barriers. Furthermore, in some countries, the government requires a foreign company to establish a joint venture, with the majority of the venture owned by a local partner (Karakaya 1993).

The nature and strategies of internationalization activities vary between industries (Tesfom and Lutz 2006). **The industry-level barriers** are related either to the structure of the industry or the competition within the industry. Structure of the industry can mean for example the industry-wide regulations and restrictions, the prices within the industry or industry trends. Industry-wide regulations may cause challenges in the form of difficulties in obtaining necessary licensing or meeting product requirements. However, industry-wide regulations tend to vary between political areas. For instance, the EU and the USA might have different industry regulations. In addition, the falling market prices industry-wide may cause challenges in selling the products profitably. (Kahiya 2013.)

Even if a company enjoys market power in its domestic market, it might encounter noticeable competition when entering foreign markets (Leonidou 2004). Industry competition can rise from several sources, as competition can be encountered with companies from other foreign countries, domestic companies in the host market, or multinational enterprises. (Kahiya 2013.) Competitors in the host country can also enjoy preferable standing in the market, as their products may be more favorable, the cost-structures of competitors may be different, and their country of origin may have a preferred relationship with the host country. Especially small companies in an industry with many larger players might experience notable competition barriers. Research has shown that competition-related barriers are nowadays considered to be ever more significant due to globalization and the reduction in trade restrictions globally. (Leonidou 2004.) In addition to the competition itself causing possible challenges when conducting business in a foreign market, the competition can act as a source for other barriers. For instance, a barrier that rises from the foreign competition can be the inability to match the pricing of the competitors (Tesfom and Lutz 2006).

Chapter 2 introduced the theoretical framework of the study. The previous sections explained the phenomenon of HTSME internationalization as well as the internal and external barriers SMEs are subject to encounter when entering foreign markets. Next, Chapter 3 will clarify the methodology by which the research is conducted.

3 METHODOLOGY

3.1 Research approach

A majority of the research on internationalization barriers has been quantitative in nature, aiming at identifying the most common barriers from a large set of companies. In the case of this thesis, qualitative approach was found more suitable, as the research problem is very specific, and the population is very limited. As the managerial perceptions of barriers are based on subjective experiences, which differ between managers with diverse experiences and backgrounds, it seemed suitable to have a flexible approach to the research. In addition, qualitative method is suitable for this thesis because in the case of health-tech companies entering Saudi Arabia, there might be barriers that are not mentioned in the earlier research, especially barriers that are unique to the healthcare sector or the host-market environment. Furthermore, Leonidou (2004) pointed out in his study that one of the major problems in the barrier research is not having enough understanding of the nature of the barriers, to which more qualitative study would be helpful.

Qualitative and quantitative methods are both used in scientific data collection. The difference between the two is the data collection technique; how to collect the data and what are the objectives of the study. (Ghauri and Groenhaug 2002.) Qualitative methods are less structured and therefore more flexible than quantitative methods, and they use a more limited number of observations compared to quantitative methods. Where qualitative methods take into account the social and cultural construction of variables, quantitative methods do not. Qualitative methods are focused on interpretation and understanding of a phenomenon, whereas quantitative methods focus on explaining and testing a hypothesis and on statistical analysis, in particular. (Eriksson and Kovalainen 2008.) There is no single best way of data collection, only correct and appropriate methods for a certain research situation (Eskola and Suoranta 1998). As both of the methods have an abundance of internal variety, it makes comparing the two methods impractical (Eriksson and Kovalainen 2008).

Qualitative research aims to thoroughly analyze a small set of observations, thus the key is the quality of the research, not the quantity of data. Where quantitative research has hypothesis, qualitative research does not. This means that qualitative research does not have presumptions about the empirical results. Furthermore, qualitative research does not aim to form statistical generalizations, but to deepen the understanding of a specific phenomenon. (Eskola and Suoranta 1998.)

3.2 Methods used

The most common way of collecting qualitative data is through interviews. As the aim of the thesis is to acquire deep knowledge on the topic, interviews are suitable. Interviews are designed for finding out how the respondents experience a given issue, and what are their motivations toward it. Interviews are performed as a type of conversation led by the researcher, either in a face-to-face meeting, or through phone or a telecommunication tool. (Eskola and Suoranta 1998.)

Qualitative research in the business studies is most commonly carried out as a case study (Ghauri and Groenhaug 2002). Case studies do not aim to establish empirically universal conclusions similarly that methods in quantitative research do. Thus, it is important that the interviewees form a unified case. (Eskola and Suoranta 1998.) In a multiple case study, every case should serve a purpose and thus every selected case needs to be justified. Therefore, the cases are selected by a non-probability sample, or furthermore as a judgment sample, in which judgment is used to draw the sample, rather than picking a random sample. The purpose of using judgment sample is to have the selected cases illustrate the population to the best possible degree. (Ghauri and Groenhaug 2002.)

According to Ghauri and Groenhaug (2002), there are two ways of conducting interviews: structured and unstructured method. In addition to these two, there is a semi-structured approach of conducting interviews, which differs from both structured and unstructured techniques. Different interview types serve different goals and thus it is important to choose a type that fits the research objective. (Eskola and Suoranta 1998.) In a structured interview, the question set for the interviewees is always the same and unchangeable. Furthermore, the researcher provides the respondent with a predetermined selection of answers. In an unstructured interview, the respondent can freely discuss opinions on a given subject; the researcher does not decide either the questions or the answers before the interview. The distinction between a semi-structured interview model and a structured model is that while in a semi-structured method the questions stay the same for all of the respondents, a selection of answers to choose from is not provided by the researcher. Consequently, the respondents can answer the questions more freely and thus bring out their own observations and opinions more specifically. (Ghauri and Groenhaug 2002.) In this thesis, the semi-structured interview method is used, as the researcher decided that while it is important to have a clear structure in the interview, it is also valuable for the respondents to be able to answer the questions in their own words, thus providing more insightful information.

The formulation of the interview questions was designed by deriving the interview themes straight from the theoretical framework of the thesis. As the interviews were conducted in a semi-structured manner and respondents were able to answer questions freely, the interviews did not necessarily follow the predetermined interview structure. However, the researcher ensured the coverage of all of the themes during the interviews. Table 5 presents the operationalization chart of the study, which also presents the interview themes. The interview themes and structure are described in more detail in the Appendix.

Table 5 Operationalization chart

Research question	Sub-questions	Theoretical framework	Interview themes
What are the barriers Finnish health-tech companies encounter when entering the Saudi Arabian market?	What internal barriers health-tech SMEs encounter during internationalization?	Internal barriers to SME internationalization	• Managerial characteristics • Knowledge of host market • Knowledge of internationalization practices • Knowledge of external assistance and financing • Human resources • Financial resources • Production resources • Market entry • Marketing mix
	What external barriers health-tech SMEs encounter during internationalization?	External barriers to SME internationalization	• Home-market environment • Host-market environment • Industry structure • Competition

First, the interviewees were asked questions regarding the company background and the current international business operations, both generally and in Saudi Arabia. Next, the main interview questions were divided to internal barriers and external barriers. The internal and external barriers were further divided to more specific themes.

As the focus of the study is on health-tech SMEs, the interviewees must be small and medium-sized companies in the field of health-tech. The researcher contacted a relevant specialist at a government export agency to find out which are the Finnish health-tech companies with a connection to the Saudi Arabian market. At this time, the researcher was an employee of the agency in question. The researcher then received lists that included altogether 21 Finnish healthcare companies that have established business or are in the process of establishing business in Saudi Arabia. This list may not include all of the Finnish healthcare companies with ongoing business in Saudi Arabia, but only the companies that work or have worked together with the agency in question.

From the list, the researcher excluded large companies as well as companies that were not in the field of health-tech, the list finally consisting of 18 companies. The researcher performed the initial reduction by acquiring preliminary information on the companies via an Internet search, mainly from the companies' websites and Finnish free databases. In selecting the case companies, the researcher considered the following criteria:

1. Is the company an SME?
2. Does the company work within the health-tech industry?
3. Is the company conducting business in Saudi Arabia at the present time?

After reviewing all the 18 companies, the researcher contacted all of them via email to question the companies about how well they would fit in the study, as well as their willingness to participate in the interviews. The researcher contacted the employees appearing most relevant to the company's international operations. Of the 18 companies, 10 replied to the researcher's email. Six out of the 10 companies informed that they were not suitable candidates for the research, due to not filling one or more of the three criteria. The most common reason was that the company does not have current operations in Saudi Arabia; they had either previously conducted business in the market, or they were still in the process of establishing business in the market. For the purposes of this study, the researcher only chose companies that are currently active in the Saudi Arabian market, as the barriers can be very different for companies in different stages of market entry. The four companies that replied to the researcher and fulfilled all of the aforementioned criteria were all willing to participate in the interviews. After reviewing all of the four selected companies willing to take part in the study, the researcher decided to set up interviews with all of them. In the end, three interviews could be arranged, with one company excluded for reasons of time management. The researcher did not select a suitable company employee to be interviewed in a particular company, but left this decision to the companies. This decision was based on the assumption that the companies themselves have deeper knowledge on their personnel regarding understanding of their international operations and especially activity in the Saudi Arabian market. In the end, two of the interviewees were the employees the researcher first contacted, and one was an employee, which the contacted person thought would have the most knowledge on the Saudi Arabian activities.

The names of the interviewees or the companies they represent will not be mentioned in this thesis for privacy reasons. The companies will be presented as Companies A, B and C, and only general background information on the companies will be provided.

3.3 Conducting the research

The interviews for the study were conducted during September of 2019. One of the interviews was conducted in a face-to-face manner, while the remaining two were carried out remotely using the telecommunication tool Skype or over the phone. The researcher found it difficult to arrange face-to-face interviews as most of the companies interviewed have headquarters far away from the researches location and interviewees were busy and possibly traveling. Thus, in two of the cases it was easier to use telecommunication tools. The interview sessions took approximately one hour, and there was only one interview conducted with each company. All of the interviews were conducted in Finnish. The interviews were recorded with the interviewee's permission and in good quality. The dates and lengths on the interviews, as well as the titles of the interviewees are laid out in Table 6. Soon after the interviews, the researcher made transcripts of the recordings, in order to have a clearer picture of the issues discussed in interviews, and to help with the analysis of the content. Moreover, the transcripts assisted in choosing expressive quotes for the analysis.

Table 6 The interviews

	Date of interview	Length of interview	Interviewee title
Company A	17.9.2019	58:22	Export manager
Company B	20.9.2019	1.06:18	CEO
Company C	23.9.2019	1.21:00	Vice president

The purpose of the detailed analysis of the interview material is to clarify the collected data and consequently create new information on the research topic. The goal of analyzing the gathered data is to increase the informational value of it by making it clearer and more sensible. Data analysis in qualitative study can be done in multiple ways, and there is no single best practice in conducting the analysis. (Eskola and Suoranta 1998.)

A thematic analysis was conducted when analyzing the collected data. According to Eskola and Suoranta (1998), a thematic analysis is a suitable solution when research problem is a practical issue. To make a thematic analysis work properly, it is important that the theory and empirical findings are closely linked together. Thematic analysis functioned well for this study, as the theoretical background is thoroughly tied to the empirical findings. In this study, the themes for the thematic analysis were directly derived from the theoretical framework.

The thematic analysis begins with data reduction. Data reduction is the process of re-organizing the collected data by going through the interview transcripts and organizing the information into categories. The interview themes work as suitable categories for organizing the information. The goal of this practice is to allow the researcher to uncover patterns in the data. (Ghauri and Gronhaug 2002.) In this study, the categories were derived straight from the interview themes. As the interview themes were drawn from the theory of the thesis, also the categorized data is clearly brought together with the theory. After categorizing the data of each transcript separately, a cross-case analysis was performed, comparing data from different interviews, and attempting to detect similarities across the interviews. Furthermore, descriptive quotes were derived from different categories as a way of exemplifying the data. A challenge in the categorization of data was that some of the barriers discussed in the interviews could be interpreted as both internal and external.

3.4 Evaluation of the study

The evaluation of a study is necessary to address the trustworthiness of the research process. The most traditional way of evaluating a research is by assessing the reliability and validity of the study. However, the traditional criteria are made to evaluate an objective study and thus they are mostly suitable for assessing the trustworthiness of a quantitative study. (Eskola and Suoranta 1998.) Most common criteria for qualitative research evaluation are the following (Lincoln and Guba 1985):

1. Credibility
2. Transferability
3. Dependability
4. Confirmability

First, credibility of a study means that the study has truth-value and the empirical findings of the study reflect the real world. Credibility of a study can be amplified for instance by getting familiar with the theoretical background and consequently choosing a suitable theoretical framework, as that is the only truly comparable feature of a qualitative study. Other common methods for enhancing credibility are triangulation and using well-known research methods. (Lincoln and Guba 1985.) The credibility of this research was increased by thorough analysis of the theoretical framework of the study and earlier research on the topic, to make well-informed decisions concerning research methods and the theoretical framework. Furthermore, the researcher used triangulation to establish credibility. Triangulation was performed by using multiple sources of information, in this case meaning that there were more than one interview respondent, making evidence supporting the findings more credible.

Second, transferability refers to the extent in which the findings can be applied in other settings and studies. A qualitative study has transferability if others not involved in the study can take meaning from the research and associate the results with their own experiences. This requires similarity between the researched context and the reader's context. A researcher should provide enough information of the research participants as well as the research context, to give the readers a chance to evaluate whether the study is transferable to their own environments and settings. Yet, as some qualitative studies do not aim to make generalizations or transferable findings, transferability as a criterion only applies to some qualitative studies. (Lincoln and Guba 1985.)

In this study, transferability is a relevant criterion, as the goal is to provide information that could help other Finnish health-tech companies in their internationalization to Saudi Arabia. The researcher has increased the transferability of the study by providing sufficient information on the interviewed companies and their backgrounds to provide context, as the context affects the way readers can transfer the findings to their own situations. Furthermore, the methods used and the details of the conduction of the research are thoroughly described to enclose information on the research processes, in order to make the processes more transferable.

Third, dependability indicates the ability of other researchers in similar conditions and with similar subjects to end up with similar findings. Dependability in qualitative studies has been proven to be difficult to demonstrate, as there is always the human aspect involved, and human experiences are subjective and humans do not necessarily act in a consistent manner. In qualitative studies, it is more important for the researcher to enclose in detail how the study was performed and how the findings were derived from the data. By such means, other researchers are offered an opportunity to replicate similar conditions and find the research process either dependable or not dependable. It has been argued, that demonstrating the credibility of a qualitative study would be enough to also establish the dependability of the study. (Lincoln and Guba 1985.)

In this study, the dependability was improved by thoroughly explaining the methods used in the research, in order to give readers as detailed knowledge of the research situation as possible. Challenging in terms of dependability is that the interviewees might not be completely outspoken about their experiences, either because some interviewees tend to be more open than others are, or because of reasons such as not wanting to share most critical thoughts about the study topic in a public study. Furthermore, the collected data is the result of the interviewees' subjective perceptions of the issue. The interviews also demanded some self-reflection from the interviewees. Means and extent of self-reflecting ones behavior and perceptions may differ greatly between individuals. For instance, in case of managerial characteristics related interview questions it may be that some interviewees are more critical towards their own actions than the others are. Furthermore, as the interviews were done in Finnish, and the thesis is written in English, the researcher needed to translate the data. This might have resulted in some vagueness in transferring nuance, especially in the quotes, even though the researcher is skilled in English.

Last, confirmability signifies that the findings and interpretations made in the study are not merely drawn from the researcher's imagination or biases, but are clearly and objectively linked to the data in a way that is also understandable for other readers. A researcher can demonstrate confirmability by showing that findings are derived straight from the gathered data, and by describing how conclusions and interpretations were made. (Lincoln and Guba 1985.) In this study, the researcher has strengthened the confirmability by providing straight quotes from the interviews to the study, to establish the direct link between findings and the collected data. Furthermore, thorough descriptions of the research processes and findings were used to enhance the objectivity.

4 EMPIRICAL FINDINGS

4.1 Background of case companies

To understand the context in which the interviewed companies experience barriers in this study, it is important to comprehend what the prior experiences and Saudi Arabian business operations of the companies are like. In addition, it is central for the purpose of this study to know what type of managerial, organizational and environmental factors the companies have. This way, the experiences, as well as managerial, organizational and environmental factors can be considered when reading the findings of the study. Chapter 4.1 will elaborate the background of the companies, as well as their international operations in Saudi Arabia and other relevant international experience. The organizational characteristics and past experiences of the three interviewed companies are listed in Table 7.

Company A is a medium-sized company within health-tech field with a vast amount of international experience from around the world. The company was founded already a century ago but it started its exporting activity in the mid-1980s after hiring an export manager for international business purposes. As this change in personnel led to the company starting to engage in international activities, the company could be considered a born-again global company. At the time of the interview, the company was serving over 100 countries worldwide. Approximately 60% of the company’s products are exported, making the company a typical Finnish health-tech company with a large proportion of its production being sold internationally. Saudi Arabian exporting operations began approximately five years ago. In addition to the extensive corporate exporting experience, the managerial team is also experienced in working in an international business environment.

Company A carries out business in Saudi Arabia through a dealership, which means that the company’s own operations do not actually extend to Saudi Arabia as the dealer takes on the operational responsibilities from the moment the products arrive to Saudi Arabia. The dealer for example registers the company’s products locally. Thus, from the standpoint of Company A, there are no significant operational barriers to be confronted in the Saudi Arabian market, as the company is responsible for production and export logistics only.

> *”The sales in Saudi Arabia are based on dealerships, so it is quite outsourced. We act as the manufacturers and exporters. Everything else is in the hands of the dealers and we just need to guide them and provide enough material so that they can sell our products.”*

Company B is a young micro-sized company in the field of health-tech. Company B also began its operations in Saudi Arabia approximately five years ago. The company could be described as a born global as it was founded at approximately the same time as the Saudi operations began. The company is strongly driven by one entrepreneur and international business makes up for all of the company's business. In Saudi Arabia, the company has both a local dealer and additionally their own representation. The manager of Company B has both prior international experience and current international operations with other companies, but Company B specifically does not currently have other international operations.

Company C is a medium-sized and approximately 30-year-old health-tech company with exports to over 60 countries. The company started its international operations in the 1990s by exporting to Sweden, after which the expansion of the internationalization was quick. Nowadays, export sales add up to 85% of the total turnover of the company. The company first started in Saudi Arabia in 2005, working together with another Finnish enterprise, benefiting from its networks and knowledge. In 2013, the company detached itself from the partnering enterprise and since then, they have established their own networks and local partnerships in the market. The company does business in Saudi Arabia through a dealer, who sells the products to end-users. However, the company also has their own representation in the market.

Table 7 A summary of the interviewed companies

	Company A	Company B	Company C
Size	Medium-sized	Micro-sized	Medium-sized
Age	100 years	5 years	30 years
Years of doing business in Saudi Arabia	5	5	6 (14)
Other international experience	Exports to over 100 countries, managerial experience	Managerial experience	Exports to over 60 countries, managerial experience

The companies A and C are quite similar in a sense of both being medium-sized companies with decades of international experience. The companies cannot be classified as born globals unlike many other HTSMEs, as they did not strive to international markets from the birth of the company. Companies A and C also have exports to a large number of countries, making the organizational experience regarding international business significant. These companies have more staff and thus the internationalization decisions do not fall entirely on the managing director. As a sign of this, neither of the interviewees were the company CEOs, unlike with Company B. Company B is a start-up and could be characterized as a born global company, as it has striven into international markets from the birth of the company, and furthermore, it has skipped the Finnish market entirely. All of the companies have been working in the Saudi Arabian market for approximately five years. Company C, however, has had operations there for 14 years, but only approximately six years ago have they had established their own networks and operations in the market.

All of the interviewed companies can be identified as typical Finnish health-tech companies, as a large percentage of the sales are being exported. Furthermore, all of the companies have a vast amount of international experience within the management team, which makes the managerial background of the companies unified in the sense of past international experience.

All of the companies have approximately the same environmental factors affecting the perception of barriers to internationalization, as all of them are based in Finland and the host market is Saudi Arabia in every case. However, some differences in experiences or perceptions may arise from operating from different locations inside Finland. Two of the companies have their production completely in Finland, although in different parts of Finland. One of the companies produces also outside of Finland, which might have an effect on some of the perceived barriers. Together, the companies A through C form a case of Finnish health-tech SMEs, with internationally experienced managerial teams and similar environmental factors. Some differences in organizational characteristics are present, which may in some cases cause differences in for instance the company resources. Next, Chapter 4.2 and Chapter 4.3 will present the empirical findings regarding the internal and external barriers the three companies experienced when entering the Saudi Arabian market, after which Chapter 4.4 will give a summary of the findings.

4.2 Internal barriers

This section will discuss and analyze the internal barriers the interviewed companies experienced during their internationalization process to Saudi Arabia. It will discuss which specific barriers were perceived as major challenges, and which barriers were regarded as not challenging at all. The barriers are divided into categories according to the theoretical background: managerial-related barriers, knowledge-related barriers, resource-related barriers and marketing-related barriers, tying the theoretical background and empirical findings together. Table 8 presents the key findings, marking the most significant internal barriers in bold.

Table 8 Key findings related to internal barriers

Category	Barriers related to
Managerial-related barriers	• Managerial experience • Managerial characteristics • Managerial time

Knowledge-related barriers	• Unfamiliarity with export practices
	• **Unfamiliarity with host-market environment**
	    o **Host-market regulations**
	    o **Host-market culture**
	• Unfamiliarity with export finances
	• Unfamiliarity with export assistance

Resource-related barriers	• Financial resources • **Human resources** o **Lack of personnel** • Production resources
Marketing-related barriers	• **Market entry** o **Finding a right partner** • Marketing mix

Managerial-related barriers are the internal barriers that originate from the companies' managerial characteristics, experience and attitudes. None of the interviewed companies reported managerial-related barriers to be major barriers in the case of internationalizing to Saudi Arabia. All of the companies' managerial teams had prior international experience either from an appointed export manager, the managerial team or the board of directors' part, even though they did not necessarily have experience from the Saudi Arabian market. The lack of experience from the Saudi Arabian market was not, however, considered to be a major barrier. Nevertheless, one of the companies mentioned that being in cooperation with a party possessing history of experience of the market as being helpful in the early stages of entering the market.

When asked about the managerial risk-taking tendencies, the companies characterized themselves as being bold and open to new opportunities, which also further indicates that the managerial characteristics did not hinder the companies' internationalization to Saudi Arabia. None of the managers of the companies were averting the risk of entering the Saudi Arabian market nor had prejudicial attitudes towards the market – on the contrary, they wanted to enter Saudi Arabia as it was regarded a high potential market.

> *"Saudi Arabia has been the engine of MENA-countries (Middle East and North Africa) and that is why Saudi Arabia has always been a market where we have wanted to go. Saudi Arabia is a little bit like Germany – large market that pays for quality. That is why we have understood that Saudi Arabia is right for our products, as our products are never the cheapest."*

The analyzed companies themselves had initiated the interest in the Saudi Arabian market and actively explored entry, which indicates neither managerial risk aversion nor negative attitudes towards the country hindering the companies' efforts to move to the market. Thus, there were no hesitations from the managerial side. Furthermore, when interviewing the company representatives, the researcher did not notice any hesitations when addressing the issue of Saudi Arabia as a market, which strengthens the interpretation that managerial attitude towards the Saudi Arabian market has not been acting as a barrier when entering the Saudi Arabian market.

The companies stated an impression that the risks involved in conducting business in Saudi Arabia were close to nonexistent. The companies indicated this being vastly due to the Finnish government insuring export sales, thus eliminating the danger of losing all of the invested money in an export deal gone astray. It could be interpreted that the companies mostly considered not receiving their money from customers as a risk when doing business in Saudi Arabia, and that the risk could be averted by having their exports insured. In addition to export insurance, all the companies had made other kinds of financial arrangements to further reduce the risk related to conducting business in Saudi Arabia. Thus, the companies reported that they did not perceive the market entry to require considerable amount of risk-taking from the managerial side. However, it was pointed out that there is always some risk when doing business in a foreign country, especially when the geographical and cultural distance is as long as with Saudi Arabia. Overall, in this study the managerial risk-taking tendency did not hinder the process any more than usual.

The companies had differentiating opinions on lack of managerial time being a challenge. Two companies did not perceive the lack of managerial time as a barrier. One company, however, mentioned managerial time as being a barrier when entering the market. The company ended up hiring an additional staff member to Saudi Arabia to manage the local business processes and sales. The company stated that otherwise they would not have had the time to manage the operations in Saudi Arabia. The difference in experiences could be explained by other companies having more exporting personnel, a larger managerial team or fewer international operations overall, which would make the managerial time more sufficient.

One of the companies stated that if one decides to enter Saudi Arabia, the manager must make long-term plans and dedicate time for the market, as things will not happen quickly in the market.

> *”Discipline and consistency, if you do not have those, do not bother going to the Saudi Arabian market. One should not think that they can make profitable business in the country the next year.”*

This claim was confirmed by another company, which mentioned that it took them multiple years to get profitable business from Saudi Arabia. Overall, the managerial barriers were not considered to be high. Only the lack of managerial time caused some challenges for one of the interviewed companies.

Knowledge-related barriers are the barriers originating from the lack of knowledge regarding the internationalization procedures, foreign markets, external export assistance or external financing. Knowledge-related barriers were experienced to cause some challenges for the interviewed companies, as entering a new foreign market always requires new knowledge.

> *”There is no place where you can get all the information in a one-stop shop manner.”*

The companies indicated that most knowledge-related challenges were caused by lack of knowledge on the Saudi Arabian regulative framework for health-tech products. Especially shortage of knowledge related to Saudi Arabian Food and Drugs Authority (SFDA) was considered to be a major barrier, as all medical devices must be registered with the authority and must obtain proper licensing before the products can be sold or used in the country. All of the companies reported having challenges with acquiring the necessary knowledge on SFDA-related procedures.

> *“Saudi Arabia brought new challenges in terms of documentations, as the products need an SFDA approval and the approval has become stricter in the last years due to misuse-related reasons.”*

All of the companies stated the problem being that SFDA requires a vast and constantly changing and growing amount of documentations and proof to grant the permits and licenses necessary to sell healthcare-related products in the country. Two of the companies specified that SFDA has become stricter in the recent years, and nowadays getting the necessary permissions require a lot of working hours from the company, mostly in order to gather and send the right documents to the authority. For instance, the companies need to prove that the products originate from Finland, as the authority has discovered deception in the past regarding the land of origin. In addition to the growing need for documentations, the SFDA requirements change continuously which means that the companies need to stay on top of possible changes at all times Even if the companies have a local partner who takes care of the permits, the companies still need to update and send documentations annually to retain the necessary permits. As the SFDA requirements change constantly, it is difficult to overcome the barrier gradually by gaining knowledge in a way that the knowledge-related barriers can usually be overcome.

Two of the interviewed companies stated that difficulties with knowledge on the Saudi Arabian regulations, in addition to the limited managerial time, led to companies hiring dedicated staff for the job of staying up to date on SFDA-related knowledge, as it was perceived time consuming to keep up with the changing SFDA demands. Furthermore, one company mentioned that government regulations and demands in Saudi Arabia need to be interpreted in precisely the right way, causing some challenge. In this sense, a local partner is often necessary as he has the knowledge to interpret the local texts correctly.

> *"As we work in the hospital world, there are a lot of demands from the public authorities, such as medical certificates and so on, and we just need to find out what our products have to obtain. The Saudi Arabian government has directions and requirements but you need to know how to read them, as everything is not always as it seems. That is when we as Finns need a reliable partner in Saudi Arabia."*

Lack of knowledge on internationalization procedures in general were, however, not considered a challenge by any of the companies, due to the prior international experience inside the organizations and the managerial teams. Furthermore, lack of knowledge on international opportunities was not considered to be a challenge when entering the Saudi Arabian market, as all of the companies readily recognized the opportunities in the area and specifically in Saudi Arabia. Common for all of the companies was that they attended trade fairs and the Finnish government trade promotion trips to the Middle East and consequently were contacted by Saudi businessmen who were interested in selling their products in the country. No further research on the business opportunities needed to be performed by the companies. Thus, after the companies had taken the first step and recognized Saudi Arabia, or even the Middle East, as a potential market, the Saudi market practically pulled the companies in. However, more extensive research was necessary when trying to acquire information on the possible Saudi Arabian partners and their companies and networks. All of the companies reported that thorough knowledge on the local partner is needed before committing to one. However, the companies did not experience lack of knowledge on the partners as a barrier as they had sufficient ways of acquiring necessary knowledge.

None of the interviewed companies reported lack of language skills as a barrier when entering the Saudi Arabian market. All of the companies stated that Saudi Arabia's official language Arabic was not needed when conducting business in the country. The companies mentioned that they do not have Arabic language skills inside the company, and it has not been an obstacle for them in any way. However, as all of the companies have local partners in Saudi Arabia with Arabic skills, it may be that only in the companies' specific situation Arabic skills are not needed – if the companies had required to undertake more operative tasks in the country, additional language skills might have been demanded. The companies stated that people of Saudi Arabia mostly speak fluent English, and thus for them English has always been the language of business in the country. Two companies mentioned that most of the highly educated people that work in and around the health-tech industry have been educated abroad, mostly in the USA or Europe, consequently having fluent English skills.

Lack of knowledge on the local culture in general and the business culture was considered to be a challenge by all of the companies. However, the barrier could be overcome by gradually learning about the culture, which is typical for knowledge-related barriers.

"Learning the local culture has been challenging and time consuming."

Issues related to the lack of knowledge on the business culture were reported to cause some disruptions when carrying out business in Saudi Arabia, but nothing that in the case of the interviewed companies would have largely hindered their business in the market. The cultural differences were experienced to cause misunderstandings and misinterpretations. Furthermore, the interviewed companies reported that it was important to learn about the local culture before working with the local people, to avoid any misunderstandings and to be able to act in a respectful manner towards the locals. The companies indicated there being challenges learning the dos and don'ts of the Saudi culture, significantly different from the Finnish. However, cultural distinctions had not affected the business side, as long as there was basic knowledge on what not to do. As a matter of fact, it could be implied from some reported experiences that the Saudi Arabians are also well aware of the features of the Western culture and do not necessarily demand behavior similar to theirs from the foreign business partners. This could be due to for instance the aforementioned foreign education.

> *"I went through a personal conduct –course before I started to spend more time in Saudi Arabia. For instance, I was told one should not shake hands with people. Then I went into a meeting in Saudi Arabia with hand behind my back and the locals came to ask me if I have gone to a manner class and told me that let's shake hands."*

In addition, basic knowledge on the business culture is needed, in order to know what to expect from the local businessmen. This was considered to be a relevant barrier as the lack of knowledge on the local business culture can lead to misunderstandings and misinterpretations in business relations. However, the companies reported the real challenge regarding knowledge being the amount of time it takes to gain knowledge on the Saudi Arabian regulations and culture.

None of the interviewed companies reported lack of knowledge on export assistance or external finance to be a barrier. All of the companies had enough knowledge of the export assistance, as all of them had used some kind of assistance in the past, as well as enough knowledge on the possible ways of acquiring assistance if needed.

Resource-related barriers are the obstacles related to companies' internal resources, more specifically to the financial, production and human resources. Financial resources-related barriers, which have been shown to cause some barriers to SMEs, were almost non-existent within the interviewed companies due to several reasons. First, two of the companies mentioned having a prepayment deal with the Saudi Arabian customers, which means that the customers need to pay for the orders before the companies start the production-related to the order. One company did not have a prepayment arrangement in place, which caused some challenges for the company. However, all of the companies had other ways of avoiding financial troubles, such as using letter of credit and government export insurance. None of the companies reported having issues with finding short-term funding for financing the Saudi Arabian operations. One of the companies mentioned having discussed financing with government agencies, in case there would ever be challenges regarding financial resources, but there has not yet been need for the financing.

Human resources-related barriers were experienced to be the most challenging barriers within the resources-related barriers category. All of the companies reported some kind of obstacles caused by the lack of personnel. Lack of human resources to deal with the host-country regulations, mostly SFDA-related issues, and shortage of managerial time, led to the companies hiring additional staff. One of the companies hired a regulatory officer to handle the regulatory demands of the Saudi Arabian market. Another company reported realizing quickly after entering the market that they needed to hire an area manager to Saudi Arabia, as otherwise their management and existing staff would not have had the time to deal with matters related to Saudi Arabia. The same company also reported having to hire an additional staff member, in addition to the area manager, as the situation was still too straining for the company personnel situated in Finland. This was mainly due to the inadequacy of the said area manager, causing additional workload for the company headquarters.

> *"We quickly realized that our area manager would not get his hands dirty; he had no technical skills and we needed to do a lot of work here in Finland to answer inquiries and decide what we could offer the customers. We understood that we needed to hire a technical support person to Saudi Arabia, so now we have a technical support who is an engineer and can help the dealer."*

Furthermore, the companies reported that it is important to have adequate personnel located in Saudi Arabia due to reasons such as long geographical distance and the need to obtain local relationships. Overall, the lack of human resources in general and the lack of adequate personnel, in particular, were experienced to cause challenges when entering the Saudi Arabian market, but the barriers were overcome by hiring additional staff.

Production-related barriers were not perceived as major challenges. All of the interviewed companies reported that meeting the production demand and schedules for the Saudi Arabian market was relatively easy. A few reasons for this were mentioned: for instance, the orders from Saudi Arabia are not unusually large. One of the companies mentioned that even though Saudi Arabia is a very affluent country, they are still strict in how they use money and thus their order sizes tend not to be any larger than from other foreign countries. Furthermore, it was mentioned that the orders have relatively long delivery times. Thus, the Saudi orders do not cause major stress to the production. However, one company mentioned encountering occasional production difficulties, as completing one delivery on a large order might push other orders to late delivery. However, this is not directly tied to the Saudi Arabian market, but to limitations in production capabilities or other resources in general.

Marketing-related barriers are the barriers related to the market entry and marketing mix in the host country. Some of the marketing-related barriers were experienced as the most challenging obstacles within the internal barriers. It was found that especially finding a right partner in the Saudi Arabian market was crucial for the success of the market entry. All of the interviewed companies reported finding the right partner to be the greatest challenge when entering the Saudi Arabian market. All of the companies emphasized the significance of having the right partner and its importance in succeeding in the market. There were multiple characteristics mentioned that make a good partner. First, the company needs to get along well with the partner on a personal level, as personal relationships are important in the Saudi Arabian culture. Furthermore, two of the companies mentioned trust as the most important factor in choosing the right partner. One needs to be able to fully trust the local partner to support the company's business operations in the foreign market. In addition, the partner needs to be influential in the country, which means having the right relationships to the business world and in best case some relationships to the royal family, and furthermore, enough influence within the networks to close deals. One of the companies mentioned their dealer being a cousin of a prince, which they perceived important. However, one company mentioned that having close relationship with the royal family does not necessarily mean anything, as the royal family is extremely large and for instance, the princes have hundreds of cousins. All in all, it could be interpreted that the former company was above all lucky to find the right royal cousin, but it cannot be generalized that having a cousin of a prince as a partner is crucial. Regardless of the partner's royal family connections, it is important to be careful when assessing the potential partner's networks and connections.

> *"The challenge is to find the right partner who truly has authority."*

One of the companies stated that it is important to spend time in choosing the right partner, as you will most likely *"be married"* to that partner. If a company makes a partnership agreement with one local partner, the partner will be hesitant to let go of the partnership, even if sales are not progressing as planned. Furthermore, when a new opportunity is recognized, it is too late to start forming new relationships with new partners, as forming good relationships takes time as well as discipline and consistency. When an opportunity rises, one needs to stay with the existing partner and hope he is able to sell the products.

In addition, the company the partner represents in Saudi Arabia, must be working with the right kind of product assortment, as it is essential the partner knows how to do business with high-end health-tech products.

> *"We are not interested in companies that do business with cheap products because then they do not know how to sell expensive products. We are always on the expensive end and we cannot compete with price. Our cost of material is higher than the sales price of Chinese and Indian products."*

One of the companies found valuable to acquire outside help to determine whether their potential partner is someone who has the right connections and his connections are legitimate. As the partners of a company handle most of the operations within the market, it is essential to have a partner who can create sales, as in case the partner is not able to do it, the business obviously will suffer.

One of the companies indicated the need for local presence as well as personal relationships with the locals in order to generate repeat business in Saudi Arabia. The company stated that a Finnish company may create sales in the country due to good quality and country brand, but in order to establish lasting business relationships, one must respect the value of personal relationships in Saudi Arabia. It was reported that it is not unheard-of that a company representative is invited to a family dinner of their local partner. However, the issue of generating repeat business was only discussed with one of the interviewees, as the two other companies rely on their dealers and the relationships of the dealers in the matter.

None of the companies interviewed have needed to differentiate their products when entering the Saudi market, and they feel that product differentiation does not concern them, as the products are cutting edge and excellent quality health-tech products. However, some differentiation in the promotional material had to be performed due to the laws and expectations of the Arabic countries. For instance, the companies mentioned that in the marketing material, there cannot be bare skin showing, as the Saudi Arabian culture and laws do not allow it. One company also mentioned that the Saudi Arabians prefer to have young people in the marketing material, as old age may be seen as a weakness, and thus, less promotional. Furthermore, the people shown in the promotional material should preferably be men, as women still hold an inferior position in the country in the eyes of many locals. The companies mentioned that product-related texts such as instructions and marketing materials did not need to be translated to the local language.

The companies did not consider pricing very challenging when entering the market, as long as one has knowledge on the Saudi Arabian business negotiation style. Two of the companies mentioned that you must be ready to negotiate about the price, and the Saudi Arabians want to have a say in the price.

> *"The way of doing business is so that there needs to always be some laxity in the pricing. They never agree if we give them rigid take-it-or-leave-it prices, and it is an insult for them if they cannot have a say in the price."*

Even though Finnish health-tech products are more expensive than some of the competitors' products, and Finns cannot match the competitor pricing, it was not seen as a challenge, as the Saudi Arabian customers were willing to pay for the Finnish products, due to good quality and country brand.

None of the companies experienced barriers related to access to distribution channels or distribution of products, or finding suitable warehousing for products in Saudi Arabia. This is due to the dealers or partners having responsibility over these operational tasks in the country. Furthermore, transportation costs and logistics from the home market to the host market were not considered to be considerably challenging, although the geographical distance between the two countries is long.

4.3 External barriers

This section will discuss and analyze the external barriers the interviewed companies faced during internationalization to Saudi Arabia, and especially barriers which were considered to be challenging and the reasons behind these challenges. External barriers will be divided into home-based market barriers, host-based market barriers and industry-based barriers, categories derived straight from the theoretical framework of the study. Table 9 presents the key findings of the section, marking the most significant external barriers in bold.

Table 9 Key findings related to external barriers

Category	Barriers related to
Home-based market barriers	• Government export assistance • Government export incentives • Restrictive regulatory framework

Host-based market barriers	• **Economic environment**
	  ○ **Difficulties in obtaining payment**
	  ○ **Oil-related instabilities**
	• Political environment
	• **Sociocultural environment**
	  ○ **Authoritarian culture**
	  ○ **Business culture**
	  ○ **Role of personal relationships**
	• **Legal and regulatory framework**
	  ○ **Rigid regulations**

Industry-level barriers	• Industry structure • **Industry competition** ○ **Competition from foreign companies**

Home-based market barriers are the ones the companies might experience in their home market. In this study, the home market of the interviewed companies is Finland. The interviewed companies did not perceive lack of government export promotion as a barrier. All of the companies mentioned using some kind of government export assistance during internationalization to the Saudi Arabian market. The companies have used varying amounts of government assistance, but none of them perceived the government export assistance to be absent nor have they experienced challenges due to the lack of support from the Finnish government. The companies reported having received assistance in the home-market grounds from Finnish government agencies such as the export promotion agency Business Finland (previously Finpro and Tekes), and the export credit agency Finnvera. The companies stated that Business Finland helped them mainly by organizing export promotion trips to the Middle East. Two of the companies also mentioned governmental export assistance agencies financing their trips to Arab Health, a trade fair organized yearly in the United Arab Emirates. Two of the interviewed companies acquired initial contacts with their Saudi Arabian partners or dealers at Arab Health, making it seemingly an important channel to reach the Saudi Arabian market.

> *"We have received governmental financial assistance for international trade fairs, in the best case the assistance covers for half of the expenses of attending the fair."*

Finnish government assistance was also present in the Saudi Arabian market, with two companies mentioning receiving very important help from the Finland's embassy in Riyadh. The embassy support came in the form of research on the possible Saudi Arabian partner, or helping with networking in the country. As it has been established, having the right partner in the Saudi Arabian market is crucial, and thus the embassy help was considered to be essential. In addition, the combined support of Business Finland and the embassy was mentioned as being very helpful.

> *"What Business Finland and the embassy can do together is establishing a network. We have had seminars with other Finnish companies where they have managed to invite also high-level people and potential customers."*

Finnvera is a financing agency of the Finnish government. Finnvera was found to offer crucial support for the companies, by insuring their export sales. All of the companies mentioned receiving help from Finnvera in the form of export sales insurance. Overall, lack of Finnish government export assistance was not considered to be a barrier when entering Saudi Arabia, as there was sufficient help from the government's side. However, two of the companies mentioned that in their opinion, the government export aid has become more restricted in the recent years, due to government not allocating as much funds to export assistance as previously. It was also stated that government assistance is more important to smaller and younger companies with less international experience.

Good reputation and solid country brand of Finland were also mentioned as being helpful in the market entry to Saudi Arabia, as the Saudi Arabians perceive Finnish products to be of good quality and thus the products are respected and valued. All of the interviewed companies perceived Finnish country brand as being a positive influence when selling health-tech products to Saudi Arabia. Furthermore, only one company mentions home market's isolated geographical location as a minor challenge, as it makes the transportation of the orders slower and more difficult, thus affecting the competitive edge of the company. The company that reported isolated geographical location as a barrier is, however, located in a very rural part of Finland, making logistics more difficult compared with companies that are located near large ports.

Home-based market regulatory framework was not considered as restrictive when entering the Saudi Arabian market. None of the interviewed companies reported having challenges with home-market government regulations or rules when selling their products to the Saudi Arabian market. One of the companies mentioned restrictive regulations when exporting to some other Middle Eastern countries, but Saudi Arabia is not included in those.

Host-based market barriers are the challenges that originate from the external environment of the host country. Host-market barriers arise from the host-country operating environment and the host-country rules and regulations.

Some economic conditions-related barriers were considered challenging. First, the companies stated the Saudi Arabian customers are often slow or even reluctant to pay for their orders, causing possible difficulties in obtaining payments. One of the companies mentioned that especially the public sector is often hesitant to pay and it might even take a year to receive payment for a delivered order. Consequently, the companies have needed to make arrangements to secure their income. One of the companies has decided to only sell to Saudi Arabia with a prepayment plan, where the order needs to be paid, either fully or up to 90%, before the order is shipped. In addition, other ways of insuring sales, such as a letter of credit, was mentioned as being an important way of securing incoming money from the export sales. It was also mentioned that the issue of secured payment methods might be the reason why the Saudi Arabians will rather do business with other local parties and not do business directly with foreign companies. That is one reason why there is often a dealer between the Saudi Arabian customers and the Finnish companies.

> *”The Saudi Arabians would rather buy products from locals, as it makes it easier to play around with money and payment times than when doing business with Europeans. To a local partner, they can say that the product color is slightly wrong, let’s negotiate the price. Us they need to pay, as they think Finnish government is behind us (Finnvera).”*

When asked about economic instabilities such as currency fluctuations, all of the conversations tilted to the oil prices, as the local currency, Saudi Arabian riyal, is very strongly tied to the oil market. Furthermore, all of the interviewed companies stated that the local politics in Saudi Arabia do not directly affect building business in the country. However, as everything in the country is tied to oil, even politics and the economy, it is understandable that oil market turmoil causes political and economic instabilities in Saudi Arabia. In the companies’ experiences, only the economic instabilities were causing challenges. All of the companies reported that oil prices greatly affect the success of business in the country. This was considered to be a major barrier when conducting business in Saudi Arabia. As the oil prices are subject to fluctuation, oil market consequently affects other businesses in an unpredictable way uncontrollable by the companies themselves. The companies stated that oil affects the existing orders as well as the future sales.

> *“The dropping of oil prices and the limitations on oil availability are completely tied to the signing of deals and financing of projects. Oil is the politics that runs everything and if the oil price decreases, there are no new orders and the existing ones are frozen.”*

The companies mentioned that two following years are never alike in the Saudi Arabian market, and the value of sales between two years can fluctuate from millions to only thousands due to oil-related instabilities.

> *“One night can change everything in Saudi Arabia. If the government suddenly announces that they do not have money, it can be that in a week or two, all the big projects are put on hold, and all the orders are cancelled.”*

One of the companies stated that to avoid the currency instabilities caused by oil fluctuations, they have managed to do business with Saudi Arabia in euros, which has been a suitable way of tackling the oil price fluctuations.

All of the companies reported facing challenges caused by the sociocultural differences between the home market and the host market. One of the companies mentioned that some challenges are due to the Finns treating everyone equally, opposite to how the Saudi Arabians act.

> *”No matter of the title, we Finnish people do not think we are better than someone else is. We respect everyone, poor or rich. The Saudi Arabians sometimes have a hard time understanding this. It has been a challenge for us and it is still sometimes difficult to remember that you cannot do everything you would in Finland in front of the Saudi people.”*

However, it was also stated that the companies seldom do day-to-day business with the Saudi Arabians, as most of the working people in Saudi Arabia are immigrants. The companies mentioned Egyptians as the most often faced counterparts in the country, and the Saudis themselves as top managers usually being more distant to daily business operations.

The local verbal language, Arabic, was not considered to be a barrier. The companies reported that they do not need to translate their product instructions or anything else related to the products, to Arabic. Nonverbal language differences on the other hand were considered to be challenging, one major barrier being the perception of time, as well as trust. It was stated that Finnish people are often too trusting and take everything that is said seriously, whereas that might not be the case with the Saudi Arabians.

The companies reported challenges in the different time perceptions of the Saudi Arabian partners. For instance, the companies stated that response times of the Saudi Arabian partners could be very long in comparison with what people are used to in Finland. As a consequence from the long response times, there can be delays in business deals as well as business operations, which was considered a challenge. When asking about the reasons behind the delayed answering times, the companies reported the authoritarian culture of Saudi Arabia being a reason for most of the challenges.

> *”You never really know when they send their final order or answer your inquiries. It is nothing like in Europe, where you can send a message in the morning and expect an answer in the afternoon. In Saudi Arabia, it can take a month. The people you work with might be very active but they need to get a permission from someone above.”*

> *”There are very strict rules that no decision, even a very little one, is made without a certain mister X knowing about it. When we do business and communicate with a company, all the messages are copied to at least six others.”*

All of the interviewed companies reported the importance of not addressing issues related to politics or religion with the local people, as they spark up strong feelings in the country. This is not something the companies perceived as a major barrier. However, it might become a barrier in case there is not enough preliminary knowledge on the importance of avoiding these topics in communication with the Saudis. Not talking about sensitive issues should be considered as a very important lesson to learn before entering the market. One company stated that one must respect the local traditions and culture, and understand that they are not something that can be changed overnight. One of the companies stated that even though the Saudi Arabians usually have a great sense of humor, religion and politics are not something one should make jokes about.

> *”If you want to dig a hole for yourself, talk about religion or politics. If you want to do business, talk about business or hobbies, something you like and that adds positive value, for example your family.”*

One feature of the Saudi business culture mentioned was that the local partner quite often makes better profits than the exporting company. It was stated that when doing business with the Saudi Arabians, one must know how to discuss product pricing in alignment with the local business culture. One of the interviewed companies reported that their latest partnership in Saudi Arabia ended as the dealer took more money from the deal than the company was aware of and had accepted. Another company reported of the similar issue; however, they stated that one must accept that the dealer will make more money of a deal that the company.

> *”Usually the partner makes more money than we do. Healthy greed is welcomed, but you just need to accept that the partners make more money and the manufacturer does not get rich.”*

Thus, it can be interpreted that the possible lack of knowledge on the Saudi Arabian business culture, and more specifically the correct approach to price negotiations, can cause major barriers. It can even result in having to change partners, which further causes delays in building business in the country. The barriers can be overcome by learning about the local business culture and how the trading is performed in accordance with the local market. Business culture of Saudi Arabia was perceived as challenging as it differs so much from the Finnish business culture. One company mentioned that the Saudi Arabians have a long history of being merchants, which comes with certain set of traditional rules and manners by which the business is conducted, and one should know how to act according to these traditions.

There were some differing experiences on whether the Saudi Arabians can be trusted in the sense of following through on promises and keeping their word. Two of the companies reported that in their experience, one could never truly trust that something being discussed will happen before actually seeing it happen. For instance, there might be talk about multiple upcoming projects, but it may be that none of them end up materializing. The companies mentioned that this causes challenges, as you need to be very critical and try to figure out who is being serious and who is just talking without any plans on acting on it. The companies state that this is a major cultural difference, as Finnish people are usually very trusting, and one needs to learn not to get excited about promises made by the local partners.

> *”The Saudi Arabians talk about having great relationships and networks, and how they can achieve great things for your company, but nothing actually happens.”*

On the other hand, one of the companies had a completely contradicting experience, reporting that in the case of Saudi Arabia, they have usually been able to trust that if an order is discussed it will most likely take place, and thus the company can even start the production before the final order is made. However, it may be that the companies were thinking about different situations and different stages of business discussions: the first two companies were referring to the first stages of discussion, where there have not yet been specific details discussed, only vague promises about the future. The reason behind the contradicting statement by one company is unclear: the company might have been referring to later stages or cooperation, when preliminary orders have already been discussed, or partners with whom they already have established steady relationship.

The role of networks and personal relationships were reported as being extremely important in Saudi Arabia. It was stated that while in Finland the companies might rely more on official channels and company merits when conducting business, in Saudi Arabia one needs to build on personal relationships in business. The difference between the two cultures caused challenges for the companies. All of the companies recognized the importance of personal relationships, and reported that without the right relationships, it is impossible to do profitable business, or sometimes business at all, in the market. For instance, it was mentioned that it is not unusual to be invited to have dinner at the house of a local business partner, which indicates the strong role of personal relationships in business.

The Saudi Arabian regulatory framework caused challenges for all of the companies, in the form of complex regulations and bureaucracy. As established earlier, the lack of knowledge on SFDA regulations was considered to be a barrier by all of the companies. The companies indicated this being due to the challenges in proving the product origin and providing the necessary paperwork to obtain licensing. One company mentioned that even though the SFDA regulations are based on the U.S. Food and Drug Authority guidelines, one still needs to go through the process of acquiring SFDA permissions and licenses from the scratch. The companies mention the bureaucracy as a challenge. One company mentions that in order to get the SFDA permissions, they need to first acquire relevant certificates from Finland's National Supervisory Authority for Welfare and Health, Valvira, to prove the product is compatible.

> *"The Saudi Arabians require that we have Valvira's certificate. Often you need to take the certificate to a public officer as well as the Department of Foreign Affairs in Finland to get it attested. Then you need to take it to the Saudi Arabian embassy for them to legalize it to a format that Saudi officials want."*

The certificate in question only applies to certain kind of products and not all health-tech products nor medical devices, but it acts as an example of the bureaucracy and strict regulatory framework that foreign companies encounter when exporting to the Saudi Arabian market.

The Saudi Arabian legal system, although quite different from European, did not cause challenges for the companies when conducting business in the country. None of the companies mentioned having business-related challenges that arise from the local Islamic legal system. Of course, one must live by the local laws and if breaking them, answer according to the local legal system. One of the companies stated that setting up and operating a business in Saudi Arabia has not been made exceptionally difficult for foreign companies, concerning the legal and regulatory frameworks, when comparing to for instance European countries.

The companies mentioned an issue regarding both the regulatory framework as well as the local culture: the registration processes for products that are related to sensitive issues according to the Saudi Arabian standards might take even two years and the process is very difficult. These sensitive issues include for example HIV, which the Saudi Arabian government does not admit having in the country, according to one of the companies which mentioned conducting some business around HIV-related products. Another company mentions active aging products as being sensitive.

> *"We are involved with active aging, and that is something that is pointless to try and export there at this time, as they do not acknowledge the elderly market. Obviously, the market exists, they just keep it under the counter. There you need to be beautiful, brave and strong. For example sports rehab is really good, just do not show too old people in your materials."*

However, the challenges that the two companies mentioned with sensitive products are just perceptions, as the companies have not gone through the process of trying to register these products. It could be interpreted that in this case, already the perceptions of possible barriers are hindering the companies' efforts to try to enter the market with such delicate products. The perceived problems can be realistic, but the companies have no actual experiences to report regarding attempts to bring sensitive products to the Saudi Arabian market.

There were some contradicting experiences when asking about the existence of corruption. Two of the companies mentioned not being aware of any corruption; one of the companies stated that there have been anti-corruption campaigns recently, and corrupted people go straight to prison, which has worked in cutting corruption. However, two companies mentioned possible naivety as a reason for not detecting corruption. Furthermore, one of the companies claimed that there is in fact corruption in the midst of the local dealers. Overall, all of the companies stated they have not or will not take part in any corruption in the country and do not get involved in the possible corruption between the dealers. Thus, corruption was not considered to cause challenges when doing business in Saudi Arabia.

Industry-based barriers arise from the industry structure and industry competition within the industry in the host-market environment. The companies reported that in Saudi Arabia, they have experienced competition and it has caused challenges, the same way competition causes challenges in virtually every market they conduct business in. From the interviews, it could be interpreted that competition in Saudi Arabia is not more or less difficult than in any other market. However, competition was still considered to be a barrier by all of the companies. The companies indicated the competition coming mainly from other foreign companies operating in the Saudi Arabian market. However, the companies mentioned that the competition could be overcome by offering good quality and innovative products that create added value, and additionally by having great personal relationships with the locals.

One of the companies stated that the local dealers of foreign companies do the actual competing in the market. The dealers are rivals to each other and compete hard with one another. Thus, the networks and relationships of the dealers are very important when competing for, for instance, hospital projects. The dealer who has the best relationship to the specific hospital is likely to win the bid and be able to create business for the company. Thus, the competition can also be overcome by having a carefully chosen partner. One of the companies mentioned that competition from the local startups is non-existent as the startup culture in the Saudi Arabian market is in its very early phases. None of the companies reported challenges caused by the health-tech industry structure, as the industry is booming around the world and Saudi Arabia in particular is seen as a friendly host for health-tech innovations and products.

4.4 A summary of the empirical research findings

A summary of the empirical findings of the study will be presented in this section, in order to emphasize the main findings presented in Chapter 4.2 and Chapter 4.3. Findings between the three interviewed companies were mostly consistent with each other and thus some deductions can be made about which are the highest barriers Finnish health-tech companies face when entering the Saudi Arabian market. The findings show that the companies experienced both internal and external barriers. This section will summarize the internal and external barriers that were perceived as the most challenging in this study, as well as give a brief summary of the barriers experienced the least significant.

The greatest internal barriers the interviewed companies experienced were related to lack of knowledge on the host-market environment, lack of human resources, and finding the right partner in the host country. All the companies experienced knowledge on the host-market environment to cause two types of barriers, namely, lack of knowledge on the host-market regulations and lack of knowledge on the host-market culture. Especially the host-market regulations-related knowledge was experienced to be challenging, as the Saudi Arabian regulatory framework requires constantly changing and growing amount of information, and the companies need to keep up with the changes. As the regulations change continuously, the barrier cannot be overcome completely by acquiring knowledge. In addition, knowledge on the host-market culture was considered a barrier, however, one that could be overcome by learning. Lack of knowledge on the host-market culture was considered to be a barrier due to very different cultures between the home and host market, and the time constraint the learning process requires.

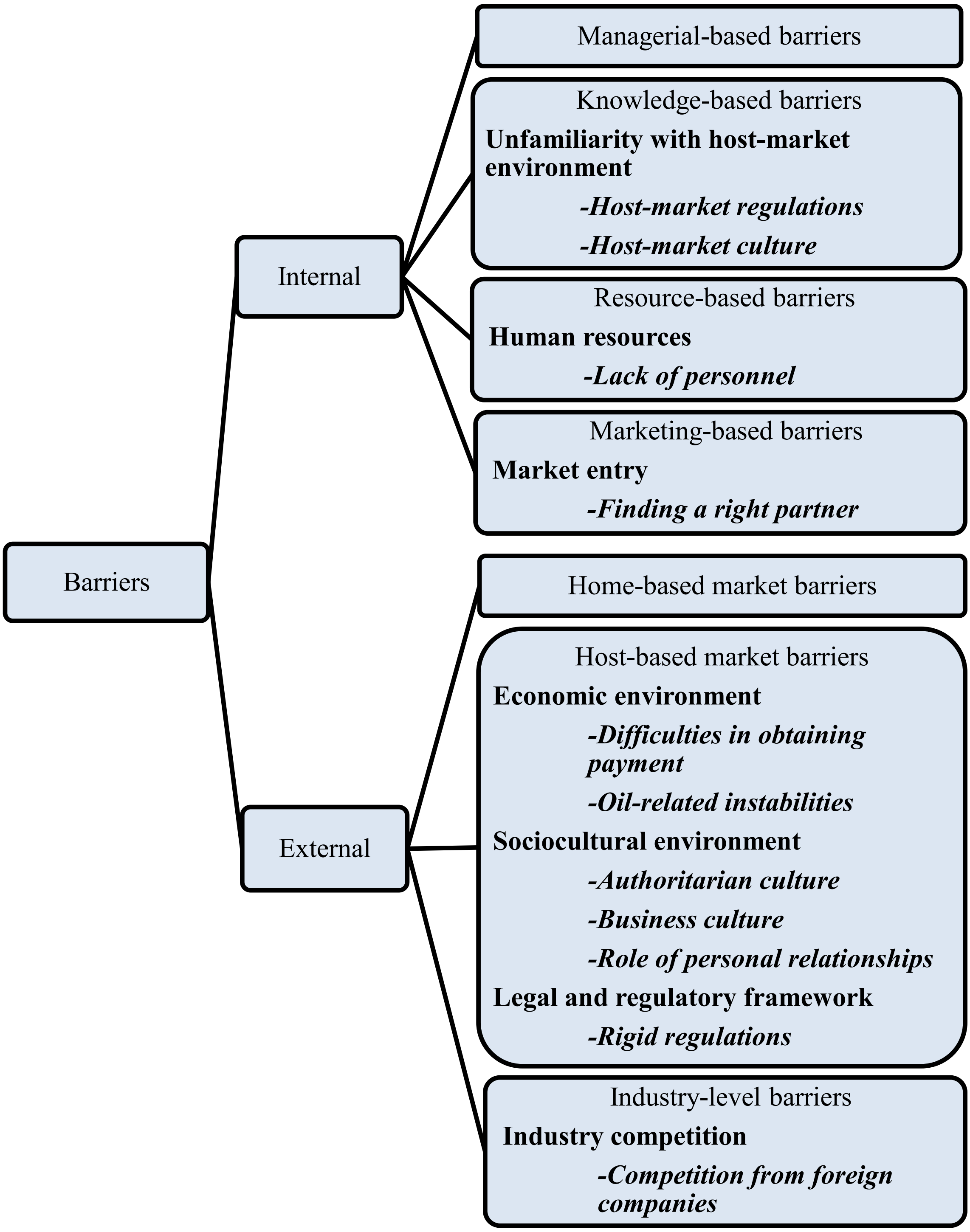
Within the resource-based barriers, only human resources were experienced to cause challenges for the companies. Especially lack of personnel to handle the business operations related to Saudi Arabia, and lack of adequate personnel to manage all the necessary matters, were perceived as major barriers. The most straining issues for the companies were the overall management of the operations in the market, and the management of regulatory issues. The companies needed to hire additional personnel to manage the Saudi Arabian business operations, both to Finland and to Saudi Arabia. Furthermore, all of the companies reported finding the right partner as the most crucial barrier from marketing-related barriers when entering the Saudi Arabian market. The choice of the partner is crucial mostly because of the great importance of personal relationships and networks in doing business in the country. The right partner must have suitable relationships within the host market, to be able to create sales. In addition, the right partner needs to be trustworthy as many of the operational tasks are left in the hands of the partner. The partner also needs to do business with the right product assortment to be able to sell the high-end health-tech products Finnish companies produce.

The external barriers that were perceived as high were related to the host-country operating environment, host-country regulations, and industry competition. In the operating environment, unstable economic environment, as well as an unfamiliar sociocultural environment caused most challenges. Fluctuating oil prices cause economic instability, which was reported by all of the companies as a challenge. The oil price fluctuations can affect the future orders as well as the existing orders from Saudi Arabia, making the business operations very uncertain. Other economic barriers arise from the difficulties in collecting payment. However, challenges in payment collection could be reduced by using secure payment methods and insuring the sales receivables. In addition, different sociocultural environments of the home market and the host market caused challenges for the companies. The sources for sociocultural barriers identified as the most challenging were the authoritarian culture of Saudi Arabia and differences in business cultures. In addition, the important role of personal relationships was considered a challenge, as without working personal relationships it is impossible to conduct business in the country, as opposed to Finland, where the role of personal relationships is not as significant.

All of the companies reported encountering regulative barriers. They were due to difficult ways of obtaining licensing and permits for the health-tech products. Most regulatory barriers were caused by SFDA. The authority requires a large amount of paperwork to grant necessary permits, and the required documents tend to change on a yearly basis. It is difficult to interpret whether the complexity of the regulatory framework of Saudi Arabia, or in fact the lack of knowledge on the local regulations caused the barriers. Most likely, both two caused barriers for the companies as all of the studied companies reported difficulties with the lack of knowledge on regulations as well as difficult regulative framework. Furthermore, competition was found to cause challenges in the Saudi Arabian market, however, it was not found to cause remarkable challenge in comparison with other markets. Competition in the Saudi Arabian health-tech sector is mainly from other foreign companies, and not from locals.

There were also multiple barriers which none of the interviewed companies experienced to be hindering their internationalization to the Saudi Arabian market. One of the lowest perceived internal barrier in the study was the language skills inside the company. None of the companies perceived lack of Arabic language skills as a challenge in Saudi Arabia, as long as there were sufficient English skills. Furthermore, managerial barriers in general were considered to be low, as all of the companies had managers with international experience as well as positive attitudes towards the Saudi Arabian market. In addition, all of the companies perceived production-related barriers and finance-related barriers as low in case of entering the Saudi Arabian market. From the external barriers, home-based market barriers, consisting of the lack of export promotion and restrictive regulatory framework, were considered low by all of the companies.

Figure 5 A summary of the empirical findings



To illustrate the findings, Figure 5 represents the highest barriers the Finnish health-tech companies experienced when entering the Saudi Arabian market. The most significant barrier categories are written in bold, below which the more specific barrier types within each category are written in italic font. Figure 5 is modified from Figure 4, which first presented the categorization of barriers in Chapter 2.

5 CONCLUSIONS

5.1 Theoretical implications

The objective of the study was to find out what are the barriers Finnish health-tech SMEs encounter when entering the Saudi Arabian market. The objective was divided into two sub-objectives, namely, what are the internal barriers the companies encounter, and what are the external barriers the companies encounter. The theoretical framework for the thesis was derived from Kahiya's (2013) study, in which the barriers to internationalization are divided to internal and external barriers, and further into seven sub-categories. The empirical data was collected by conducting semi-structured interviews with three Finnish health-tech SMEs. The companies were asked regarding the challenges they have experienced when entering the Saudi Arabian market. The interview themes were directly drawn from the theoretical framework and the same themes were discussed in the empirical findings, linking the theoretical framework and the findings closely together.

The theoretical framework from Kahiya's (2013) study was used to discover the internal and external barriers the interviewed companies had experienced, and tested in the setting of health-tech companies internationalizing to the Saudi Arabian market. The framework functioned well for the purpose of this study, and the researcher perceived the framework to include all the important aspects of the barriers to internationalization, as no additional barriers outside the Kahiya's (2013) classification framework came up in the interviews. A difficulty concerning the framework was that some of the barriers could be interpreted to belong in multiple different categories, depending on the point of view. For instance, it is difficult to distinguish whether challenges with the host-market regulations are due to lack of knowledge or difficult nature of the regulatory framework, and differences between researchers' interpretations can result in different conclusions.

The findings from the earlier empirical research on the topic have been inconsistent, claiming numerous different barriers as the largest challenges for high-tech SMEs in the process of internationalizing. The reason for this inconsistency could be that the earlier studies have mostly been case studies researching barriers companies from one specific country encounter when entering another specific country, making the research context different between the studies. It is important to note that in the case of barriers to internationalization, the managerial, organizational and environmental factors affect the findings greatly. This study supports the findings of some of the earlier research, however, also major contradictions were found. In addition, the study provides some extension to the existing research by filling the gap regarding barriers to high-tech SME internationalization in the context of Finnish health-tech companies entering the Saudi Arabian market.

The study supports the findings of Barnes et al. (2006), who suggested that the largest barriers for healthcare SMEs were generated by the challenges of finding a right partner in the host market. This study makes a conclusion that finding the right partner is in fact the most important barrier, as it was greatly emphasized in the empirical findings. This study was done in the context of the Saudi Arabian market, which means that the conclusion cannot necessarily be applied to countries with other cultural backgrounds, as for instance the importance of personal relationships can vary between cultures. However, the study by Barnes et al. (2006) examined healthcare SMEs from the UK internationalizing to every continent in the world, making the finding more widely applicable.

The study of Hed and Malmström (2010) researched internationalization of medical technology companies. In unison with this study, Hed and Malmström (2010) found the host-market rules and regulations as well as cultural differences causing major challenges for medical technology companies. As the study of Hed and Malmström (2010) was executed in the Nordic context, it could be implied that the challenges with host-market regulations and culture are not only found between very distant markets like Finland and Saudi Arabia, but can also be found within health-tech companies in a broader extent. Overall, the findings of this study suggest that the choice of a host-market partner, as well as the host-market regulations and culture cause some of the most significant challenges for Finnish health-tech companies entering the Saudi Arabian market. This is in accordance with the findings from Barnes et al. (2006) and Hed and Malmström's (2010) research on the barriers to healthcare SME internationalization.

Similarly, Ojala and Tyrväinen (2007) concluded that finding the right contacts in a host market is a major barrier, which the findings of this study again support, strengthening the conclusion that finding a right partner is crucial to high-tech SME internationalization. In addition, Ojala and Tyrväinen (2007) found that many challenges high-tech SMEs encounter were related to the company resources and capabilities, especially language skills. This study suggests that challenges were caused by the lack of human resources, supporting the findings of Ojala and Tyrväinen (2007) to some extent. Both studies suggested that hiring local personnel in the host market would benefit the company. Language skills of the personnel were seen as a great barrier in Ojala and Tyrväinen's (2007) study, which is contradictory to the findings of this study, concluding that lack of language skills do not cause any challenges.

In contradiction to the findings of this study, Bell (1997) and Richardson (2010) found that high-tech SMEs face significant challenges with financial resources. This study did not find financial barriers as challenges, as none of the companies interviewed had trouble with the lack of financial resources, even though it is generally accepted that SMEs often face limitations in resources. The lack of financial barriers can be explained with different home-market characteristics as Richardson (2010) researched Malaysian companies. In this study, it was found that governmental assistance had a major role in ensuring the companies' financial competence in internationalization activities. Thus, there might be differences in the government export assistance between Finland and Malaysia. However, Bell's (1997) research included also Finnish companies. The findings suggested that one of the greatest challenges was obtaining external financing, which is contradictory to this study. As Bell's (1997) study was conducted over 20 years ago, some of the finance-related barriers were found to be due to reasons such as high cost of IT and instability of some high-tech sectors, making banks reluctant to lend money for the high-tech companies.

Furthermore, Cahen et al. (2016) found that the greatest barriers for internationalizing high-tech SMEs were caused by the home-market institutional environment, including lack of government assistance and incentives. This is contradictory to the findings of this study, indicating the home market is not considered to be causing any major barriers, and the home-market institutional environment offering satisfactory services for internationalizing companies. This difference in findings could be the result of very different home-market environments, as the study by Cahen et al. (2016) was conducted in Brazil, which can be categorized as a developing country.

5.2 Managerial recommendations

In addition to the theoretical implications, the study also aims to provide practical recommendations for the managerial teams of companies planning on entering the Saudi Arabian market. The managerial recommendations are directly based on the empirical findings of the study. This section will introduce six managerial recommendations:

1) Focus on finding the right partner in Saudi Arabia,
2) Invest time in acquiring knowledge on the local regulations,
3) Focus on applying secure payment methods,
4) Learn about the local business culture,
5) Be prepared to hire additional personnel to support the Saudi operations,
6) Follow the oil price fluctuations.

The findings of this study emphasized choosing the right partner in Saudi Arabia, and its importance in succeeding in the market. A sufficient amount of time should be put into researching the potential partners, especially their networks and personal relationships with key stakeholders in government and business elite. The findings in this study indicate that the networks of the partner are very important for foreign companies and should be evaluated carefully. Even if a possible partner has connections to the royal family, it should be assessed cautiously, as not all of the royal family connections are helpful when building a business in the country. Furthermore, the partner should know how to do business with expensive high-end health-tech products. Time should be put into finding the right partner also because choosing the wrong partner can cause major complications later and it might turn out to be very difficult to change partners later on. If a company is lacking the right networks, such can be acquired through having a local partner with the suitable connections. Right connections of the partner can provide a crucial advantage in, for instance, highly competitive biddings for government projects. Based on the findings, Arab Health trade fair could be recommended for companies interested in Saudi Arabia as a forum for meeting possible partners. In addition, home-market government assistance was found to be helpful when assessing the potential partners.

The Saudi Arabian regulations for health-tech products were found to cause substantial challenges, thus it is recommended to invest time and effort in acquiring a sufficient amount of knowledge. Especially the mandatory SFDA-related permissions were found to be difficult to obtain, as the regulations have become stricter in the recent years. Furthermore, it was reported that the regulations and demands evolve constantly and it thus takes time and effort to stay up to date on the SFDA-related knowledge. When entering the Saudi Arabian market, a company should be aware of the high demands set by the SFDA and know that the processes take time and possibly human resources. The empirical findings showed that it is not unusual to end up hiring additional personnel to handle the workload related to the local regulations, which indicates the importance of the issue.

The findings indicated that one should also focus on secure payment methods when entering the market. The interviewed companies in this study all mentioned it being important to ensure payments by the Saudi partners. Several reasons for this were mentioned: first, the Saudi Arabian government is often slow and even reluctant to pay. Second, if the oil prices go down abruptly, the orders might be set on hold, making it important to have a way to receive payment from the orders already manufactured. Solutions for the problem, which have been discussed in this study, are obtaining government export sales insurance, acquiring a letter of credit and utilizing a prepayment plan.

Furthermore, it is recommended that a company entering the Saudi Arabian market performs thorough research on the Saudi Arabian business culture. The lack of knowledge on the business culture can cause misunderstandings and may, in the worst case, end partnerships. This study found that the host-market culture was a relevant cause for challenges. One should learn for example about the authoritarian culture as well as the peculiarities in business habits of the locals, focusing on issues like pricing negotiations and profit sharing between the local partner and the exporting company. In addition, one should be aware of religion and politics being unsuitable small talk subjects with the Saudis. In fact, these subjects should be avoided altogether. In relation to the local culture, it should be taken into account that marketing material has to be done by the local standards.

One should also be aware that some obstacles encountered during internationalization could only be overcome by adding manpower. Thus, it is recommended that a company is prepared to invest in hiring additional staff for the purposes of internationalizing to Saudi Arabia. This study found, that especially additional positions regarding handling the host-market regulations, and managing the host-market operations locally, were needed to conduct successful business operations in Saudi Arabia.

Last, a company should be aware of the possible instabilities caused by oil price fluctuations, which sometimes greatly affect the business operations in Saudi Arabia. The oil price fluctuations can shut down government-funded projects practically overnight, affecting present and future orders. However, the oil price instability is a problem out of a company's own hands. Thus, the only measure a company can take is to monitor the oil market fluctuations and prepare for the possible effects of the shifts in the market. To make sure the business is as stable as possible in the Saudi Arabian market if instabilities occur, a company should consider the aforementioned recommendations.

5.3 Suggestions for further research

This section aims to suggest possible directions for further research on the topic or similar topics to this study. The suggestions derive from notions the researcher made when conducting the study, either rising from unanswered questions, limitations of the study, or the research findings.

The literature review on HTSME internationalization revealed that there are not yet generally accepted theories explaining the phenomenon. Thus, the HTSME internationalization could be an important topic for further research, in order to provide a better framework for the internationalization of high-tech companies, in a world where technology and internationalization are both rapidly growing. Moreover, even though the theoretical background for barriers to SME internationalization is very well established and has been researched vastly, barriers to HTSME internationalization should be researched more, in order to form a suitable model for the barriers HTSMEs in particular encounter, as the present findings are inconsistent.

Research similar to this has been conducted in many different cultural contexts. As the findings and contributions of these types of culture-specific studies are very closely tied to the particular host and home markets, the results cannot be directly applied to other settings with different environmental factors. Thus, it is suggested to further research the topic in other cultural contexts. Furthermore, much of the research has been done from the viewpoint of companies from Western cultures. Further research on the topic could be done from the viewpoint of companies from cultural areas such as the Middle East, Africa or East Asia, entering markets of Western cultures. Moreover, cross-cultural studies on the barriers to HTSME internationalization could provide a more applicable set of findings.

As the selection of the right local partner was found to be essential in this study as well as in some of the earlier studies, further research on the success of failure in selection of a partner for internationalizing health-tech companies is suggested. Finally, it would be of great interest to study further the role of government export assistance in finding the right partner in a foreign market, as the significance of the host-country partnerships and the assistance provided by the government were both emphasized in the findings of this thesis.

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APPENDIX

Interview themes

<u>Background questions</u>

- Business in Saudi Arabia
    - Current state of business in Saudi Arabia
    - When was the opportunity in Saudi Arabia recognized?
    - When did the company start doing business in the market?
    - How did the company enter the market and why that particular way?
- Other international activities of the company
    - Does the company do international business elsewhere other than Saudi Arabia?
    - Was there international activity before entering Saudi Arabia?

How have the following themes affected your company's internationalization to the Saudi Arabian market? Which ones do you consider the most challenging and which ones the least challenging?

<u>**Internal barriers (barriers that rise from company's internal operations)**</u>

Managerial-based barriers:

- Managerial background
    - Past international experience
    - Education
- Attitude towards Saudi Arabia as a potential market
- Risk taking tendencies
- Lack of managerial time

Knowledge-based barriers:

- Lack of knowledge of internationalization processes within the company
    - Internationalization strategies, documentations, logistics etc.
- Lack of knowledge about opportunities in Saudi Arabia
- Lack of knowledge on the Saudi Arabian market and business environment
- Lack of knowledge external financing
- Lack of knowledge export assistance
- Language skills

Resource-based:

- Human resources
    - Lack of personnel
    - Inadequate export personnel
    - Difficulties in finding and hiring skilled personnel for exporting tasks

- Production resources
    - Limited production capabilities
- Financial resources
    - Access to short-term funding for internationalization activities

Market entry barriers:

- Finding the right partner
- Generating sales
- Gaining access to distribution channels
- Generating repeat business
- Transportation costs and logistics
- Difficulties in finding warehousing

Marketing mix:

- Differentiating product for the host-market standards and customer expectations
- Pricing
    - Inability to offer competitive pricing due to high expenses
    - Inability to match competition's pricing
- Figuring out the right promotional approach
- Offering aftersales service

<u>External barriers (barriers that rise from external environment)</u>

Home-based market barriers:

- Sufficient government export assistance
- Government export incentives (tax incentives, innovation financing etc.)
- Possible restrictive regulatory framework

Host-based market barriers:

- Economic instabilities
    - Currency related instability, low income, working with local banks, difficult payment methods, slow collection of payments from customers
- Unstable political environment
- Sociocultural differences
    - Role of networks, differences in communications, maintaining relationships with stakeholders, differences in customer habits, religion, language, corruption, business culture
- Legal and regulatory differences
    - Regulations, legal framework, bureaucracy, taxes, customs, price control, tariffs, ease of setting up a business

Industry-based barriers:

- Industry structure
    - Industry regulations
    - Challenges within the industry

- Competition
    - Competition by local companies in Saudi Arabia
    - Competition by foreign companies in Saudi Arabia
    - Competition by multinational enterprises