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UNIVERSITY OF VAASA

Munkhjargal Badamgarav

The Role of Networks in Overcoming SME Internationalization Challenges:

A Comparative Case Study of Pharmaceutical Companies from Developed
and Emerging Economies

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Author:	Munkhjargal Badamgarav		
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ABSTRACT :

This thesis examines the internationalization challenges faced by two pharmaceutical small and medium-sized enterprises (SMEs) from different economic backgrounds and their network utilization to overcome these challenges. Company A, from Finland, represents a developed economy, whereas Company B, from Mongolia, represents an emerging economy. This study employs a qualitative, comparative case study approach to explore how different types of networks (social, business, institutional, and digital networks) used to address internationalization challenges (regulatory and institutional challenges, financial and resource constraints, lack of foreign market knowledge and experience, market-specific challenges, cultural and communication differences, and technological and digitalization challenges). The primary data was collected through semi-structured interviews with two case companies' key managers, which provided a deep understanding of the pharmaceutical SMEs' internationalization challenges and the network utilization to overcome those challenges.

The findings show that SMEs from developed economies benefit from a diverse and integrated network ecosystem. This integrated network utilization helps them address internationalization challenges more effectively. In contrast, SMEs from emerging economies depend heavily on social networks and lack strong institutional and digital networks. This hinders their success in the international market. The study contributes to international business literature with findings of how SMEs' home-country economic backgrounds shape the challenges they face in internationalization. Additionally, this research found that networks play a vital role in overcoming these challenges. SMEs from developed economies encounter fewer internationalization challenges compared to SMEs from emerging economies. Companies aiming to enter new markets should strategically combine social, business, institutional, and digital networks to tackle these challenges. Furthermore, governments should improve institutional support systems for their SMEs for sustainable international growth.

KEYWORDS: (internationalization challenge, SMEs, network, pharmaceutical, Mongolia, social network, business network, institutional network, digital network)

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1 Introduction

This chapter outlines the rationale for the study, starting with the background and significance of small and medium-sized enterprises (SME) internationalization, the challenges faced by SMEs' internationalization, and the role of networks in internationalization. It then identifies existing research gaps and key problems addressed in this study. Finally, the research objectives are presented, followed by an overview of the thesis structure.

1.1 Research background, significance of SMEs, and their internationalization

Firms' internationalization has been a focus of research for many decades, and scholars have examined firms' internationalization from various perspectives (Cavusgil & Knight, 2015). In particular, the internationalization of SMEs has garnered attention over the past few decades due to their substantial economic contributions to countries' economic development (Gamage et al., 2020; Alsuwaidi et al., 2024). SMEs comprise more than three-quarters of all business entities worldwide. That represents approximately 90% of businesses and employs around 60% of the global workforce, which reveals the crucial role in global economic development (Gamage et al., 2020; Doojav et al., 2020). Given that SMEs are essential to a country's economic development, their successful internationalization in the global market is crucial (Chaldun et al., 2024). To better understand the internationalization of SMEs, firstly, this research examines how internationalization has been conceptualized in the literature over time by various scholars.

Johanson and Vahlne (1977) provided the most cited definition of internationalization, describing it as a firm's gradual process of increasing its commitment to foreign markets by acquiring experiential knowledge and reducing uncertainty. Johanson and Mattsson (1988) defined internationalization from a network perspective, which is a process that

occurs through the development and management of relationships and networks, where firms depend on partnerships and interactions to enter and operate in foreign markets. Knight and Cavusgil (1996) explained internationalization as a process of firms achieving significant international reach by leveraging innovative capabilities and global market opportunities. According to Chandra et al. (2021), internationalization refers to a strategic process of firms expanding their operations beyond national borders by leveraging innovation, networks, and market opportunities while contributing to economic growth. Additionally, *“SME internationalization brings numerous growth prospects by facilitating access to foreign markets and expanding operational scale”* (Acs et al., 1997). The following part explains why the SMEs' internationalization is important and what the triggers are for SMEs to enter foreign markets.

According to Paul et al. (2017), SMEs contribute to global economic growth by introducing new and innovative products and services. It improves market competition across industries. Moreover, SMEs' flexibility, agility, and ability to adapt to new markets enable them to enter foreign markets rapidly. SMEs' internationalization fosters the knowledge transfers, global technology development, and innovative practices (Steinhäuser et al., 2020). According to Stuart (2011), SMEs play a positive role in decreasing poverty and income inequality, providing employment opportunities, developing innovation and technological advancements, and addressing various social challenges. SMEs utilize local resources in their manufacturing processes, which contributes to local economic growth by generating financial turnover, establishing supply chain networks, and creating employment opportunities (Asare et al., 2015). Therefore, SMEs success brings opportunities to increase revenue, enhance innovation, build global brand recognition, and access valuable networks and resources (Knight & Cavusgil, 2004; Paul et al., 2017; Johanson & Vahlne, 2009), while also allowing countries to benefit economically through job creation, export income, and increased tax revenues (Gamage et al., 2020).

However, while globalization and internationalization opportunities provide significant advantages to the firms, they also pose the risk of market saturation because of international competitors, such as multinational enterprises (MNEs). This trend can bring disadvantages to domestic SMEs without specific support to protect them against MNEs (Lis et al., 2012). Specifically, when the domestic market is small and unrestricted, allowing free entry to foreign MNEs without protective policies, internationalization becomes a survival strategy for SMEs.

SMEs' internationalization journey is a complex process due to the numerous challenges they face, which can hinder their chances of successfully expanding internationally (Paul et al., 2017; Johanson & Vahlne, 2009). Not all SMEs succeed in the global market or benefit from global scalability. The critical challenges that hinder SMEs' internationalization success include resource constraints (Bellone et al., 2010, as cited in Paul et al., 2017), market knowledge gaps (Freeman et al., 2012, as cited in Paul et al., 2017), operational challenges (OECD, 2009, as cited in Paul et al., 2017), institutional barriers (Majocchi & Zucchella, 2003, as cited in Paul et al., 2017), competitive pressures (Coviello & Munro, 1997, as cited in Paul et al., 2017), and cultural and social differences (Hofstede, 1984, as cited in Paul et al., 2017). According to Chandra et al. (2021), internationalization challenges are contextual and vary across firms. Depending on their size, industry, and the institutional and economic conditions of their country of origin, firms encounter different challenges.

For example, SMEs from emerging economies face greater challenges compared to those from developed economies due to factors such as institutional infrastructure development, access to financing, government support, and networking opportunities (Ahimbisibwe et al., 2020; Cardoza et al., 2016; Chandra et al., 2021; Ciravegna et al., 2014; Kiss et al., 2012; Narooz & Child, 2017). Moreover, SMEs from emerging economies often face more significant challenges. The reason is mostly countries' underdeveloped infrastructure, lower living standards, slower economic growth, a

weaker legal business environment, and reduced government support (Gamage et al., 2020).

Networks are important for a SME's successful internationalization, and building a network is a critical strategy for addressing internationalization challenges (Chetty & Holm, 2000). Additionally, in resource-constrained and uncertain environments, network utilization can significantly decrease market entry challenges and increase the chance of success (Johanson & Mattsson, 1988; Musteen et al., 2014). The internationalization success of SMEs largely relies on their networks (Steinhäuser et al., 2020). Therefore, firms are increasingly prioritizing the development of various types of networks to access essential resources and market knowledge. It provides an opportunity to reduce uncertainties in foreign markets and seize international opportunities effectively (Han et al., 2024).

1.2 Research gap

Many studies have examined the internationalization of SMEs from a network perspective in both developed and emerging economies, often separately. Most research studies have focused on the internationalization of SMEs and their challenges and opportunities in developed economies (Gamage et al., 2020). However, studies on emerging economies are increasing. Because such studies represent diverse contexts with unique challenges, this attracts researchers to investigate (Child et al., 2022). For example, Sanyal et al. (2019) explored the internationalization challenges of SMEs in emerging economies from a firm's network perspective. Johanson et al. (2024) and Goncalves et al. (2024) examined how SMEs in developed economies strategically utilize knowledge and networks for effective internationalization. Ciravegna et al. (2014) examined the differences in network utilization during internationalization between a developed economy and an emerging economy, one of the few studies that compares networking strategies across different economies. However, their study focused on the

high-tech industry, which differs from the industry type of the case firms examined in this research.

Despite previously published extensive research on SMEs' internationalization and the role of networks, significant gaps remain. Particularly in the comparative analysis of SMEs in developed versus emerging economies across a broader range of industries (Child et al., 2022; Dekel-Dachs et al., 2021; Narooz & Child, 2017). As stated previously, most existing studies have examined SMEs' internationalization in a network perspective separately, focusing solely on developed or emerging economies. Such studies did not address the primary differences between different economic contexts of firms. This lack of comparative analysis, especially in the networking context, highlights a crucial gap in the research. Therefore, there is a need to enhance understanding by examining and comparing the SMEs internationalization and its challenges for SMEs from both developed and emerging economies within the framework of networking.

Additionally, research on SMEs' internationalization often focuses on broad industries, overlooking challenges within the specific sector, such as the pharmaceutical sector. SMEs in the pharmaceutical sector face unique challenges, such as strict international regulatory compliance and extended product approval timelines, that require strong networking capabilities from the firms in the global market (Grant, 2024). Compared to other sectors, SMEs in the pharmaceutical sector encounter greater challenges in internationalization due to institutional voids, regulatory complexities, liability of foreignness, limited resources, and geopolitical constraints (Dekel-Dachs et al., 2021). This industry is unique due to its importance in public health, contribution to innovation, and complex global regulatory process (Grant, 2024; Healthtech Finland, 2023; Takawira & Pooe, 2024; Waktole & Negera, 2024). Therefore, it is crucial to focus on the internationalization challenges faced by SMEs in the pharmaceutical sector; moreover, the absence of comparative studies across different economies in this sector highlights the most critical research gap.

Lastly, while many findings focus on the importance of networks in facilitating firms' successful internationalization, most studies generalize the concept of networking without distinguishing among different types of networks (Han et al., 2024; Magni et al., 2021). For instance, Han et al. (2024) systematically review literature on networks and identify a crucial oversight. Studies often treat networks as identical and neglect the types, functions, or actor roles. This gap limits theoretical clarity and practical guidance, as decision-makers and managers cannot determine which network types are most effective for addressing specific internationalization challenges. Due to these research gaps and the need for such studies, the following section explains the objectives of this research.

1.3 Research objectives of the study

Based on the previous discussion and the existing research gaps, the main objective of this research is outlined, along with three additional sub-objectives.

Main objective

To explore and compare how pharmaceutical SMEs from emerging and developed economies utilize networks to overcome the internationalization challenges of entering foreign countries.

Sub objectives

- (1) To identify and compare the types of internationalization challenges the SMEs from different economies encounter.
- (2) To identify the different types of networks utilized by these SMEs.
- (3) To empirically explore how Finnish and Mongolian pharmaceutical SMEs utilize different types of networks to overcome internationalization challenges.

This research will focus on the internationalization challenges SMEs face at the market entry stage, as this is the most difficult period for establishing a foundation for successful business abroad. The networking plays a vital role in the early stages of internationalization for SMEs, by providing essential resources, market knowledge, and connections that effectively facilitate entry into new markets (Musteen et al., 2014; Ojala, 2009; Steinhäuser et al., 2020; Galkina & Chetty, 2015).

The case firms examined in this research are pharmaceutical SMEs in Finland and Mongolia offering research and development (R&D) based healthcare products that aim to expand their operations into foreign countries. The justification for selecting Finland and Mongolia as the focus countries in this study is based on their contrasting economic contexts. Finland represents a developed, innovation-driven economy with well-established institutional support for firms' internationalization, whereas Mongolia represents an emerging economy with a less developed international business infrastructure. Additionally, both countries have relatively small populations and limited local market sizes, with fewer pharmaceutical firms operating, making them suitable for a comparative analysis of SMEs in this sector. Additionally, the unique nature of the highly regulated pharmaceutical sector, which faces many international challenges compared to common industrial sectors, makes this research particularly noteworthy.

1.4 The structure of the study

This thesis is divided into five key chapters: introduction, literature review, research methodology, findings, and conclusions.

The first chapter presents the main research topic and the importance of SMEs and their internationalization strategies. It describes the background of this research and the growing role of networks in firms' internationalization. The chapter also identifies a research gap and then outlines the research goals and objectives.

The second chapter offers a comprehensive overview of the literature. It starts with key theories on internationalization, such as the Uppsala model, network theory, and the "born globals," which serve as the theoretical foundation for this research. The chapter then discusses the challenges SMEs face in internationalization and different types of networks, such as social, business, and institutional networks. Additionally, it highlights the growing importance of digital platforms for firms' internationalization.

The third chapter covers research methodology. The study used a qualitative, comparative case study approach to examine two pharmaceutical SMEs. The chapter details the selection of these two cases, data collection via semi-structured interviews and secondary sources, and how the data were analyzed with thematic and cross-case analysis.

The fourth chapter presents the research findings. It begins by discussing common challenges faced by SMEs during their internationalization and provides detailed descriptions of each company's case. The chapter covers Company A (Finland) and Company B (Mongolia)'s internationalization backgrounds, the types of networks they used, and their internationalization challenges. It concludes with a comparative analysis highlighting key similarities and differences in network utilization and internationalization challenges.

The final chapter concludes the main findings. It emphasizes this research's contribution to existing theories. The chapter also includes managerial implications. Finally, it acknowledges the research limitations and proposes directions for future research.

2 Literature review

This chapter provides a comprehensive review of the key theoretical and empirical studies related to the internationalization of SMEs. The primary objective is to establish a foundation for understanding the challenges that SMEs face during the initial stage of internationalization, as well as the crucial role of networks and relationships in addressing these challenges.

The review starts with an overview of established internationalization theories, including the network perspective. It then focuses on the primary internationalization challenges and the role of networks in overcoming these challenges. The chapter also investigates various types of networks, such as social, business, institutional, and digital, and evaluates each type of network's advantages and disadvantages in facilitating firms' internationalization.

2.1 Internationalization theories

Research articles related to international business and the internationalization process of firms have captured scholars' interest since the 1960s (Steinhäuser et al., 2020) and have served as a primary strategic guide for many companies. The Uppsala theory, the most cited internationalization theory, was proposed by Johanson and Vahlne in 1977. This model has undergone several revisions to adapt to the ever-changing global business landscape. The original theory was developed based on observations of traditional Swedish manufacturing firms expanding their operations into foreign markets. The main idea is that a company's internationalization is a gradual process and follows a general path. This is a complex process that requires significant costs, resources, knowledge, expertise, and time from the firms. Due to the high uncertainty in international markets, firms generally take many small steps to enter foreign markets. The model explains the internationalization process using change and state variables, reflecting four decades of shifts in global business (Cisneros-Reyes, 2021).

The original Uppsala theory emphasizes the concept of psychic distance between home and host countries (Johanson & Vahlne, 1977). The theory presents that a firm's internationalization is a gradual and incremental process driven by experiential learning and knowledge development. Firms enter foreign markets in stages. The process begins with low-commitment modes, such as exporting, and then increases commitment to higher modes, like foreign direct investment, as companies gain more experience in foreign markets. Firms are more likely to expand into countries with lower psychic distance, as these markets present less external uncertainty. Consequently, they prefer to enter markets that are similar to their home market. The perceived psychic distance decreases when a firm acquires experience and knowledge in a foreign market (Johanson & Vahlne, 2009). However, the Uppsala model has been criticized for not explaining the early and rapid internationalization steps of international new ventures (INVs) and born globals (BGs). It primarily focuses on the gradual steps taken by larger firms, although it remains relevant for explaining the internationalization challenges that SMEs face (Paul et al., 2017). Despite its limitations in explaining the internationalization processes of all business entities, including traditional manufacturing firms, INVs, and BGs, many new internationalization theories have been developed based on the Uppsala theory (Arvidsson & Arvidsson, 2019).

Research on BGs has significantly grown due to the increasing involvement of these firms in international operations (Sharma & Blomstermo, 2003). Unlike the traditional model of gradual internationalization, the BG theory suggests that certain firms (digital or knowledge-based industries) can operate internationally from their inception. Driven by rapid technological advancements and globalization, many firms, particularly SMEs, skip the gradual internationalization process that typically involves starting in nearby markets. Instead, they entered the global market from the inception, and these firms are collectively known as INVs and BGs (Sharma & Blomstermo, 2003). INVs and BGs do not have to be large firms; for example, a BG can be an SME that operates in multiple countries shortly after establishment (Knight & Cavusgil, 1996).

There are several approaches to understanding firms' internationalization. However, this thesis focuses on the role of networks in addressing the challenges of internationalization. Therefore, the following sections will explore the concept of networks and their significance in overcoming these challenges. Another important internationalization theory is network theory, introduced by Johanson and Mattsson in 1988. This theory suggests that firms utilize different types of networks to enter new markets abroad. In contrast to the Uppsala model, network theory emphasizes how networks enable rapid internationalization (Musteen et al., 2014; Steinhäuser et al., 2020; Galkina & Chetty, 2015). This approach underscores how firms leverage relationships and connections to access market resources, knowledge, and opportunities that accelerate their entry into foreign markets (Ojala, 2009).

According to network theory, markets are viewed as interconnected networks of relationships. A firm's success in internationalization is influenced by its ability to establish, develop, and maintain meaningful connections with other actors within the network (Johanson & Mattsson, 1988). These actors typically include key stakeholders such as suppliers, customers, and business partners, and relationships with them facilitate obtaining resources, knowledge, and opportunities (Chetty & Holm, 2000; Costa et al., 2016). Firms' internationalization involves leveraging their network advantages, with partner companies serving as bridges to other networks in the international market. Johanson and Vahlne (2009) noted that firms are typically situated within networks of other firms; their relationships enable them to obtain valuable market information and knowledge necessary for internationalization. Consequently, companies build and manage their positions within these networks to access resources controlled by firms in other markets. This network comprises firms that mutually benefit each other and provide access to shared resources (Johanson & Mattsson, 1988). The strength of these relationships relies on mutual trust, knowledge acquisition, and commitment (Paul et al., 2017).

According to Ojala (2009), networks are important in facilitating firms' successful internationalization. Firms may establish new connections proactively or leverage existing ties when opportunities arise. When the seller initiates and manages the networking, it is referred to as active networking; conversely, when the buyer starts the process, it is termed passive networking (Johanson & Mattsson, 1988). Both parties can benefit from active networking by learning from one another, acquiring new knowledge, and using this knowledge to enter foreign markets (Ojala, 2009). Due to limited resources and capabilities, SMEs' internationalization heavily depends on their network relationships with partners abroad (Paul et al., 2017). Therefore, networking is essential for the internationalization of SMEs.

Johanson and Mattsson (1988) proposed three key propositions underpinning the network approach:

- (1) Companies rely on relationships to obtain resources and enter new markets.
- (2) Relationships function as external market assets that require time and effort to cultivate.
- (3) Connections among firms are dynamic and interdependent, fostering broader network effects.

The network approach has proven particularly applicable to SMEs, whose internationalization often relies heavily on their connections, relationships, and networks. Building strong connections in both home and host countries is important, as these networks serve as bridges to foreign markets and help overcome the liabilities of outsiders, such as the inability to gain access to key networks in foreign markets (Johanson & Vahlne, 2009). For SMEs operating in culturally distant or highly competitive markets, local networks in host countries are especially critical for managing risks and obtaining operational support (Håkansson & Ford, 2002).

Despite its advantages, the network approach has limitations. Building and maintaining networks is a time-consuming process, and it does not always have positive outcomes. Trust, compatibility, and mutual benefit are essential for successful collaboration, and their absence can lead to conflict or inefficiencies (Carson, Gilmore, & Rocks, 2004). Furthermore, networks are dynamic, and they evolve with firms' growth or markets' change (Halinen & Törnroos, 1998).

This subchapter on internationalization theories focuses on the conceptual foundation for addressing the main research objective of how SMEs from developed and emerging economies utilize different types of networks to overcome internationalization challenges. By reviewing past and current internationalization theories, such as the Uppsala model, traditional network theory, BG theory, and newer network perspectives, this section presents the mechanisms of SMEs' internationalization and the role of networks in that process. Including these theories is important because it helps clarify how and why SMEs internationalize. It links this research to popular theories and ideas in the field of internationalization, demonstrating that the companies' internationalization is not random. The theories highlight the reasons and motives behind firms' internationalization and how they utilize different types of networks to overcome international challenges. These links are explored in more detail in the empirical part of the study.

2.2 SMEs' internationalization and its challenges

In today's globalized world, research on SMEs' internationalization is crucial due to their significant contributions to economic development (Knight & Liesch, 2016; OECD, 2019). Despite their smaller scale, SMEs offer several advantages. Those including their ability to contribute to economic development through job creation and innovation (Pavitt et al., 1987). Furthermore, SMEs play a crucial role in poverty reduction by generating new job opportunities, technological capabilities, innovative product development, and local revenue generation (Arudchelvan & Wignaraja, 2015).

The latest 12 review papers published from 2017 to 2025 summarize the possible challenges that SMEs encounter while internationalizing into different countries. The most common words to describe firms' challenges for internationalization are barriers, problems, difficulties, restrictions, uncertainties, risks, and constraints in these research articles. Therefore, based on the context and focus of the paper, each reviewed article refers to internationalization challenges using different terms. However, this review focuses more on the research articles that use the word “challenge” to describe the difficulties firms must overcome or adapt to during internationalization. The following table summarizes the main findings of all 12 review papers regarding internationalization challenges.

Table 1. Review articles for SMEs' internationalization challenges.

Author and year	Number of reviewed articles	List of the challenges found from the reviewed articles	Economic background for the reviewed firms	Recommendations related to network how to mitigate the internationalization challenges
Paul, J., Parthasarathy, S., & Gupta, P. (2017)	211 articles (1980 - 2016)	<p>Macro problems (External institutional barriers, regulatory issues, economic environment, weak trade policies, unfavorable exchange rates).</p> <p>Micro problems (Resource constraints, lack of international experience, knowledge and experience barriers, financial limitations).</p> <p>Internal problems (Limited managerial capacity, lack of export experience, weak financial resources, knowledge gaps) and external problems (foreign market regulations, trade restrictions, lack of local market understanding).</p> <p>Other challenges</p> <p>Human resource management issues (difficulty in recruiting and retaining talent with international experience), export marketing challenges (adapting products to international markets, branding difficulties, weak distribution networks), and inadequate social capital resources (weak networks and alliances in foreign markets).</p>	SMEs from both developed and emerging economies were reviewed, but the exact number is not specified	<ul style="list-style-type: none"> • Leveraging networks: Build relationships with international partners and leverage trade associations. • Utilizing government support: Take advantage of trade policies, export incentives, and institutional support programs. • Enhance market knowledge: Invest in market research, understand cultural differences, and comply with international regulations.
Kahiya, E. T. (2018)	100 articles (1960-2016)	<p>Knowledge and experience: Lack of international market knowledge, inadequate/untrained personnel for exporting, difficulty in gathering foreign market data, Lack of export marketing research, lack of international business experience</p> <p>Procedural barriers: Difficulties in meeting product quality/packaging requirements, complex export procedures and documentation, challenges in locating foreign distributors/agents, communication problems with overseas customers, Shipping and logistics challenges, payment delays and collection difficulties</p> <p>Resource barriers: Limited working capital to finance exports, high market development costs, lack of financial assistance for exporters, high transportation/insurance costs, lack of production capacity to meet export demand, high costs of adapting products for foreign markets, Inability to offer after-sales services abroad</p> <p>Exogenous barriers (External to the firm): Strong competition in foreign markets, high tariff and non-tariff barriers, exchange rate risks and fluctuations, political and economic instability in target</p>	Developed economies – 60 Emerging economies - 40	<ul style="list-style-type: none"> • Building networks and partnerships • Engaging in strategic alliances with local firms • Enhancing export support programs through government agencies, embassies, and trade missions. • Using export intermediaries to navigate complex regulations. • Developing local presence through subsidiaries or partnerships to adapt products and marketing strategies.

		markets, unfavorable home country regulations and policies, cultural differences and consumer preferences, Institutional and legal barriers in host markets		
Chandra, A. A., Paul, J., & Chavan, M. (2019)	65 articles (2000-2019)	<p>Institutional challenges: Weak government support, inefficient legal and regulatory frameworks, rigid trade policies, bureaucratic red tape, and a lack of export promotion policies.</p> <p>Financial challenges: Limited access to financing, high transaction costs, and expensive export licensing and compliance fees.</p> <p>Knowledge and experience challenges: Lack of international market knowledge, poor managerial competence, and limited information on foreign trade opportunities.</p> <p>Geographical and Infrastructure Barriers: High transportation and logistics costs, poor infrastructure (ports, roads, and communication networks), and limited connectivity to global markets.</p> <p>Competitive challenges: Intense competition from foreign firms, Limited economies of scale for international competition.</p> <p>Cultural and psychic distance challenges: Language and cultural differences, difficulty in adapting products to different consumer preferences, limited networks and relationships in foreign markets</p>	Developed economies – 40 Emerging economies - 25	<ul style="list-style-type: none"> • Develop international partnerships and alliances to overcome resource constraints. • Encourage SMEs to participate in business networks and industry clusters to access resources and knowledge. • Strengthen ties with foreign distributors, customers, and suppliers.
Sanyal, S., Hisam, M. W., & Baawain, A. M. S. (2019).	30-40 articles (1977-2023)	<p>Resource constraints: Lack of financial resources, market knowledge, and skilled labor.</p> <p>Regulatory complexities: Bureaucratic hurdles, trade policies, and unpredictable policy changes in emerging markets.</p> <p>Cultural differences: Differences in business practices, language barriers, and consumer behavior.</p> <p>Market specific challenges: Lack of infrastructure, volatile economic conditions, and legal uncertainties.</p> <p>Competitive pressures: Difficulty in competing with established multinational corporations.</p> <p>Knowledge gaps: Limited understanding of foreign markets and lack of access to international networks.</p> <p>Entry barriers: Difficulty in forming local partnerships or gaining consumer trust.</p> <p>Technological limitations: Limited digital capabilities and difficulty in adapting to technological advancements.</p>	All emerging economies	<ul style="list-style-type: none"> • Developing strategic partnership and alliance programs: Governments and industry associations should create initiatives to facilitate SME partnerships with local and global firms. • Proceeding knowledge transfer mechanisms: Encourage workshops, training, and mentorship programs to enhance knowledge-sharing between SMEs and established firms.
Chandra, A. A., Paul, J., &	65 articles	<p>Internal Barriers:</p> <p>Human capital constraints (Lack of skilled workforce, Limited managerial competence, Inadequate international business knowledge), Resource Poverty (Limited access to financial</p>	All emerging economies	<ul style="list-style-type: none"> • SMEs should leverage business networks to access foreign markets. • Engage in trade associations and international partnerships.

Chavan, M. (2020).	(2007-2017)	<p>resources, Poor technological capabilities, Limited innovation and R&D capacity), Product Quality Issues (Inability to meet foreign quality standards, Poor adaptation to foreign consumer preferences, Lack of branding and differentiation strategies), Managerial Capabilities (Lack of experience in global markets, Inadequate risk management strategies, Low levels of entrepreneurial orientation).</p> <p>External Barriers:</p> <p>Currency and transactional barriers (exchange rate risks, high transaction costs for cross-border payments, complex import/export procedures), government and institutional barriers (bureaucratic red tape in export processes, weak government support for SMEs, unfavorable trade policies and tariffs), socio cultural barriers (cultural differences in consumer behavior, language barriers affecting communication with foreign buyers, limited networking opportunities), market conditions and competition (high competition from established foreign firms, market fragmentation in developing economies, lack of access to global distribution networks).</p>		<ul style="list-style-type: none"> • Develop relationships with foreign distributors and suppliers.
Naradda Gamage, S. K., Ekanayake, E. M. S., Abeyrathne, G. A. K. N. J., Prasanna, R. P. I. R., Jayasundara, J. M. S. B., & Rajapakshe, P. S. K. (2020).	110 articles (1990 - 2020)	Examined global challenges faced by SMEs in the context of economic globalization include: market competition, global capital and economic crises, information communication technology (ICT), the emergence of multinational corporations (MNCs), transnational corporations (TNCs), international terrorism and religious conflicts, international trade wars, and international dumping.	SMEs from both developed and emerging economies were reviewed, but the exact number is not specified	<ul style="list-style-type: none"> • Networking and collaboration: Building relationships with MNCs, universities, and industry partners to access resources.
Alsuwaidi, F., Raziq, M., & Batool, U. (2024).	19 articles (2007-2023)	<p>Internal barriers:</p> <p>Limited resources (financial constraints, high internationalization costs, lack of managerial skills), knowledge and information gaps (lack of awareness of foreign markets, limited experience in handling global operations, inability to identify market opportunities), credibility and reputation</p>	Developed economies – 11 Emerging economies - 8	<ul style="list-style-type: none"> • Engage with embassies, trade representatives, and foreign investment agencies for market intelligence. • Participate in trade fairs and networking events to build relationships. • Enhance digital presence to improve visibility in global markets.

		<p>challenges (difficulty in establishing trust with foreign buyers, weak brand presence in global markets, low recognition among international stakeholders).</p> <p>External barriers: Regulatory and Institutional Barriers (Complex trade policies, bureaucratic red tape in foreign markets, high tariff and non-tariff barriers)</p> <p>Market entry and competition challenges: Strong competition from established multinational corporations (MNCs); difficulty in forming partnerships with foreign distributors; barriers related to product adaptation and localization. Cultural and Communication Barriers: Language differences; cultural misalignment affecting business negotiations; difficulty in networking with key players in foreign markets.</p>		<ul style="list-style-type: none"> • Use online trade platforms, e-commerce, and digital networking to reduce dependency on physical trade missions.
Sreya, R. (2024).	300 articles (2010 - 2023)	<p>Resource constraints: Limited financial, human, and technological resources.</p> <p>Regulatory challenges: Tariffs, trade restrictions, and legal compliance difficulties.</p> <p>Cultural differences: Language, communication, and business practice misalignments.</p> <p>Logistical complexities: Cross-border supply chain and distribution issues.</p> <p>Limited international orientation: Lack of a global mindset and experience.</p> <p>Lack of confidence: Fear of navigating complex international business environments.</p> <p>Political instability: Unstable government policies, corruption, and risks of business disruption.</p>	All emerging economies	<ul style="list-style-type: none"> • Forming Strategic Partnerships – Collaborating with local distributors, multinational firms, and industry associations. • Seeking Government and Institutional Support – Accessing trade programs, funding, and export assistance initiatives.
Nirmala, A. R., Sukoco, B. M., Ekowati, D., Nadia, F. N. D., Marjan, Y., & Hasanah, U. (2024).	57 articles (2000-2021)	<p>Limited resources and financial constraints (Scarcity of financial, technological, and human resources; limited access to funding for international expansion; lack of export departments and physical resources).</p> <p>Inability to manage global networks and relationships (SMEs struggle to form international partnerships, weak business networks in foreign markets, difficulty in connecting with distributors, agents, and joint ventures).</p> <p>Limited information and knowledge for internationalization (Lack of understanding of international market conditions, weak legal and regulatory knowledge, insufficient entrepreneurial and managerial expertise).</p> <p>Limited internationalization of managerial capabilities (Owners and managers often lack international business experience, are unable to develop long-term global strategies, and have poor international risk management).</p>	Developed economies – 44 Emerging economies - 17	<ul style="list-style-type: none"> • Collaboration with larger companies: SMEs should partner with larger multinational corporations and collaborations provide access to international networks and expertise. • Leveraging founder/Leader experience: Prior international experience of leaders is crucial and utilizing personal networks and business relationships abroad. • Strengthening social and business networks <ul style="list-style-type: none"> • Engaging with local and international trade associations and forming strategic alliances and partnerships. • Government and institutional support: SMEs should leverage export incentives and funding schemes. • Seeking consulting services and advisory programs.

Koprivnjak Popović, T. (2024)	60 articles (1977-2023)	<p>Environmental barriers (Government procedures and support, Political and legal restrictions, Socio-cultural differences, Lack of trade institutions, Unfavorable foreign market conditions).</p> <p>Company-level barriers (Resource constraints (financial, human, technical) Marketing challenges (advertising, distribution, product quality), Lack of internationalization knowledge.</p> <p>Owner/Manager barriers (Lack of international experience, Lack of language skills, Resistance to internationalization)</p>	SMEs from both developed and emerging economies were reviewed, but the exact number is not specified	<ul style="list-style-type: none"> • Networking, strategic planning, and resource allocation as key ways to overcome barriers. • Building international partnerships, leveraging digital technologies, and government support programs as solutions.
Andini, D., & Kusnandar, H. F. (2024)	99 articles (2020 - 2024)	<p>Cognitive barriers: Limited awareness and understanding of international opportunities.</p> <p>Digital platform risks: Security, technological adaptation, and reliability concerns.</p> <p>Institutional constraints: Regulatory, legal, and bureaucratic barriers.</p> <p>Network coordination complexity: Difficulties in managing and leveraging international business networks.</p> <p>High financial requirements: The cost of expanding internationally and investing in digital transformation.</p> <p>Competitive disadvantages: Struggles against large multinational corporations (MNCs) with greater resources.</p> <p>Technological disparities: A gap in the adoption of digital tools compared to larger firms.</p> <p>Risk of innovation leakage: Fear of losing intellectual property when engaging in open innovation.</p> <p>Uncertainty in foreign markets: Risks related to fluctuating global economic conditions.</p>	SMEs from both developed and emerging economies were reviewed, but the exact number is not specified	<ul style="list-style-type: none"> • Stronger network capabilities: Building international partnerships to access resources and markets. • Open innovation ecosystems: Collaborating with universities, startups, and multinational corporations.
Kwartati, F., Maupa, H., & Cahyadi, H. (2024).	5 articles (2020 - 2024)	<p>Resource constraints: SMEs often lack the financial, technological, and human resources needed for expansion.</p> <p>Regulatory and compliance barriers: SMEs face challenges in navigating complex international regulations and diverse legal requirements.</p> <p>Risk management: SMEs face political, economic, and market risks when entering new international markets.</p>	SMEs from both developed and emerging economies were reviewed, but the exact number is not specified.	<ul style="list-style-type: none"> • Strategic alliances: Partnering with foreign firms, distributors, and suppliers to gain market access and local knowledge. • Building diverse leadership teams: Including members with international experience to improve regulatory navigation and risk management. • Market knowledge and local networks: Investing in market research and local partnerships to enhance competitiveness.

Table 1 summarizes 12 review articles that collectively analyze 948 articles (including overlaps) on SME internationalization challenges across various economic backgrounds. The number of reviewed articles in each study is five minimum (in the 2024 Kwartati et al. study) and three hundred maximum (in the 2024 Sreya study). Some reviews focused on a long time duration, such as Paul et al. (2017), who reviewed 211 articles from 1980–2016; Kahiya (2018), who reviewed 100 articles from 1960–2016; Naradda Gamage et al. (2020), who reviewed 110 articles from 1990–2020; and Popović (2024), who reviewed 60 articles from 1977–2023. However, more recent reviews focused on the latest research trends, including Alsuwaidi et al. (2024), who reviewed 19 articles covering 2007–2023; Andini and Kusnandar (2024), who reviewed 99 articles covering 2020–2024; and Kwartati et al. (2024), who reviewed only five articles covering 2020–2024.

Earlier reviews (before 2019) examined broader information, which includes macro and micro challenges. Those are regulatory barriers, financial constraints, and resource limitations. Later reviews (2023–2024) focused on newer challenges such as digital networking, cognitive barriers, innovation risks, and technological disparities. Some studies divided the reviewed articles into developed versus emerging economies. However, a few reviews did not specify the exact number of SMEs from each economy.

Regarding the internationalization challenges identified in the reviewed articles, these challenges are classified differently. Forty-three types of challenges are identified across the review articles. The most frequently cited internationalization challenges are as follows:

- (1) Regulatory and institutional challenges (Repeated in 11 out of 12 articles).
- (2) Financial and resource constraints (Repeated in 10 out of 12 articles).
- (3) Lack of network and relationship (Repeated in 9 out of 12 articles).
- (4) Lack of knowledge and experience (Repeated in 9 out of 12 articles).
- (5) Market-specific challenges (Repeated in 8 out of 12 articles).

- (6) Cultural and communication differences (Repeated in 7 out of 12 articles).
- (7) Technological and digital challenges (Repeated in 6 out of 12 articles).

The most frequently repeated challenges are regulatory challenges, financial constraints, knowledge gaps, and networking difficulties. Newer challenges (2023-2024 studies) emphasize digital risks, cybersecurity, and technological disparities.

Each article provided managerial implications and recommendations for addressing these challenges. According to the findings of the review articles, networking has consistently been identified as one of the most significant strategies for SMEs to address internationalization challenges (Musteen et al., 2014; Paul et al., 2017; Chetty & Holm, 2000). This includes strengthening business networks and partnerships (Paula et al., 2017; Chandra et al., 2019; Kahiya, 2018; Sanyal et al., 2019; Gamage et al., 2020), utilizing government and institutional support (Alsuwaidi et al., 2024; Sreya, 2024; Nirmala et al., 2024; Popović, 2024; Andini & Kusnandar, 2024), and improving strategic alliances (Paula et al., 2017; Chandra et al., 2020; Sreya, 2024; Popović, 2024).

Several articles highlight that SMEs with strong international business networks are better prepared to handle uncertainties in foreign markets. According to Paul et al. (2017) and Kahiya (2018), networking helps SMEs build relationships with local business partners, distributors, and industry associations; therefore, this improves their understanding of the foreign market, customer preferences, and regulations.

Regulatory and institutional barriers are a major challenge to SME internationalization. Articles by Paul et al. (2017), Chandra et al. (2019), Sanyal et al. (2019), and Sreya (2024) highlight that networking with government agencies, trade associations, and export promotion organizations helps SMEs to comply with such foreign regulations.

Financial limitations pose another common challenge for SMEs aiming to expand internationally. Articles such as Alsuwaidi et al. (2024) and Sreya (2024) emphasize that

networking is essential for securing financial resources through joint ventures, foreign investments, or funding from international development programs. Business networks offer SMEs opportunities to collaborate with larger firms, engage in cross-border trade initiatives, and access funding sources.

Popović (2024) and Nirmala et al. (2024) argue that many SMEs struggle to build trust and reputation in foreign markets, making it difficult for them to establish partnerships with suppliers, distributors, or customers. However, by participating in trade fairs, business forums, and industry networks, SMEs can enhance their visibility, showcase their expertise, and earn credibility among international stakeholders. Developing relationships with trusted local business partners also aids SMEs in reducing risks associated with fraud, unreliable suppliers, and business misalignment.

In addition to the review articles focused on this chapter, many other articles highlight the importance of networking in addressing the challenges of international markets. For example, SMEs enter international markets supported by their network relationships and continue to rely heavily on these connections (Musteen et al., 2014). Firms typically internationalize based on their strategies or through their networks. Ojala (2009) highlighted the importance of network relationships in the internationalization of SMEs, emphasizing their active utilization during the new market entry process. Costa et al. (2016) demonstrated the significance of foreign market information, knowledge, and collaboration with other actors in the decision-making process for SMEs' market entry. According to Altnaa et al. (2021), SMEs from emerging economies enhance their internationalization efforts by strengthening networks with foreign actors, finding strong correlations between network ties and the internationalization performance of these SMEs. The firm's network relationships are crucial for successful internationalization, providing SMEs with access to vital foreign market knowledge (Musteen et al., 2014).

Numerous authors have examined types of networks (business, personal, and institutional) and their specific importance in the internationalization of SMEs. All types of network relationships are important for a firm's market expansion. In the context of SME internationalization, networks are not a monolithic concept but encompass a variety of forms. Each form offers advantages in supporting firms' internationalization. The following section categorizes networks into three main types, social networks, business networks, and institutional networks, to highlight their roles and characteristics.

2.2.1 The Social Network

Social networks are crucial factors influencing SMEs' internationalization performance, as they facilitate the acquisition of information and knowledge while promoting rapid learning (Ahimbisibwe et al., 2020). According to Zhang et al. (2016), social network participants often emerge from personal relationships, such as friends, coworkers, and family members. These social connections are primarily established between business owners and managers, resulting in more reliable information due to the inherent trust shared among individuals. Consequently, the relationships of social networks are generally more dependable.

Additionally, firms should cultivate personal networks with international partners, as these connections can provide a competitive edge by capitalizing on market opportunities and reducing risks and uncertainties related to foreign markets (Steinhäuser et al., 2020). SMEs can utilize the personal networks and previous internationalization experiences of their managers and owners to bolster their own internationalization efforts (Musteen et al., 2014).

Han et al. (2024) systematically analyzed the role of social networks in firms' internationalization, categorizing these networks at individual, organizational, and national levels. Social networks serve as mechanisms for acquiring essential capabilities, enabling firms to overcome resource constraints and navigate uncertainties in global markets (Ahimbisibwe et al., 2020; Han et al., 2024). At the individual level, personal

connections establish the basis for building trust and facilitating informal knowledge sharing. These relationships often guide new opportunities, particularly when formal institutional support is lacking (Zhang et al., 2016; Chen & Chen, 2004). At the organizational level, social networks help firms develop alliances with other businesses. Such alliances frequently lead to value co-creation, access to new distribution channels, and improved innovation capabilities (Chetty & Holm, 2000). National-level social networks are affected by a country's broader cultural, societal, and economic frameworks. That highlights the informal connections among individuals, organizations, and stakeholders within the national context (Narooz & Child, 2017). Therefore, these networks give firms access to resources, legitimacy, and crucial support mechanisms for internationalization.

However, social networking has its downsides, including overreliance, resource drain from unnecessary activities, breaches of trust, and misunderstandings or conflicts arising from cultural and institutional differences (Carson et al., 2004). Therefore, firms must actively manage their network relationships to ensure alignment with strategic objectives and mitigate potential conflicts (Han et al., 2024).

2.2.2 The Business Network

The most studied type of network is the business or formal network, which consists of two or more interconnected business relationships focused on resource exchange and aimed at achieving common goals (Jin & Jung, 2016). Business networks provide more reliable and formal market-specific knowledge. Ojala (2009) notes that formal relationships (business) are often associated with firms' financial aspects, while informal relationships (social) are more related to personal interactions.

Relationships within formal business networks help SMEs determine their entry modes into foreign markets, as well as the timing of their entry and subsequent business activities, such as marketing efforts after entering a new market (Altnaa et al., 2021). Jin and Jung (2016) found that SMEs with extensive international business networks are

more likely to collaborate closely with their partners, gaining better insights and knowledge about international market environments.

In terms of financial and strategic performance, business networks tend to support SMEs more effectively than other types of networks. To expand their business relationships with foreign actors, firms often seek to hire managers who have experience and established network ties in international markets and participate in international business exhibitions and conferences (Jeong, 2016).

2.2.3 Institutional Network

Institutional networks are formal organizations and public entities such as government agencies, financial institutions, and academic bodies. They provide regulatory support, funding, and market access to firms during internationalization (Franco & Martins, 2023; Halinen & Törnroos, 1998). The increasing role of institutional networks has captured researchers' interest over the past decade, especially as countries aim to create these networks. According to Franco and Martins (2023), formal institutional network actors include countries' ministries of foreign affairs, export and import agencies, international business support organizations, and R&D institutions that facilitate the recognition of foreign market opportunities and internationalization. State support programs, policies, support from other organizations, activities, and the endeavors of professional and research support institutions are also classified as institutional networks.

In highly developed countries such as those in the EU, Australia, the USA, and Japan, institutional network development organizations play a significant role in supporting local SMEs' internationalization, encouraging them to expand abroad without relying solely on the personal network connections of their managers and owners (Narooz & Child, 2017). The primary purpose of these organizations is to provide essential resources to local businesses, including market information, financial support (such as loans), and potential business partner contacts. This support reduces risks and

accelerates firms' internationalization, fostering a positive view toward international entrepreneurship (Costa et al., 2017).

However, the role of institutional networks in emerging economies is often limited, and studies focusing on SME institutional networks in these regions are scarce (Altnaa et al., 2021). Due to a lack of institutional networks, SMEs in emerging economies heavily rely on social networks to acquire market information, understand international regulations, and secure the resources for internationalization.

All three social, business, and institutional networks are vital for obtaining international market information and knowledge and for successful internationalization. Therefore, developing and maintaining these networks is crucial (Altnaa et al., 2021). Besides the necessity of social, institutional, and business networks, digital platform networking has emerged as a powerful tool in the modern digital era. The following section explains the emerging trend of digital platform networking and its benefits for firms' internationalization.

2.3 The role of digital platform networking in firms' internationalization

The existing literature on utilizing digital platforms for firms' internationalization presents contradictory views. Some researchers demonstrate that firms should leverage digital networking to enhance their internationalization, while others argue that over-reliance on digital networks may hinder firms' performance (Galkina et al., 2023).

Digital platforms enable the creation of comprehensive digital networking systems for firms seeking opportunities abroad (Hu et al., 2024). For instance, these platforms equip firms with tools to develop partnerships with local institutions, distributors, mediators, and other stakeholders across diverse regions (Galkina et al., 2023; Magni et al., 2021). E-commerce platforms, for example, facilitate the global distribution of products, while social media and professional networks allow firms to connect with professionals and

end-users, enhancing brand visibility and trust (Nam & Kannan, 2020). The advantage of digital platforms is that they congregate consumers, suppliers, manufacturers, mediators, and other actors in the same space simultaneously, enabling them to build a digital ecosystem and network without geographical constraints (Nam & Kannan, 2020). *“Digitalization changed the internationalization process, influencing the speed, timing, and rhythm”* (Coviello et al., 2017). Many studies found that firms' digital tools support their knowledge acquisition in internationalization efforts.

There are 3.8 billion active social media users worldwide, with an annual growth of 9.2% (Naslund et al., 2020). Digitalization, along with professional networking, enables these 3.8 billion social media users to communicate, connect with like-minded groups, share their content, and interact with each other. Like individual users, businesses and organizations are increasingly prioritizing interaction through social media platforms (Almeida & Santos, 2020).

Due to their limited resources and capabilities, utilizing digital technologies to engage with consumers, suppliers, and partners is the most cost-effective approach for SMEs (Hu et al., 2024). Finding business partners or consumers and accessing global markets and their information is the biggest example of how digitalization positively affects firms' internationalization (Massa et al., 2023). Information obtained from the network built on digital platforms can support SMEs in their efforts to internationalize to other markets (Hu et al., 2024). Digital platforms enable firms to quickly locate necessary actors globally and network effectively. Therefore, companies increasingly utilize various digital platforms for networking and internationalization. In particular, this is crucial for SMEs' internationalization due to the purpose of cost reduction. It is evident that digitalization positively influences firms' internationalization, and the traditional internationalization process has evolved since the intensification of digitalization (Bhatti et al., 2022). Additionally, digitalization allows firms to get closer to the parties they seek to engage with, decreasing the psychic distance between firms and international markets (Hu et al., 2024).

Naslund et al. (2020) emphasized that digital platforms are allowing firms to internationalize, network, and provide value to customers in innovative ways. Almeida and Santos (2020) conducted a survey of firms using LinkedIn as a social media platform for their internationalization and discovered that social networks facilitate firms' internationalization while reducing associated costs. Galkina et al. (2023) found that digital platforms empower firms to effectively expand their networks. Platforms like LinkedIn and other social media enable firms to transcend geographical boundaries and connect with new partners in international markets. Additionally, digital networks help lower entry barriers by offering cost-effective access to market information, allowing firms to connect with key industry representatives and establish valuable partnerships. However, instead of solely relying on digital networking, firms achieve the greatest benefits when they combine both physical and digital networking efforts (Galkina et al., 2023). LinkedIn, with 663.3 million users (Naslund et al., 2020), is a prominent platform for professional networking, offering businesses valuable tools for sales, recruitment, and marketing. A firm's LinkedIn profile showcases its business description, operational functions, and key personnel in significant roles, making it easier for potential partners to find contacts, access essential information, and establish effective communication (Golbeck, 2015). Almeida and Santos (2020) found that LinkedIn enables firms to connect with key industry players and potential collaborators, thus supporting a more informed and network-driven approach to entering new markets.

2.4 The summary of theoretical background

This subchapter summarizes the theoretical framework developed from the literature review chapter to explore the main research objective of how SMEs utilize different types of networks to overcome internationalization challenges.

Drawing from existing literature on internationalization, the internationalization literature framework focuses on the following key dimensions, which this research focuses on from the case companies in the empirical part.

The internationalization theories discussed in this chapter are earlier internationalization theories, such as the Uppsala model (Johanson & Vahlne, 1977), which explains the internationalization process as incremental and knowledge-driven, where firms expand gradually based on experiential learning and reduced uncertainty. Additionally, the network approach (Johanson & Mattsson, 1988) presents that firms internationalize through relationships with external actors. However, the newer concepts, such as BGs (Knight & Cavusgil, 1996) and INVs, highlight firms that internationalize early and quickly by leveraging innovation and digital capabilities.

The internationalization challenges identified from the articles reviewed in this chapter, which are used to explore the challenges faced by case companies, include regulatory and institutional issues, financial and resource limitations, knowledge and experiential gaps, market-specific challenges, cultural and communication differences, and technological and digitalization constraints.

The main types of networks used by firms include social, business, and institutional networks. However, with the rise of digitalization, digital platforms now function as additional networking tools, allowing SMEs to make international connections with fewer physical limitations.

3 Research methodology

This chapter outlines the research methodology employed in this study, detailing the rationale for adopting a multiple-case study approach and describing the data collection methods, data analysis techniques, initial assumptions, reliability, validity, and ethical considerations.

3.1 Qualitative case study

This study employs a qualitative research methodology, which enables the exploration of complex phenomena through in-depth investigation rather than numerical measurement. According to Saunders et al. (2019), qualitative research is a methodological approach that seeks to explore, interpret, and understand business-related phenomena through non-numerical data such as interviews, observations, and textual analysis. Qualitative research is especially valuable when examining processes, behaviors, and experiences that cannot be easily quantified. It emphasizes depth over breadth, aiming to capture the richness and complexity of human behavior and decision-making within business contexts. In this research, the qualitative approach enables a rich, detailed exploration of how SMEs from different economic backgrounds utilize networking to overcome internationalization challenges. Unlike quantitative methods, which focus on statistical generalization, qualitative research highlights contextual insights and deeper interpretations of SME networking strategies.

Two case companies from emerging economies are central to this study. By focusing on the case studies of SMEs from Finland and Mongolia, this study illustrates how various types of networks support international market entry and tackle significant challenges. The comparative nature of the research promotes a deeper understanding of how firms from developed and emerging economies leverage their networks to improve internationalization success and maintain competitive advantages in foreign markets.

Given the nature of the exploratory study, the aim of this research is to determine what is occurring with SMEs from various economies during their internationalization. Understanding new insights and assessing phenomena are the outcomes of this research. Exploratory research provides an opportunity to comprehend the SMEs' actions utilizing the networking effect for their internationalization. According to Saunders (2019), an exploratory study involves examining what is happening regarding the study subject and evaluating specific phenomena in depth, assisting researchers in better understanding the problem to answer the research question precisely. Among the three main principles of conducting exploratory research—literature review, expert interviews, and focus group interviews—this study will utilize the first two methods.

This research utilizes a case study strategy with multiple case study design, a widely recognized qualitative research method that enables an in-depth investigation of real-world business scenarios. The form of research questions determines which type of research method researchers should select. For example, questions such as how and why utilize experimental and case study methods (Yin, 2014). However, researchers have some level of control over the experimental method, and in this research, the author has no control over the case firms' internationalization; therefore, a case study research methodology was adopted for this study. Case studies are widely used across various fields of research, including political science, psychology, sociology, education, public administration, and business. International business is one area that extensively employs case studies (Yin, 2014, p. 6). The case study method is especially well-suited for exploring complex and dynamic business environments, such as SME internationalization.

A case study strategy utilizes a wide variety of information sources and investigates a real-life empirical phenomenon. According to Yin (2014), case studies are especially valuable when the boundaries between a phenomenon and its context are unclear. This approach facilitates a comprehensive exploration of real-world situations, capturing the dynamic interactions among various influencing factors. Since SME internationalization

challenges are diverse and context-dependent, different firms face unique challenges stemming from their specific economic, institutional, and industry conditions. Given this complexity, a case study approach provides an in-depth investigation of how SMEs identify and navigate these challenges, offering insights into the strategies they employ. Therefore, this research will utilize case studies to explore SME internationalization in a manner that aligns with Yin's focus on investigating complex, real-world phenomena within their contextual settings-

The multiple-case study approach examines SMEs from two distinct economic contexts. The rationale for using multiple cases is to enhance the comparability and validity of findings by understanding whether results from one case also occur in the other. According to Yin (2014), a multiple-case study strengthens the reliability of research findings by allowing for stronger justification, as the findings from one case can be tested against another to assess their consistency. Additionally, multiple cases will help determine whether the networking tactics employed by an SME in Finland are similar to those used by an SME in Mongolia. If similarities exist, these findings could be recommended for SMEs operating in these two economic contexts in the future. If the findings are consistent across both cases, the generalizability of the results will increase within the context of SME internationalization. However, if differences are observed, this will highlight context-specific factors influencing networking strategies, further contributing to the understanding of how SMEs from different economic backgrounds navigate internationalization challenges.

In terms of time horizon, the research is a cross-sectional study that examines a phenomenon at a single point in time, while a longitudinal study tracks changes over an extended period. Although internationalization is a long-term process involving finding foreign partners, conducting market research and selection, deciding on an entry mode, actual market entry, and expansion, conducting a longitudinal study is not feasible within the timeframe of this thesis. Since observing and tracking SMEs over multiple years is

impractical, this study will use a cross-sectional approach, gathering longitudinal data from managers regarding their past, current, and future internationalization tendencies.

3.2 Case selection criteria and data collection methods

The case companies were selected according to the following criteria:

- (1) They are both SMEs.
- (2) Their home countries represent different economic backgrounds, one from a developed economy and the other from an emerging economy.
- (3) They operate in the pharmaceutical industry.
- (4) They have engaged in and initiated internationalization activities.
- (5) They utilize networks for internationalization purposes.
- (6) They were accessible for research, with key informants available for interviews.

This study employs a triangulation approach, integrating both primary and secondary data sources to ensure a comprehensive and well-rounded analysis of SME internationalization challenges and networking strategies. Triangulation is a research technique that involves using multiple data sources, methods, or theoretical perspectives to enhance the validity, reliability, and credibility of findings (Saunders et al, 2019). It helps researchers verify results repetitively, reducing potential bias and strengthening the reliability of conclusions. Triangulation is especially useful in qualitative research, where findings may be subjective and require validation from multiple perspectives. By verifying data from various sources, triangulation enhances the credibility, validity, and reliability of the research findings (Saunders et al, 2019).

The case company A, the representative of a developed economy, is contacted through their company's LinkedIn profile. Initially, six pharmaceutical SMEs operating in the pharmaceutical industry in Finland were selected, and messages were sent to their respective people in charge of international activities. However, three of them

responded, and one refused to participate in this research. The remaining two companies agreed to continue with the case study research, and Company A was chosen as the final participant due to its fit and willingness to cooperate in this research. Company B was chosen because it is the only pharmaceutical SME in Mongolia involved in international activities. An official request was emailed to the CEO, who agreed to participate in the research. Company B aims to derive valuable managerial implications from this research, thereby enhancing its internationalization process, and seeks practical guidance on how SMEs in developed economies establish networks and support their international growth.

Primary data was collected through semi-structured interviews, while additional data was gathered from secondary sources. Interviews with key stakeholders from the case companies aim to collect detailed information on networking strategies, internationalization challenges, and market expansion efforts. Furthermore, secondary data will be sourced from various company documents, websites, social media platforms, industry reports, and tender materials to provide contextual insights into the firms' internationalization strategies and networking activities.

3.2.1 Semi-Structured Interviews

This study's primary data collection method consists of semi-structured interviews with key stakeholders from the selected case companies. Semi-structured interviews strike a balance between structured and unstructured approaches, allowing for both guided discussions and flexibility in exploring emerging themes (Saunders et al., 2019). They are utilized when researchers seek in-depth insights and consistency across interviews. They offer flexibility to the interviewee and unexpected new insights to the researcher. Additionally, this type of interview is suitable for exploratory or explanatory research, aiming to understand how and why certain phenomena occur. Therefore, it will provide detailed answers to how SMEs from different economic backgrounds utilize networking to overcome their international market entry challenges.

Due to the geographical distance between the researcher and the case companies, primary data was collected through semi-structured interviews conducted via Zoom.

Company A: Data was gathered through three separate Zoom interview sessions with a single key interviewee, the company's Chief Development Officer, who was directly involved in the company's internationalization efforts. These interviews allowed for a deep and ongoing exploration of the company's background, internationalization challenges, and network utilization across different phases of its international journey.

Company B: Data collection involved two separate Zoom interviews with two different interviewees, each holding key roles related to the company's international activities. One is the Chief Executive Officer, and the other interviewee is the Head of the Marketing Department, both directly involved in the company's internationalization activities. This approach provided a broader perspective by capturing insights from multiple decision-makers, contributing to a more comprehensive understanding of the company's internationalization.

The interviews covered key areas such as the companies' internationalization, challenges faced in foreign markets, and the role of various networks in supporting their internationalization. Any follow-up questions or clarifications were addressed via email correspondence after the Zoom sessions.

According to Saunders et al. (2007, p. 312), a list of themes and questions to cover in a semi-structured interview is provided, but some questions can be altered based on the specifications of the organizational context. Additionally, in-depth interviews were conducted to explore areas that the researcher did not focus on or was unaware of, and interviewees will have the opportunity to discuss challenges not included in the list of interview questions (Eriksson & Kovalainen, 2016, p. 89).

Participants are intentionally selected based on their direct involvement in the case companies' internationalization from the beginning. Case company names and interviewee names have been anonymized at the companies' request. Data was collected from two case companies, along with interview details as follows:

Table 2. Interview background of the case companies

	Company A	Company B
Company main business	Cancer drug development	Biological active products, with natural ingredients and generic medicines
Interviewee	Chief Development Officer (Interviewee 1 from company A: IA)	Head of the Marketing Department (Interviewee 1 from company B: IB1) Chief Executive Officer (Interviewee 2 from company B: IB2)
Interview date and duration	24.03.2025 – 33 min 24.03.2025 – 36 min 28.03.2025 – 51 min	16.04.2025 – 46 min 16.05.2025 – 43 min

One person from company A, the Chief Development Officer, and two people from company B, the head of the marketing department and the chief executive officer, were interviewed. The following abbreviations IA (interviewee from company A), IB1 (interviewee one from company B), and IB2 (interviewee two from company B) are used for each interviewee to clarify the direct quotes from the interview.

3.2.2 Secondary Data

Secondary data supplements primary findings and provides broader industry insights. This type of data refers to information that has already been collected, processed, and made available by another entity for purposes other than the current study. It includes data from sources such as government reports, academic publications, industry statistics, company records, and online databases (Saunders et al., 2019). Secondary sources of the two case companies in this research are as follows:

Table 3. Secondary sources of the two case companies.

Category	Company A	Company B
Types of secondary sources	<ul style="list-style-type: none"> - Company website - Social media platform - Pharmaceutical regulations of Finland - Newspaper article 	<ul style="list-style-type: none"> - Company website - Pharmaceutical regulations of Mongolia - Company annual report - Company tender document - Written materials for international EXPOs

Using both primary and secondary data enhances the credibility and depth of the study by allowing for data triangulation (Eisenhardt, 1989). Secondary sources listed in Table 3 were primarily used to gather general information about the case companies, while more detailed information was obtained through primary data collection.

3.3 Data Analysis

This study uses a qualitative data analysis approach to examine the internationalization challenges and networking strategies of the two case companies. Considering the data collected from semi-structured interviews and secondary sources, the analysis focuses on identifying patterns, making comparisons, and validating findings through multiple data sources. The primary method for analyzing the data is thematic analysis, and cross-case comparative analysis is employed to assess the similarities and differences between the two case companies.

The thematic analysis facilitates the identification of recurring patterns, themes, and relationships within the qualitative data gathered from semi-structured interviews (Braun & Clarke, 2006). The analysis begins by transcribing the interviews to accurately represent the responses. After transcription, the data is systematically coded, focusing on key themes such as the internationalization challenges faced by the two case companies, their networking strategies, and market entry approaches. These themes are then organized into broader categories, which include a list of internationalization challenges, various types of networks, and future networking plans. This process allows

for a structured interpretation of the data, emphasizing critical insights into how SMEs from different economic backgrounds navigate their internationalization.

A cross-case analysis was conducted to compare findings regarding the common and unique challenges faced by the two SMEs, the effectiveness of networking, and the differences in their market entry strategies. Cross-case comparative analysis is a research method for systematically comparing multiple cases to identify similarities, differences, and patterns (Ragin, 2014). This method enhances the generalizability of findings and allows researchers to develop theories or test existing ones through comparative reasoning. According to Yin (2018), cross-case analysis is an essential approach in case study research that aids in theory-building by identifying patterns across multiple cases. This comparative analysis facilitates the identification of best practices and offers recommendations for pharmaceutical SMEs operating in various economic contexts.

The primary assumption of this study is that SMEs from different economic backgrounds have different networking opportunities and use networks differently to overcome their challenges in the international market (Sanyal et al., 2019).

3.4 Reliability and Validity

The study aims to produce credible, reliable, and academically rigorous findings by applying these measures. Reliability refers to the consistency and stability of research findings over time and across different conditions (Yin, 2018). In this study, reliability was ensured through the following measures:

- **Systematic Documentation:** The research process, including data collection and analysis methods, was thoroughly documented to allow for replication.
- **Structured Interviews:** Semi-structured interviews with key decision-makers from both case companies were conducted, video and voice recorded, and followed a consistent protocol to ensure uniformity in data collection.
- **Participant Transparency:** Interviewees were informed of the research objectives in advance to minimize bias, and anonymity was maintained to encourage candid responses.

- **Triangulation:** Primary data from interviews was supplemented with secondary sources (company documents, industry reports) to cross-verify findings and enhance consistency.

Regarding this research validity, it aims to evaluate if the study accurately measures what it claims to measure (Eriksson & Kovalainen, 2016). The following strategies were employed to ensure validity in this research:

- **Construct Validity:** Multiple data sources (interviews, secondary data) were used to triangulate findings. Key themes (e.g., network types, challenges) were derived from the literature and empirically validated through case analysis.
- **Internal Validity:** Cross-case comparison highlighted patterns and discrepancies, strengthening causal inferences.
- **External Validity:** Detailed case descriptions enable readers to assess transferability to other settings.

Ethical standards are strictly followed as following:

- **Informed Consent:** Interviewees will receive details about the research and sign consent forms.
- **Confidentiality:** Company names will be anonymized where necessary.
- **Data Security:** All interview recordings and transcripts will be securely stored.
- **Compliance with Research Ethics:** The study follows institutional and GDPR (General Data Protection Regulation) guidelines.
- **Respect for Participants:** Participants were treated professionally and respectfully throughout the research process. They were given the opportunity to review and clarify their responses if needed.

4 Findings

This chapter presents the empirical analysis and key findings of the research. The chapter begins with an overview of the internationalization context within the pharmaceutical industry generally, how pharmaceutical firms internationalize globally, and what the specific challenges are in this sector, followed by an analysis of the two case companies that highlights their respective backgrounds, the challenges they encountered, and the different types of networking they utilized. The final section presents a comparative discussion, highlighting how networking has contributed to overcoming their internationalization challenges, and what type of networks are utilized to overcome which type of challenges, while examining the similarities and differences between the two cases.

4.1 The internationalization challenges of the firms in the pharmaceutical sector

Like firms operating in every other sector, firms in the pharmaceutical sector face many specific challenges. These include rapid innovation, pressures from globalization, difficulties in navigating diverse regulatory systems across markets, government restrictions, and compliance (Waktole & Negera, 2024). Navigating a complex environment while adhering to local and international regulatory requirements is already challenging for pharmaceutical manufacturers (Grant, 2024). Countries' stringent medicinal regulatory requirements are a major challenge in the internationalization of pharmaceutical SMEs in global supply chains (Takawira & Pooe, 2024). That includes passing the local pharmaceutical product registration requirements in foreign markets, which demand significant time and effort from these firms (Waktole & Negera, 2024). Each country has specific regulations concerning pharmaceutical product registration, and in some cases, the standard registration process may take as long as five years. In some countries, the registration process for pharmaceutical

products can take even longer and incur higher costs, depending on the market's regulatory complexity.

Regarding the legal and business environment, the two case pharmaceutical companies differ in terms of home country regulatory complexity, institutional support, and the overall maturity of the pharmaceutical sector in their respective countries. However, both companies agreed that foreign countries and strict global regulations on pharmaceutical products are among the most challenging aspects of internationalization. For example, Company A is established and operates in Finland, a country renowned for its highly advanced healthcare and research ecosystem, which provides significant opportunities for pharmaceutical businesses. However, despite the country-specific advantages, Finnish pharmaceutical SMEs encounter notable challenges in their internationalization efforts. These challenges include navigating complex regulatory requirements in foreign markets, facing competition from established MNCs, and dealing with limitations imposed by Finland's relatively small domestic market, which restricts scale efficiencies (Ministry of Economic Affairs and Employment of Finland, 2020).

Mongolia's pharmaceutical industry challenges include a lack of global networking, limited knowledge of foreign markets, and compliance with international pharmaceutical product regulations. Additionally, there is inadequate government or institutional support, along with limited access to foreign markets. The country is characterized by an unstable political and business environment, a high dependence on foreign markets and economies, a harsh climate, and an underdeveloped export industry (Enkhbayar et al., 2019).

4.2 Case company A

This section presents Company A, a Finnish pharmaceutical SME, as a representative firm from a developed economy by outlining its background, current

internationalization status, and networking activities. It highlights the firm's global collaborations, the internationalization challenges it faces, and the types of networks it utilizes. The information presented in this section is drawn from both primary data obtained through a direct interview with the chief executive officer and secondary data, including the company's website, emails from the chief executive officer, social media platforms, and other publicly available sources.

4.2.1 Background of Company A and its internationalization activities

Company A is a relatively new drug development company, originating from the research and development team at the University of Helsinki. This small yet highly professional team of scientists is dedicated to creating drugs for cancer. They discovered a treatment for a rare cancer that currently lacks a specific global treatment. Many cancers show overexpression of a specific cancer gene that triggers tumor development in patients' bodies. Company A developed a unique solution: a first-in-class precision therapy targeting these genes. Unlike existing treatments, which primarily alleviate symptoms or lead to drug resistance over time, their approach provides a precise mechanism to stop the growth of these tumor genes, with potential applications for other cancers that share this gene. Thus, Company A stands out by offering a tailored formula to address the unique problems of individual patients, a solution that no competitors worldwide can match.

However, as a drug development is their main focus, they do not manufacture the actual product themselves locally. Instead, their main production, clinical trials, quality assurance, and other existing product development activities are all highly internationalized, which means that all their current activities are outsourced, except for the research and development of new products.

The interviewee stated during the interview that *“our international activities included formulation development activities in the research laboratory in the Netherlands, API manufacturing from a contract manufacturer from Germany, and quality management*

operations from an expert company in the UK” (IA1., 2025). Table 4 outlines the details of Company A’s internationalization activities, including the countries involved and the main role of each activity.

Table 4. Company A’s internationalization activities.

Activities	Country	Role
Drug development and research	Finland	Headquarters (R&D)
API direct manufacturing	Germany	Main material contract manufacturing.
Formulation development	Netherlands	Specialized pharma services.
Product manufacturing	Netherlands	Specialized pharma services.
Clinical trials	Netherlands, Poland, France, Germany, UK, and	Specialized pharma services.
Quality management and regulatory consulting	UK	Experts provide compliance and quality consultancy.
Marketing and sales	USA and EU countries	Product registration, distributor partnership, and local regulatory support

The company's headquarters in Finland oversee primary operations abroad. In the Netherlands, formulation development focuses on drug delivery technology for patients. Additionally, preclinical development is conducted in partnership with various service providers in the Netherlands. Product manufacturing and related analytics also occur in the Netherlands. The contract manufacturer handles main API manufacturing in Germany. A UK company provides quality control services, offering consulting that emphasizes product quality and efficiency.

Regarding commercialization, Company A is currently securing marketing authorization in key markets, including the United States and European countries. This step follows the successful completion of clinical trials conducted internationally as part of the company’s global development strategy. They are preparing for market entry while

strategically assessing target markets (e.g., the US and EU) for international expansion. This process occurs after the ongoing clinical trials but before full commercialization, as they await decisions on marketing authorization.

The company structure includes two additional key members besides the interviewee, A, the Chief Development Officer: the Chief Executive Officer, who holds a Ph.D. in immunology and has extensive experience in drug development; the Chief Development Officer, who also holds a Ph.D. in Chemistry and has expertise in drug development that encompasses laboratory work and medical product business activities; and the founders and board members, all of whom possess Ph.D.s in the biochemical and medical fields.

Table 5. Company A's key people's experience and international networking.

Position	Degree	Experience	International networking
Chief executive officer	Master's Degree in Biotechnology and Ph.D. in Immunology	More than 20 years of experience in the pharmaceutical market, working both as a researcher and in the business field	Worked with both local and international entities, with diverse networking across Europe and the U.S
Chief development officer	Bachelor's Degree in Industrial Engineering and Management and Ph.D. in Chemistry	Both research and commercial positions in local and international pharmaceutical companies	Strong professional network in the pharmaceutical industry, particularly in Europe and the U.S
Chief Scientific Officer	Doctor of Philosophy and MSc in Biochemistry	Mainly worked on hard-to-treat cancers in research institutions	Network with academic collaborators, biotech innovators, and pharmaceutical partners

The Chief Development Officer of company A, who participated in this research, has extensive experience in her home country and internationally, spanning multiple countries and continents, along with a deep understanding of the global market landscape. She has held research positions in laboratories as well as commercial roles within business organizations, which has allowed her to comprehend the research

process involved in drug development, as well as business operations and strategies for bringing products to market.

4.2.2 The networking process for Company A's internationalization.

Building and leveraging networks is essential to Company A's internationalization strategy. Given the company's small size and specialized focus, identifying reliable, competent, and trustworthy partners for executing core business activities, such as manufacturing, clinical trials, and regulatory compliance, is crucial. The process of finding partners begins with compiling a pool of potential candidates, often numbering up to 20 options for a specific operational need. However, the final selection is not based solely on company qualifications or market reputation. Instead, the decision is significantly influenced by recommendations from trusted contacts within Company A's professional network. For instance, input from a long-term quality consultant plays a central role in assessing the credibility and operational readiness of potential partners.

The partner evaluation process entails audits, meetings, and relationship-building activities that allow Company A to understand not only the partner's technical capabilities but also the individuals behind the operation. The interviewee emphasizes that *"personal relationships and mutual trust are very important to us, especially given our small scale and limited internal resources. Even if a candidate meets all the technical requirements, a lack of personal engagement or cultural fit can result in elimination during the selection process"* (IA1., 2025). For the company, choosing a partner goes beyond merely outsourcing tasks; it entails finding individuals who will grow with the company, fostering long-term collaboration through trust and shared commitment.

In the case of manufacturing partnerships, the approach is strategic and often recommended by pre-existing networks. When a new contract manufacturer or service provider is required, the first step is typically to consult within their expert network for recommendations. This ensures that the selected partner is assessed through trusted networks, thereby reducing risk and shortening the due diligence process.

Regarding clinical study partners abroad, the process is developed within their professional medical and pharmaceutical communities, which operate as tightly interconnected networks. Most clinicians and researchers involved in clinical trials are already part of a large, semi-formal network characterized by both strong and weak ties. When Company A began developing its cancer treatment drug, the team started collaborating with leading experts in the field. Through academic publications and research partnerships, news of the product development spread throughout the community. Consequently, medical professionals with strong reputations in oncology and clinical research became aware of their work and expressed interest in collaboration. The specialized nature of the pharmaceutical sector, where a few major players dominate each specific product development, further enhances the effectiveness of networking by enabling companies to quickly identify reputable clinical partners and establish trust-based networks.

Company A's networking is highly relationship-driven, emphasizing trust, reputation, and prior connections over formal business partner selection procedures. This approach is effective not only for a small firm but also crucial for ensuring the quality and reliability of partners in the heavily regulated pharmaceutical industry. The interviewee said, *"we are not looking for anyone just to provide services or the products, we are looking for the people who want to cooperate with us and be successful together. So it is so important to find those who trust each other and to be successful together globally."* (IA1., 2025).

4.2.3 The types of networks

The company actively utilizes various types of networks for its internationalization activities, and the following types are discussed in the interview.

Social network. Trust between individuals is key in Nordic culture, and networking remains crucial for all activities (Halinen & Törnroos, 1998). In a small company like

Company A, networking is vital for every process, not just for partner selection or international expansion. For instance, the interviewee joined the company through networking after previously working with the CEO in another organization, and later came on board. In this context, hiring someone they know is essential. The company is heavily network-centered for all its activities.

Interviewee mentioned that *“in small companies, it is beneficial that we can support one another. Maintaining close friendships with former colleagues, friends, and people in the same sector can lead to successful collaboration, as this industry is unique in that everyone knows each other and values one another’s opinions, expertise, and companionship”* (IA1, 2025). According to IA1, as in some other sectors or larger companies, social networking may not be as crucial as it is for Company A. In small businesses, trust-based collaboration and human interaction are essential for successful business partnerships. IA1 added that *“Friendships made during postdoc years still drive most of my collaborations today”* (2025). Most of the larger companies and MNEs have employees responsible for regulatory affairs in various countries and for preparing the necessary documentation to operate there. However, Company A utilizes its own network for this purpose, primarily a social network, to address the challenge of regulatory compliance in foreign countries.

Regarding their current quality management system provider, the company selection and cooperation process began based on a social networking associate’s recommendation. This associate, who had worked on a different project with the company’s Chief Development Officer a few years ago, recommended their quality management system provider company. The selection of such a provider company was solidly based on the personal network.

In this industry, having a strong network and fostering relationships is crucial for success and staying updated with market trends. The interviewee mentioned that *“whenever the company needed information or support for operations, there was always a phone*

call to someone I knew, whether locally or abroad, and say hello, can you help me?" (IA1., 2025).

Business network. The raw material contract manufacturing companies in Germany, along with pre-clinical and clinical development and end-user product manufacturing companies in the Netherlands, as well as quality management and consulting support from the UK, are business partners of Company A. This trusted business network is essential for them as part of their key operations. Interviewee said that *"we need the best suppliers and the best people to work with, people who also want to give their expertise in addition to their products or services. They are the partners who really want to help us, not just provide services"* (IA1., 2025).

In this industry, when a company needs a specific service or product, there are limited vendors, and Company A knows who the best candidates are, mainly through their network. Finding the best partners is crucial, as it determines who will successfully collaborate with them in the long term. The primary activities involve extensive discussions, background checks, inquiries about candidates from their previous networks, and a due diligence process. As the interviewee mentioned, their best candidates originated from recommendations within their prior business network, specifically a consulting company in the UK with which they have had a long-standing relationship. Therefore, they tend to accept business partner candidates recommended by networking partners. Additionally, a consulting firm in the Netherlands that has worked with Company A for many years recommended their top contract manufacturer in Germany. There were several options available, and this consulting firm made the final selection. Company A did not participate in the site-check selection process, auditing, or company visits, as they lack the necessary expertise in these areas. This demonstrates the level of trust Company A has in its business partner companies, such as their consulting companies, allowing them to make significant decisions on behalf of the company. Interviewee added that *"if we want to bring the product to the market, we need industry. We connect with pharmaceutical companies and biotech start-ups*

because they understand the pharmaceutical sector and countries' regulatory compliance" (IA1., 2025).

Institutional network. Finnish institutional bodies play a significant role in Company A's business development process. These bodies are formal organizations and institutions that operate in the public or governmental sector, influencing, governing, and supporting firms' business activities, such as their internationalization.

Company A received a business loan from a Finnish institutional body to start its internationalization, which has been the leverage that has enabled this business to this day. Such organizations support not only pharmaceutical firms but also other types of startups in developing their operations, and this opportunity extends even to risky or unstable businesses in Finland. Additionally, other financial support programs specifically target the drug development sector, which will be available to small startups like Company A. They noted that institutional networks may be crucial for their operations since these networks include connections with doctors and hospitals who can begin using their drug, facilitate permissions from various regions, and obtain financial support. In particular, institutional networks are vital for companies from countries like Finland, which has a small population and limited size. They require larger support to compete on an international scale. Interviewee agreed that *"our collaboration with patient advocacy groups (PAGs), universities, and regulators like European Medicines Agency (EMA) is crucial. These institutional networks help us navigate approvals and connect with key stakeholders"* (IA1., 2025). Their institutional networks included the following:

A patient advocacy group (PAG): A non-profit or community organization that represents the interests, rights, and needs of patients, particularly those affected by specific diseases or health conditions (Themistocleous & Argyropoulos, 2024). In Company A's case, the UK PAG consists of actual cancer patients, their friends, relatives, and professionals working in this field. This powerful group actively seeks opportunities

to treat or lessen the effects of such diseases, significantly impacting hospital operations in this regard. In this instance, PAG assisted Company A in engaging with UK hospitals and clinical stakeholders to gain access to major hospitals and collaborate with them to develop, distribute, and conduct clinical trials for their product.

University group: Knowledge-based institutions that serve as a foundation for scientific legitimacy, significantly influencing Company A's drug development from a scientific perspective. They collaborated with various university research teams to evolve the current product from its inception, which originated in the science laboratory at the University of Helsinki, as mentioned earlier. *"Our university's international consortium opened doors for joint research grants. It was a structured entry point into the European research community"* (IA1., 2025). Additionally, large medical universities abroad have their own hospitals and conduct clinical trials on patients treated within these facilities, which provided Company A the opportunity to study the efficacy of its drug in global patients.

Scientific conferences: A formal gathering of professionals within a specific academic field, such as drug development, to present and discuss their work, exchange ideas, form networks, and suggest future research directions (Rowe, 2018). It serves two primary purposes. First, they promote networking among industry professionals, enabling participants to introduce their work and products and connect with individuals, businesses, and institutions in the field. Second, these conferences attract investors and funding organizations, providing additional networking opportunities with these firms. Company A has participated in numerous scientific conferences throughout Europe, establishing important networks in the process. Events like BIO-Europe (BIO), a leading partnering conference in the life sciences, occur annually to foster collaboration among biotechnology innovation organizations. Such events are significant in scale, attracting nearly everyone in the industry, which helps participants stay informed about emerging trends and developments. Consequently, when Company A presents its new drug development process, everyone in the European industry will have the chance to learn

about it. Interviewee stated that, *“being invited to speak at the international stem cell conference gave us visibility to the professional audience. It is not just about the presentation, it is about being seen in the right place to the right people”* (IA1., 2025).

Digital network. Web of individuals, organizations, or systems interconnected through digital platforms, tools, or communication technologies that enable the exchange of information, services, and relationships beyond physical or geographic constraints (Galkina et al., 2023). The interviewee established a professional group on LinkedIn for various small pharmaceutical companies and individuals to come together and share ideas and information. The primary purpose of this LinkedIn group is to gather professionals in the industry to network, get to know one another, share experiences, exchange information and knowledge, and seek assistance from each other. *“For small pharmaceutical companies, gaining knowledge and staying updated with the latest trends is crucial to being aware of this industry. If we experience something new, we share this on our social group page”* (IA1., 2025). BIO-Europe is an annual life sciences partnering conference that combines both physical and digital networking opportunities. The physical participation fosters face-to-face human interactions, relationship-building, and trust development. However, such events organize virtual partnering days, enabling companies unable to participate physically to schedule and conduct meetings virtually. This presents a great networking opportunity, and Company A participates in the online event every year. Additionally, digital platforms for funding and investment provide opportunities for businesses and investors in this industry to connect with one another.

4.2.4 Company A’s internationalization challenges

As discussed in the literature review chapter, this research identified seven types of internationalization challenges, which formed the focus of the interview. The challenge of a lack of networking and relationships was not outlined or discussed as an internationalization challenge with the interviewees, since this study focused on how

networking is utilized to overcome the internationalization challenges faced by these case companies.

Regulatory and institutional challenges: Confirmed that one of the biggest challenges to any pharmaceutical company in this sector, and the same as them, is that Company A's biggest challenge is foreign countries. *"Sometimes we get stuck for months waiting for approvals that are not transparent. Each country has a different process, and in some cases, the criteria are not even published. There is no global standard, and it negatively affects our budget"* (IA1., 2025). Some countries require foreign companies to establish a local legal entity, which Company A does not intend to do in every country while managing its operations. For pharmaceutical companies in Europe, obtaining permission from the European Medicines Agency (EMA) or the Food and Drug Administration (FDA) in the USA is the most challenging and fundamental step to succeeding internationally. Once a product receives approval from these authorities, it is free to register elsewhere and operate in those areas. For Company A, this process involves leveraging its network, meaning someone knowledgeable about regulatory matters assists in preparing documentation and applying for permission.

Finance and budget-related challenges: Company A's product is expensive, and not every patient can afford it. As a result, countries' health systems reimburse patients for the treatment of such conditions. Company A has identified a lack of funding as one of the major issues. *"Funding is always a challenge. Even when we have a good product, finding early-stage investment to internationalize is hard"* (IA1., 2025). The company is in the early stages of its business, where income is insufficient, and it constantly requires funding for various processes, including product manufacturing, purchasing raw materials, laboratory tests, and clinical studies, all of which demand significant financial resources. Therefore, the financial and resource constraint is another major challenge they currently face.

Lack of market knowledge and experience: In new countries, there is unfamiliarity with the market, along with a lack of experience. A consulting company is currently addressing this for Company A. Gaining knowledge of the country and acquiring experience in this market requires substantial resources, time, and money. Currently, the company mainly operates in EU countries due to the similar legal systems, insurance, healthcare, and an overall easier understanding of these markets. On the other hand, some countries may be avoided in the future due to insufficient market knowledge, as they may be difficult to understand, hard to enter, and subject to strict regulations. Therefore, this type of challenge is considered medium for company A, as it can be easily solved with consulting firms, entering countries with similar environments, and can be avoided if necessary.

Market-specific challenges: Company A highlighted several market-specific challenges, including the need to adapt to local consumer behavior, market readiness, intense competition from well-supported local firms, market entry costs, and difficulties in finding reliable partners due to unfamiliarity with the product or perceived risk. Regarding the different markets they entered, the interviewee said that “what works in Japan does not necessarily work in Germany. We had to adjust our messaging and sometimes the product itself” (IA1., 2025).

Culture and language differences: According to Finnish culture, people’s communication style tends to be more straightforward and honest, with an open approach preferred in business settings. There are cultures where communication styles differ, which can lead to miscommunication. However, due to the nature of the medical industry, interactions generally follow a more formal approach, with written regulations, standards, and policies prevailing, regardless of country or culture. Therefore, adhering to these guidelines and communicating in accordance with established standards is considerably easier. As a result, in this context, cultural and language differences do not pose a significant challenge for Company A.

Technological and digital challenges: The interviewee did not highlight technological and digital challenges as major challenges. While digital platforms were used for communication and information, no significant difficulties related to technology adaptation, infrastructure, or digital regulation were reported for Company A. This can be linked to the fact that all members of the company are highly educated, proficient in English and other international languages, and skilled in using modern technological tools to interact with global partners effectively.

4.3 Case company B

Similar to the previous section, this part introduces Company B, a Mongolian pharmaceutical SME, as a representative firm from an emerging economy. It begins with Company A's background, current internationalization status, networking activities for effective internationalization, the types of networks they utilize, and the internationalization challenges they encounter. All information was gathered from both primary and secondary data.

4.3.1 Background of Company B and its internationalization activities

Company B's background information was obtained from secondary data, the company's annual report, and tender documents. Company B was established in 1990 in Mongolia and manufactures eighty different types of pharmaceutical products, including generic medicines, herbal products, beauty items, and biologically active products made with natural ingredients. Approximately thirty of these products are their own brand items developed through original inventions. Their brand products primarily consist of biologically active ingredients sourced from rare natural sources. The company has operated in the local market for over thirty years, and its products are well-known and reputable in this region.

However, the company aims to introduce its products, developed in its own laboratory, to the international market and expand its business abroad, focusing on

internationalization in countries that are geographically or culturally similar to Mongolia. Currently, there are one hundred fifty employees, but the company lacks a dedicated export department. Instead, the local marketing department oversees export activities and explores opportunities for internationalization overseas.

Since 2020, the company has intensified its efforts in internationalization by sending teams to potential foreign markets for market research, networking with local distributors, and exploring opportunities in these countries. The targeted countries include those in the Eurasian Economic Union (EAEU), which comprises Russia, Kazakhstan, Uzbekistan, Kyrgyz Republic, and Azerbaijan. Recently, Company B has expanded its international operations to several countries, including the Kyrgyz Republic. Since 2022, the company has shifted its focus to other markets, including China and Korea, and has begun its export activities in these regions. Another food manufacturing subsidiary of Company B has started exporting twenty types of products to these countries, as the internationalization process for food-grade products is easier and faces fewer challenges compared to that of pharmaceutical products.

Since the beginning of 2020, the company has been developing a new strategy for expanding into foreign markets, with a focus on various countries, primarily China, which appears to be a lucrative market due to its geographical proximity. However, both interviewees from company B stated that *“we did not have any market knowledge about Chinese regions, thought that China is a big market with many potential customers”* (IB1. & IB2., 2025). Additionally, Mongolia and China have a long history of business cooperation, and the company’s generic medicine raw materials suppliers are primarily based in China. Thus, the company believed it would be easier to enter the Chinese market. However, China and Mongolia have different cultures, languages, and pharmaceutical sector regulations that vary significantly. They initiated the registration of their branded products in the Chinese market, but even after three years, they have not achieved significant success with this first step.

Since then, the company has actively sought other opportunities to expand its market into other countries, beginning to meet people and sending teams to focus countries. Based on foreign market research, they have decided to focus on the Central Asian countries mentioned above. The reason is that these countries all speak Russian, making communication easier. Market size, the country's population, culture, customer behavior, and pharmaceutical market regulation, along with the supply chain system, seemed similar to those of Mongolia. Therefore, Company B initiated its internationalization in the Kyrgyz Republic and successfully registered a single product in this country, which renders this registration valid for the remaining five countries in the EAEU region. EAEU countries, including Russia, Kazakhstan, Uzbekistan, Kyrgyz Republic, and Azerbaijan, accept each other's pharmaceutical product registrations, and a product registered in one of these countries can be freely sold to other EAEU countries. However, they are currently only exporting their product to the Kyrgyz Republic while trying to stabilize product development in that country first.

The key people in the company involved in the internationalization are the CEO and the Head of the Marketing Department, both of whom were interviewed for this research. Regarding their education, experience, and international networking, the following information was obtained:

Table 6. Company B's key people's experience and international networking.

Position	Degree	Experience	International networking
Chief executive officer	Bachelor's Degree in Business Administration	10 years of experience in the pharmaceutical field, working in various positions in company management	For the last 5 years, focusing more on the company's internationalization, with little international networking experience
Head of the Marketing Department	Bachelor's Degree in chemical science and business administration	18 years of experience in the company for both drug research and commercial positions.	Not much international networking experience

Both key individuals have over ten years of professional experience in the pharmaceutical industry, primarily within domestic companies. However, they have limited international experience and lack established professional networks abroad.

4.3.2 The networking process for Company B's internationalization

The reason they initiated their internationalization efforts in the Kyrgyz Republic was *"we found a person who could represent our company in this country and manage the registration work independently"* (IB1., 2025). The initial internationalization was based on the social network of the company's previous manager, who had a friend living in the Kyrgyz Republic. This friend introduced the representative to the company management, leading to discussions about future business opportunities. Consequently, the company established a subsidiary in the Kyrgyz Republic and appointed this individual as its director. However, the registration process was neither easy nor quick; it took more than two years to obtain approval for registration and permission in these countries. Company B's single type of pharmaceutical product was registered as a medicine in this country with two different dosages. Since the company established its representative office there, it has registered the food-grade products of another subsidiary in the market through this established subsidiary with a local person as director. The interviewee mentioned that *"the food grade products registration was quite fast and easy. Currently, the company has started exporting activities to this country, and new products were delivered to the Kyrgyz Republic in April 2025"* (IB2., 2025). They plan to register and export more pharmaceutical products with natural ingredients to this country and expand the business to the rest of the EAEU countries in the near future.

Company B's next target for expanding its business abroad is Kazakhstan, where the ethnic group known as Kazakh resides. The reason for targeting this country is its language and cultural similarity. Mongolia has a small ethnic group of people of Kazakh origin who speak the Kazakh language and understand Kazakh culture. The company employs individuals from the Kazakh ethnic group, and by utilizing this human resource,

it aims to enter the Kazakhstan market. *“Every Kazakh employee has relatives or friends in Kazakhstan, which presents a good opportunity for the company. When we give tasks to our Kazakh employees to expand the market to Kazakhstan, they will definitely seek to meet their network in Kazakhstan”* (IB2., 2025).

However, the company lacks significant networking in other markets and continents. The interviewee mentioned that *“we do have products that are highly effective and safe, manufactured in a very sustainable manner, and made with many beneficial natural ingredients. These products could be appealing to customers in highly developed countries, such as European nations. However, there is no one we can contact to support us in these countries. We are very interested if someone could recommend companies for collaboration or introduce us to an experienced distributor”* (IB2., 2025).

4.3.3 The types of networks

Social network: Company B emphasized the importance of personal networks in their business operations. Specifically, the interview highlighted that *“personal relationships helped us get access to current foreign markets. Some of our contacts come from friends' circles or shared professional experiences”* (IB1., 2015). The current foreign market, Kyrgyz Republic, was obtained through social networks, with a previous key manager's friend acting as the bridge to this new country.

Business network: When the neither interviewee clearly stated that the company has a business network that can be utilized for their internationalization. The only type of network that helped them enter the Kyrgyz Republic was a social network, specifically a friend of a previous employee. Through their established business entity in the country, they began contacting local businesses for cooperation in this market.

Institutional network: The Mongolian National Chamber of Commerce and Industry (MNCCI) is the primary organization that supports local businesses in their development of internationalization in Mongolia. Their primary activities include advocating for private sector interests, promoting trade and investment in Mongolia, and fostering

international partnerships between foreign entities and local businesses. Additional functions include supporting the export development of local companies, facilitating access to foreign markets, ensuring regulatory compliance, and organizing international trade fairs, business networking events, and training programs to enhance companies' competitiveness. A few years ago, MNCCI organized a business networking event for managers in Central Asian countries, to which Company B sent its senior managers. They traveled to two Central Asian countries, Uzbekistan and Kazakhstan, to meet pharmaceutical companies. *"We got the idea to expand our business into these countries from this event"* (IB2., 2025).

Additionally, the Company B stated that they never participated in pharmaceutical industry scientific conferences such as Bio Europe, and it has no connection or networking with medical professionals from abroad. Networking with industry experts at such scientific conferences is a new endeavor for the company, which has never previously attempted it.

Digital network: *"We mostly use digital tools for local communication rather than for building networks. Our company website and social platform profiles are active, but they have not led to business networking yet"* (IB1., 2025). This suggests that while Company B maintains a basic digital presence, such as a company website and LinkedIn profile, they do not consider digital networking a primary channel for international business development.

4.3.4 Company B's internationalization challenges

Similar to the interview with Company A, the interview with Company B focused on the six types of challenges mentioned in the previous part and discussed in the literature review chapter. Additionally, open-ended questions were also asked to reveal any further internationalization challenges not covered in the literature review.

Regulatory challenges: Foreign countries' regulations regarding pharmaceutical products present one of the biggest challenges to overcome for Company B. Each country has its own specific rules when it comes to permitting pharmaceutical products. *“Some countries with strict regulations require clinical trials with large sample sizes conducted within their borders, while others permit products that have been used in their country of origin for more than five years”* (IB2., 2025). These regulatory demands are the most challenging aspect, and due to these stringent requirements, Company B has cancelled its internationalization plan to China. The networking opportunities in China were insufficient for Company B, and the only business network, which consisted of previous raw material suppliers, supported their attempt to enter the Chinese market. However, strict country regulations and difficult approval processes, combined with unprofessional and inefficient network support, made it impossible for Company B to succeed in the Chinese market. Nevertheless, they mentioned that in the future, if they can find networking opportunities to support their entry into the Chinese market, they will be willing to try again.

Financial and resource constraints: Company B has not indicated that financial difficulties are the primary obstacle preventing it from expanding its market internationally. Since the company was established over thirty years ago, it has maintained stable operations in the local market, where it manufactures and sells its core products.

Additionally, there are no specific funding organizations or institutional networking groups that provide financial support to companies in Mongolia. The only way to assist these business entities is through government-specific policies that give low-interest rate loans with longer repayment. The company received this type of financial support, which is not specifically aimed at helping companies expand their operations abroad; its purpose is more focused on developing their business locally. The interviewee mentioned that *“a few years ago, there was a government export promotion program that distributed business loans with a low interest rate. With the help of that loan, we*

managed to make our first step to China, even though it ended up unsuccessful" (IB2., 2025). Additionally, the marketing head noted that "when we attempted to hire professional from the foreign country, the salary was too high, that we could not afford" (IB1., 2025). This reveals that company B faces financial and resource constraints regarding its internationalization, and it could perform better if it had sufficient financial resources.

A lack of knowledge and experience: For Company B, finding experienced individuals who understand foreign markets is another significant challenge the company faces, as it lacks experience in these new markets. The company's primary strategy is to open a subsidiary office or collaborate with a trusted partner to gain knowledge in this market. This approach aims to reduce the risk associated with limited market knowledge by leveraging their network and acquiring insights through networking activities. Finding qualified human resources who can manage international business activities poses a challenge for the company. They attempted to find such personnel locally; however, they were unable to identify anyone with both the necessary experience, knowledge, and connections in foreign markets.

Cultural differences: After starting work with the Kyrgyz Republic, the company began to understand the cultural differences and people's attitudes toward business activities and communication styles. The variations in communication styles presented challenges, not only in face-to-face conversations and phone calls but also in email exchanges. The interviewee noted that "*nationality and cultural differences significantly influence business cooperation, and we made our best efforts to adapt and understand these differences*" (IB1, 2025). As they mentioned, social or personal networking is the top priority for conducting business in the Kyrgyz Republic. Business meetings between companies can be easily scheduled if both parties are interested in cooperating; they arrange a time and organize the meeting accordingly. However, in the Kyrgyz Republic or any other EAEU countries, even if both parties are eager for business, a meeting will never occur without a relative, close friend, or someone who can connect the two sides.

In Mongolia, knowing the person and establishing a personal relationship is not as crucial as it is elsewhere. Therefore, for company B's market expansion in the Kyrgyz Republic, networking, especially social networking, is the most important tool to mitigate the challenge of cultural differences.

Technological and digital challenge: Company B acknowledged that their limited technological and digital capabilities hinder their internationalization opportunities. Unlike firms in developed economies, Company B did not fully leverage digital platforms like LinkedIn or online B2B networks to build global relationships. Interviewees did not specifically mention that developing digital capabilities within the company is a significant challenge for them; rather, they are unaware of the importance of technology and digitalization. In today's digital economy, under utilization of digital tools creates a major constraint, particularly for SMEs in regulated and knowledge-intensive sectors like pharmaceuticals, where digital engagement is a key enabler of global collaboration and market entry (Sinkovics et al., 2013).

In addition to the overall challenges of internationalization, Company B added the "**country of origin**" effect as a significant challenge during its internationalization. While the company believes in the quality and efficacy of its natural pharmaceutical products, interviewees noted that *"being a manufacturer from a developing country like Mongolia can negatively impact product success in the international market. Potential partners and regulators in more developed countries see Mongolian-made pharmaceutical products skeptically"* (IB2., 2025), associating them with weaker regulatory standards or lower quality. According to Ciravegna et al., (2014), firms from emerging or less developed countries often face "liability of origin" which includes perceived lower product quality, weaker brand reputation, limited institutional trust which applied to Company B internationalization. Country of origin undermines Company B's credibility and complicates its efforts to gain market entry or attract distributors abroad. Company B's case study found that country-of-origin and product-origin-based biases can influence internationalization, particularly for firms from less recognized

pharmaceutical-manufacturing nations. The liability of origin suggests that firms from emerging or developing economies face additional disadvantages in global markets due to negative stereotypes or unfamiliarity with their home country (Ciravegna et al., 2014).

4.4 Comparison of case companies

In this part, the main comparisons of the case studies will be discussed. The discussion is organized into a few different parts to address the research's main research objectives.

Both case companies are SMEs operating in the pharmaceutical sector, aiming to expand into international markets. However, they differ in terms of their country of origin, product type, challenges faced, and networking opportunities in foreign markets. Background information for the two case companies is summarized in the following Table 7.

Table 7. Two case companies' background comparison.

Categories	Company A	Company B
Country of origin	Finland (Developed economy)	Mongolia (Emerging economy)
Company size	Small-sized (less than 10 employees)	Medium-sized (More than 150 employees)
Type	Born global	Traditional
Market experience	Less than 10 years	More than 30 years
Product type	Rare cancer medicine	Natural ingredient biological active products
International experience	Actively engaged in global partnerships from inception	Limited, early-stage internationalization
Target countries to internationalize	EU countries, the USA, and Japan (countries with a strict regulatory environment)	Central Asian countries
Key people's education	PhDs and MScs from top European universities	Bachelor's in chemical science and business administration from local universities
Key people's international experience and networking	Extensive, all key people have experience in international organizations and have direct network access to any foreign countries	Limited, minimal interaction with foreigners and foreign institutions

Both companies are pharmaceutical SME, Company A is relatively small and also a new company, with only a few highly-skilled and experienced members who have rich networks all over Europe. They do not manufacture and commercialize the products by themselves; instead, they hire contract manufacturers and service providers from all over the world. Finland's small domestic market, particularly for rare cancers, made Company A's internationalization a necessity from the very beginning. The company's niche product targeted a global patient population from the outset, aligning with the born-global definition of "early and rapid internationalization" (Knight & Cavusgil, 2004). The company's human resources consist of highly qualified professionals with international experience who have networked across Europe and the U.S. The firm relies heavily on its networks, with decisions regarding suppliers, quality consultants, and market entry being network-driven, often based on trust and past relationships. According to Johanson & Vahlne's (2009), the role of trust and relationships in internationalization helps firms reduce uncertainty in foreign markets.

Company B is a medium-sized company with over 150 employees and has operated in its local market for more than thirty years. However, no key members of the company have significant international experience or network connections abroad. They manufacture their products in-house, which makes them a traditional manufacturing firm, following a simple internationalization path, starting with neighboring or geographically closer countries. It gradually expanded into culturally similar and geographically nearby markets (e.g., Central Asian countries like the Kyrgyz Republic and Kazakhstan) only after it had succeeded domestically. Unlike Company A, Company B's internationalization was led by motivations rather than necessity (Doojav et al., 2020). The company does not have an export department, and its marketing team and personal networks manage its international operations. Furthermore, it does not have sufficient knowledge, regulatory experience, or international networks. Despite an interest in expanding to Western markets, the firm is limited by low absorptive capacity and a lack of reliable networks.

Networks play an important role in the internationalization strategies of both case companies. Both companies emphasize trust-based partner selection: Company A actively utilizes various types of networks and chooses its business partners through both formal and informal networks, as well as long-term relationships, while Company B relies more on personal trust and familiarity to identify foreign partners. **Table 8** compares the network types utilized by both companies for their internationalization.

Table 8. Case companies' types of network and utilization in their internationalization.

Aspects	Company A	Company B
Main Networking Types	Actively utilize all different types of networks, including social, business, institutional, and digital networks, as well as connections with company and key managers.	Social networks primarily involve the personal connections of key managers, while institutional networks are utilized to a lesser extent.
Social network	Friends in the pharmaceutical industry, academic peers, former classmates, and former colleagues from previous companies or research institutions	Friends or relatives of key people.
Business network	Consulting firms, R&D partner companies, preclinical and clinical trial organizations, raw material and end-user product contract manufacturers, quality management service providers, hospitals, and laboratories	Limited Hired a consulting firm in China.
Institutional network	Finnish institutional body, Universities and Research Groups, Bio-Europe, Financial support program, PAG UK, EMA, Scientific networking conferences	MNCCI, Government program for financial support (business loan with low interest rate)
Digital network	B2B network virtual groups, LinkedIn, Virtual Bio-Europe	Limited

According to the literature background chapter, "SMEs rely on different types of networks for foreign market knowledge and rapid market entry" (Musteen et al., 2014),

and "SMEs use networks to pivot quickly in response to regulatory or market changes" (Paul et al., 2017). In line with this, both case companies prioritize the network for their internationalization. While both SMEs are aware of the importance of networks. However, their approaches differ significantly in terms of scope and intensity.

Company A's network utilization is a combination of social, business, institutional, and digital networks. In contrast, Company B mainly relies on social networks. They often leverage personal relationships, such as friends and relatives.

Company A prioritizes building deep, trust-based relationships with its partners and views them as close, strong network ties who can grow together with them for the long term. Company A actively invests in partnerships with networks that share its values and goals, treating these partners as coworkers and friends in the complex international pharmaceutical environment. This is reflected in their internationalization approach, where partners are considered a crucial tool for global market access, and they work together as a team instead of Company A working alone.

In contrast, Company B recognizes the importance of networking from a different perspective. For example, Company B hired a consulting firm in China to manage its regulatory registration documents. This represents a purely service-based interaction without any relationship development with this consulting firm. There is no active networking, personal communication, or long-term collaboration with these external parties. This highlights a fundamental difference in how each company utilizes its network. Company A builds strategic, close, and deep relationships, and Company B tends to engage in short-term, neutral connections without any close connections.

Company A collaborates with consultants, experts, and regulatory advisors, and Company B lacks this support. This results in slower and more challenging international expansion. Company A's expert network comprises consulting firms, R&D collaborators, preclinical and clinical trial organizations, contract manufacturers, and quality

management service providers. There is always someone they can contact when starting a project abroad, and through these networks, Company A leverages global market entry to co-create value.

Additionally, Company A benefits from public and institutional funding in Finland, which enables it to sustain its operations and continue its outreach abroad. External financing allows for greater risk-taking in internationalization, a characteristic typical of developed market SMEs (Oviatt & McDougall, 2005). In contrast, Company B receives limited domestic financial support, primarily through general business loans that do not emphasize international growth. Besides institutional financial support, there are other organizations, such as PAG, university groups, and various scientific networking conferences, that allow Company A to build long-term collaborations that facilitate smoother international market entry.

Regarding digital presence, Company A actively engages with global digital platforms, such as LinkedIn, professional digital networking platforms, and the BIO-Europe digital conference. In comparison, Company B does not have a global digital networking strategy, which leads them to stay out of international reach.

Both Company A and Company B face several challenges in their internationalization. Although both companies operate in the highly regulated pharmaceutical industry. Their challenges are different in terms of market focus, resource availability, institutional environments, and networking strategies. Based on the findings from the literature review on recent challenges in SME internationalization, this research focuses on six key types of challenges. **Table 9** outlines and compares the internationalization challenges faced by the two case companies, highlighting both their similarities and key differences.

Table 9. Comparison of internationalization challenges faced by case companies.

Internationalization challenges	Company A	Company B
Regulatory and institutional challenges	High	High
Financial and resource constraints	High	Medium
A lack of knowledge and experience	Low	High
Market specific challenges	Medium	Unknown
Cultural and communication differences	Low	Medium
Technological and digital challenges	Low	High

Table 9 compares six categories of challenges commonly encountered by SMEs during internationalization: regulatory and institutional barriers, financial and resource constraints, knowledge and experience gaps, market-specific issues, cultural and communication differences, and technological/digital difficulties. Each challenge is evaluated based on the degree of difficulty faced by the respective company: High, Medium, and Low. However, market specific challenge is unknown for case Company B, because the company did not encounter many foreign markets specific challenges that could be different, except for the Kyrgyz Republic and China currently.

Both companies experience high **regulatory and institutional challenges**, reflecting the strict compliance requirements of the pharmaceutical sector, which aligns with highly regulated industries facing steep challenges when entering foreign markets (Grant, 2024). This was the biggest challenge both companies agreed and repeated during the interview with both case companies.

In terms of **financial and resource constraints**, both companies agreed that this is the challenge for them, though the importance is higher for Company A. This may reflect Company A's deeper investment in R&D, clinical trials, and contract manufacturing processes, which demand substantial funding. Company B reports only medium-level financial constraints, potentially because it adopts less resource-intensive strategies and no plan to invest much. Because they acknowledged that they do not see the financial constraint as the most significant challenge they encountered, they did not invest in a foreign expert who could help them develop their internationalization due to the high cost of the expert fee.

Lack of knowledge and experience: Company A reports low difficulty, suggesting a highly educated management team's prior international experience and access to specialized networks. Additionally, Company A deliberately focuses on expanding within EU countries, where regulatory systems, institutional frameworks, and industry infrastructure are more familiar. This strategic preference for familiar markets enables Company A to reduce internationalization risk and avoid failures that may arise in unfamiliar or highly uncertain markets. Company B, however, faces a high challenge in this aspect, aligning with literature on SMEs from emerging economies that struggle with international business knowledge, weak managerial experience, and limited institutional learning (Sanyal et al., 2019).

Market-specific challenges show a medium level for Company A, and it is marked as "unknown" for Company B. Because Company B is in the early stage of its internationalization and has not encountered many new foreign markets yet.

Regarding **cultural and communication differences**, Company A faces a few challenges. The reason is that their foreign markets are located mainly in the EU region and they have internationally experienced staff who speak multiple languages. In contrast, Company B reported medium-level difficulties. This is a common challenge faced by SMEs from isolated and emerging markets like Mongolia. Initially, Company B tried to enter the Chinese market because of the size and geographic location. However, lack of market knowledge, cultural and language differences, and regulatory challenges led to the failure. Therefore, Company B shifted its focus to culturally and institutionally closer Central Asian markets. Such countries have lower risk and greater familiarity.

Finally, regarding **technological and digital challenges**, the pharmaceutical industry is not as advanced in digitalization. It does not use modern IT systems, digital tools, and automation to the same degree as the high-tech industry. This challenge highlights the companies' limited digital skills and capabilities, as well as the underuse of digital

platforms. Company A reports low difficulty. They actively use digital platforms, and key managers can use these digital tools effectively. Conversely, Company B faces significant technological and digital hurdles. This aligns with Hu et al., 2024; Andini & Kusnandar (2024)'s findings of digital underdevelopment in emerging economies.

Finally, at the end of this subchapter, this section examines how two case companies utilize different types of networks to tackle their internationalization challenges. Networking is widely regarded as critical support for SMEs in overcoming internationalization challenges (Johanson & Vahlne, 2009; Musteen et al., 2014). However, in the context of the two case companies, networks play distinct roles and provide varying levels of support depending on the nature of the challenge and the firm's internationalization strategy.

MNEs have the expertise and human resources for every aspect of the internationalization process. However, pharmaceutical SMEs cannot afford to hire experts for every operation. Additionally, this industry requires expertise at every single step. Therefore, networking and having reliable partners are essential for overcoming challenges, especially in the international market.

Table 10 illustrates how networks addressed the internationalization challenges faced by the two case companies.

Table 10. The importance of different types of network utilization for internationalization challenges.

Challenges	Company A				Company B			
	Social network	Business network	Institutional network	Digital network	Social network	Business network	Institutional network	Digital network
Regulatory & Institutional Challenges	Moderate	High	High	Low	High	Moderate	Low	Not used
Financial & Resource Constraints	Low	Moderate	High	Low	Low	Low	Moderate	Not used
Knowledge & Experience Gaps	Moderate	High	Moderate	Moderate	Moderate	Low	Low	Not used
Market-Specific Challenges	Moderate	High	Moderate	Moderate	Not used	Not used	Not used	Not used
Cultural & Communication Differences	Low	Moderate	Low	Moderate	Moderate	Low	Not used	Not used
Technological & Digital Challenges	Not used	Moderate	Low	High	Not used	Not used	Not used	Low

Based on the backgrounds of the two companies, their internationalization status, the internationalization challenges they encounter, and their level of network utilization, it can be concluded that Company A is effectively using different types of networks to address internationalization challenges. In contrast, Company B faces numerous challenges in its internationalization efforts. They are not employing specific tactics, such as many different types of networks, to overcome these challenges. Rather, it is more accurate to say that Company B continues to struggle with internationalization challenges and is not utilizing various networks to address them. It cannot be said that networks have no impact on internationalization challenges for pharmaceutical SMEs from emerging economies. Instead, pharmaceutical SMEs from emerging economies are not effectively utilizing networks to address their challenges.

Company A, from a developed economy, effectively integrates all four network types to address a wide range of internationalization challenges, particularly by leveraging institutional and business networks to navigate regulatory and financial constraints. In contrast, Company B primarily relies on social networks, exhibiting limited or no strategic use of business or digital networks. This analysis points to the literature (e.g., Ciravegna et al., 2014; Narooz & Child, 2017) that indicates SMEs in emerging economies often lack access to formal business networks and institutional support, limiting their ability to establish strategic partnerships. Consequently, they tend to depend on informal or social networks, such as friends, family, or former colleagues.

The biggest internationalization challenges for Company A were regulatory and institutional challenges, as well as resource and financial challenges. Market-specific challenges were moderate, while the remaining three types of challenges—lack of knowledge and experience, cultural and communication differences, and technological and digital challenges—were viewed as the least important. To overcome the most significant challenges (regulatory and institutional challenges, resource and financial challenges, and market-specific challenges), institutional and business networks had the strongest effect. The business network had the greatest impact on overcoming all six

types of challenges, followed by the institutional network, which had a moderate to significant effect on these key challenges. However, while Company A recognized the importance of social networks for their internationalization, their effect on overcoming challenges was not as pronounced as that of business and institutional networks. The digital network had a limited impact on addressing the most important challenges, though it was beneficial for tackling the least significant challenges, such as overcoming the lack of new market knowledge, market-specific challenges, and cultural and communication differences.

5 Conclusions

This section will present the results of this research, as well as the theoretical contribution, limitations, and suggestions for further studies.

5.1 Summary of findings and theoretical contributions

This research aimed to explore how networking supports pharmaceutical SMEs in overcoming internationalization challenges during their new market entry and how the situation differs between SMEs from emerging and developed economies. If the country of origin affects the situation. To understand this, two case studies of pharmaceutical companies from each type of economy were analyzed based on the relevant literature. The main research objective was to explore and compare how pharmaceutical SMEs from emerging and developed economies utilize networks to overcome the internationalization challenges of entering foreign countries.

Firstly, this paragraph addresses the sub-objective of identifying the types of internationalization challenges that SMEs from different economies encounter and comparing these challenges. This research focused on six specific challenges: regulatory compliance, financial and resource constraints, market uncertainty, cultural and communication differences in foreign countries, market-specific challenges, and the utilization of technological and digital tools. Market-specific challenges were moderate for Company A, while the lack of knowledge and experience, cultural and communication differences, and technological and digital challenges were identified as the least significant. For Company B, all types of internationalization challenges have a high to moderate effect, except for market-specific challenges, as Company B is in the early stages of its internationalization and has not yet encountered many new foreign markets. Therefore, it can be stated that pharmaceutical SMEs from emerging economies face more challenges compared to those from developed economies. This finding confirms that firms from emerging markets have a weaker competitive

advantage compared to those from developed economies, primarily due to their limited institutional development, which leads to facing greater challenges in international markets (Igwe et al., 2022, p. 2). Companies in emerging economies often have weaker technology, less brand reputation, and management abilities (Ramamurti, 2012). Conversely, firms in developed economies have better access to networks, technological advancements, adequate network infrastructures, clear guidelines and regulations from regulatory bodies, extensive market knowledge and experience (Narooz & Child, 2017; Altnaa et al., 2021). This enables them to compete better in international markets. Additionally, the country of origin presents a significant challenge for pharmaceutical SMEs from emerging economies. It influences their product image in foreign markets. Company B, which is from an unfamiliar and less industrialized country, faces underestimation regarding product quality, regulatory reliability, and brand credibility in the international market. This is called "liability of origin". It decreases trust from potential foreign partners and regulators and makes market entry more difficult and costly (Ciravegna et al, 2014). As discussed in previous sections, this disadvantage emphasizes the need for stronger institutional networks, reputation-building strategies, and trust-based social connections to address the negative bias toward the country of origin.

The second and third sub-objectives of this research were regarding the different types of networks utilized by the two case SMEs and the role of these networks in addressing their internationalization challenges. Company A, from a developed economy, presents a strategic use of all social, business, institutional, and digital networks. This approach enables the company to mitigate its internationalization challenges systematically. Particularly, regulatory compliance, financial/resource constraints, knowledge and experience gaps, and market-specific challenges. The most significant networks for Company A are business and institutional networks. These two types of networks are crucial to overcome strict regulations in foreign countries, access financial resources, and build effective partnerships. Another finding of this study is the growing role of digital platform networking in facilitating successful internationalization. Digital and

social networks, while not central, still play a supporting role in enhancing access to market knowledge and facilitating communication. Company A has strategically developed digital platforms as part of its internationalization efforts, using them to strengthen its existing networks. Company A's case of digital platforms utilization supports Neubert's (2018) finding that digital networks are becoming cost-effective tools that enhance firms' global visibility, gather market knowledge, and facilitate new partnerships without requiring a physical presence or incurring additional costs. In contrast, Company B has limited use of digital platforms. Therefore, they lost opportunities to expand their international network and reach new partners. Digital networking enables SMEs to overcome geographic and institutional limitations at relatively low costs (Jean et al., 2021). Digital platform networking represents an effective tool for SMEs to enhance their global connectivity.

Company B relies on social networks, such as personal contacts. It shows minimal utilization of business and institutional networks and virtually no use of digital networks. Therefore, Company B struggles to address its internationalization challenges effectively. This aligns with the findings of Ciravegna et al. (2014) and Narooz & Child (2017), that SMEs in emerging economies often lack access to structured network ecosystems and rely on survival-oriented informal connections. Additionally, it confirms Altnaa et al (2021)'s findings that Mongolian SMEs often depend more on social networks than formal business or institutional networks for market-related connections. This reliance poses challenges for SMEs in emerging economies such as Mongolia. For example, it limits their ability to leverage more formal types of networks that could enhance their internationalization efforts. Furthermore, support from third parties (government, funding programs, and NGOs) in emerging countries is low (Narooz & Child, 2017). Therefore, it forces SMEs to depend on social networks.

Although Company B's overall network utilization is limited, there are clear cases where networks have played a crucial role in their internationalization efforts. For example, social networks enabled their entry into the Kyrgyz Republic. The government-

supported financing program helped them take their first steps toward the Chinese market. Additionally, participation in an institutional networking event gave them the idea to expand their business to Central Asian countries. It means that, whenever Company B had the opportunity to use a network, they always reached a positive outcome.

There is another interesting finding that proves that the country-of-origin effect is crucial for R&D based innovative products such as pharmaceuticals. Product reputation significantly decreased due to its country of origin being less developed. Despite Company B's emphasis on product quality and scientific credibility, its reputation was significantly diminished because it is from a less developed country.

Therefore, based on the findings, this research shows that SMEs from developed and emerging economies use networks differently to overcome internationalization challenges, depending on their own capabilities and third-party support. This supports the initial idea that SMEs from different economic backgrounds have unique networking opportunities and use networks in different ways to address specific challenges in the international market (Sanyal et al., 2019). SMEs from developed economies benefit from various types of networks and operate within an integrated network ecosystem, which helps them handle internationalization challenges more effectively. SMEs from emerging economies tend to have lower levels of network use. However, all levels of network utilization still help them overcome challenges to some extent. This means different types of networks assist firms, whether from developed or emerging economies.

5.2 Managerial implications

Regarding the **implications for decision-makers** in SMEs from developed and emerging economies, this study can provide several contributions.

First, the findings emphasize the strategic **importance of various types of network** utilization for SMEs' internationalization. Managers of both developed and emerging economy SMEs should understand that relying solely on informal social networks is insufficient for successful internationalization. Instead, developing a **combination of social, business, institutional, and digital networks** can enhance the chances of successful internationalization.

Second, the study emphasizes the importance of proactive engagement with **institutional support systems**. SMEs in both developed and developing countries benefit from public innovation agencies, government funding programs, and international trade missions (Radulovich, 2008). Managers should actively seek out and engage with such institutions to reduce financial and regulatory burdens. The lack of networking opportunities and support services from external organizations remains a major challenge for SMEs in emerging economies. To support the internationalization of local SMEs, countries have established official institutional networks. For example, Business Finland in Finland, KOTRA in South Korea, and the China Council for the Promotion of International Trade (CCPIT) in China.

Third, the research highlighted the importance of digital networking. Managers who operate in emerging economies should allocate resources to digital platforms, including LinkedIn, virtual events, B2B portals, and EXPOs. These platforms serve purposes such as marketing and international partner connections. SMEs need to use digital networking tools for their internationalization strategy to reach maximum foreign market potential and competitive advantage. This is referred to as one of the most cost-effective approaches.

Fourth, SMEs in emerging economies face the country-of-origin challenges. It requires a strategic plan and concrete market promotion activities such as branding, certification, and reputation building. Managers must recognize that how foreign countries view their country can influence their trust and their future intentions. Therefore, SMEs should

strategically leverage networks to mitigate these effects. The actions include third-party product validation and partnerships with internationally reputable brands.

Fifth, the study suggests that internationalization is not a one-time, temporary act. It is an evolving systematic process, such as long-term relationship-building with international partners. Managers should treat their partners as future-oriented strategic networks that will expand together with their firm. After building a network, it becomes essential to maintain and nurture these relationships actively.

Lastly, the findings reveal important implications for governments. Since SMEs are main contributors to a country's economic development and create most employment, governments should focus on building institutional infrastructure to support SME internationalization. This includes financial funding programs, trade facilitation services, and institutional networking platforms that can connect local SMEs with global markets. Such actions will significantly reduce the liability of origin and enable SMEs to compete more effectively in international markets.

5.3 Limitations and directions for future research

Despite its contribution to current literature, this study has several limitations.

Since only one pharmaceutical SME from each economic background is studied, the findings may not be fully generalizable. The sample size is limited. The findings may not apply to the whole range of internationalization of all SMEs operating in this industry, in the exact locations, since they are based on particular firm-level experiences.

The internationalization and network utilization of the two case companies differ significantly. Two case companies have different backgrounds. The Finnish company actively engages in utilizing various types of networks, while the Mongolian company is

less involved and is not even aware of the importance of networking. Therefore, in the future, the two companies should be compared on a similar level of network utilization

Participants may provide subjective responses influenced by their interests. They may view their company's internationalization efforts in an overly positive or overly negative way. This could lead to biased interpretations and affect the reliability of the findings.

The results may not be directly applicable to SMEs in other industries. The pharmaceutical sector operates under unique regulatory frameworks that significantly shape internationalization processes. This may not be relevant or relatable to firms in different industries.

The two case companies are from two distinct countries with different cultural and contextual differences. This may impact how networks function in these countries, and it may potentially limit direct comparability.

Regarding the directions for future research, this study contributes to understanding how pharmaceutical SMEs from developed and emerging economies utilize different networks to address their internationalization challenges. However, the following directions remain open for further research exploration.

Pharmaceutical companies are not a homogeneous group. Their regulatory, operational, and strategic environments differ significantly based on their specific products. For example, drug manufacturers, R&D oriented drug developers, and IV solution manufacturers operate under different regulatory environments. This study compares a supplement manufacturer to a drug development company. Future research should explore and compare the same groups, such as generic drug manufacturers, with other generic drug manufacturers. Each SME faces its unique internationalization challenges, which impact its networking needs and strategies.

This study examines firms from Mongolia and Finland as representatives of emerging and developed markets. However, generalizability can be improved. For example, compare SMEs from bigger and more professional emerging economies such as India, Pakistan, Brazil, Indonesia, or China, which are the largest pharmaceutical product manufacturing countries. Furthermore, developed economies with specialized pharmaceutical industries, such as Switzerland or Japan. Expanding the samples would improve understanding of how the country of origin shapes SME internationalization success in the pharmaceutical sector.

While this thesis addressed digital networking to some extent, a more in-depth exploration of how digital platforms, particularly industry-specific ones, facilitate internationalization would be beneficial.

This study focuses on successful networking strategies; however, failed internationalization attempts, especially those related to failed networks, can provide equally valuable lessons. Future studies should examine network-related failures to identify patterns of over-reliance on weak ties or ineffective institutional support mechanisms.

This study focuses only on the challenges of internationalization. However, future research could explore the internationalization opportunities. Both perspectives can provide valuable insights to SMEs to succeed in international markets.

Since this research demonstrated that networking is essential for SMEs' successful internationalization, future studies could explore it in greater depth. For instance, how the educational background of key managers, language proficiency, and previous international experience contribute to successful internationalization.

As SMEs are the main contributors to countries' economic development, the government and state organizations should support their local SMEs'

internationalization. To improve the effectiveness of internationalization, they should prioritize the development of institutional support systems. They should provide SMEs with opportunities to access formal business and international networks. Meanwhile, SMEs should adopt integrated networking. Integrate all digital, institutional, and interpersonal networks to improve their internationalization success.

Lastly, the pharmaceutical firms' successful internationalization is vital for global health. It significantly affects the reduction in costs of essential life-saving products and their availability in the global market (Takawira & Pooe, 2024). Therefore, the successful internationalization of pharmaceutical SMEs is crucial for the firms, the countries, and the overall society well-being.

References

- Acs, Z. J., Morck, R., Shaver, J. M., & Yeung, B. (1997). The internationalization of small and medium-sized enterprises: A policy perspective. *Small Business Economics*, 9 (1), 7–20.
- Ahimbisibwe, G.M., Ntayi, J.M., Ngoma, M., Bakunda, G., & Kabagambe, L.B. (2020). The internationalization of small to medium-sized enterprises: do all levels in international networking matter? *Journal of Small Business and Enterprise Development*, 27(5), 817-837. <https://doi.org/10.1108/JSBED-09-2019-0313>.
- Almeida, F., & Santos, J. D. (2020). The role of social networks in the internationalisation of startups: LinkedIn in the Portuguese context. *Management & Marketing*, 15(2), 239-257. <https://doi.org/10.2478/mmcks-2020-0020>
- Alsuwaidi, F., Raziq, M., & Batool, U. (2024). Commercial diplomacy and internationalization of SMEs: A scoping review. *International Research in Management and Marketing*, <https://doi.org/10.32479/irmm.17271>
- Altnaa, U., Vasa, L., & Neszmélyi, G. I. (2021). The role of network ties on SMEs internationalization process in the developing countries/emerging markets: A comparison between Mongolia, China, and Malaysia. *International Journal of Economics and Business Administration*, 9(1), 3-21.
- Alauddin, M., & Mustafa, M. (2015). Small and Medium Enterprise in Bangladesh- Prospects and Challenges. *Global Journal of Management and Business Research: C Finance* 15: 1–10.
- Anderson, W. (2011). “Internationalization opportunities and challenges for small and medium-sized enterprises from developing countries”, *Journal of African Business*, Vol. 12 No. 2, pp. 198-217.
- Arteaga-Ortiz, J., & Fernández-Ortiz, R. (2010). Why don't we use the same export barrier measurement scale? An empirical analysis in small and medium-sized enterprises. *Journal of Small Business Management*, 48(3), 395–420.

- Arudchelvan, M., & Wignaraja, G. (2015). SME internationalization through global value chains and free trade agreements: Malaysian evidence. *ADB Working Paper* 515
- Arvidsson, H. G., & Arvidsson, R. (2019). The Uppsala model of internationalization and beyond. *International Journal of Finance and Economics*, 24(4), 239–253.
- Asare, R., Mavis, A. O., Wilhelmina Q., & Kwasi Atta-Antwi. (2015). Characteristics of Micro, Small and Medium Enterprises in Ghana: Gender and Implications for Economic Growth. *African Journal of Science, Technology, Innovation and Development* 7: 26–35.
- Bhatti, W.A., Vahlne, J.E., Glowik, M. & Larimo, J.A. (2022). “The impact of industry 4.0 on the 2017 version of the Uppsala model”, *International Business Review*, Vol. 31 No. 4, 101996, doi: 10.1016/j.ibusrev.2022.101996.
- Bilal, Z. O., & Nawal, S. A. M. (2015). Challenges and Constraints Faced by Small and Medium Enterprises (SMEs) in AL Batinah Governorate of Oman. *World Journal of Entrepreneurship, Management, and Sustainable Development* 11: 120–30.
- Bruneel, J., & De, C. R. (2016). Entry mode research and SMEs: a review and future research agenda. *Journal of Small Business Management*, 54:135–167
- Cardoza, G., Fornes, G., Farber, V., Duarte, R.G. & Gutierrez, J.R. (2016). “Challenges and public policies affecting the international expansion of Latin American SMEs: evidence from Brazil, Colombia, and Peru”, *Journal of Business Research*, Vol. 69 No. 6, pp. 2030-2039.
- Carson, D., Gilmore, A., & Rocks, S. (2004). SME marketing networking: A strategic approach. *Strategic Change*, 13(7), 369–382. <https://doi.org/10.1002/jsc.695>
- Cavusgil, S. T., & Knight, G. (2015). The born global firm: An entrepreneurial and capabilities perspective on early and rapid internationalization. *Journal of International Business Studies*, 46(1), 3–16
- Chaldun, E. R., Yudoko, G., & Prasetio, E. A. (2024). Developing a Theoretical Framework of Export-Oriented Small Enterprises: A Multiple Case Study in an Emerging Country.

- Chandra, A. A., Paul, J., & Chavan, M. (2021). Internationalization challenges for SMEs: Evidence and theoretical extension. *Journal of Business Research*, 128, 557-567. <https://doi.org/10.1016/j.jbusres.2021.03.020>
- Chen, X., & Chen, C.C. (2004). On the intricacies of the Chinese guanxi: A process model of guanxi development. *Asia Pacific Journal of Management*, 21(3), 305-324.
- Chetty, S., & Holm, D. B. (2000). Internationalisation of small to medium-sized manufacturing firms: A network approach. *International Business Review*, 9(1), 77–93. [https://doi.org/10.1016/S0969-5931\(99\)00030-X](https://doi.org/10.1016/S0969-5931(99)00030-X)
- Child, J., Karmowska, J., & Shenkar, O. (2022). The role of context in SME internationalization – A review. *Journal of World Business*, 57(1), 101310. <https://doi.org/10.1016/j.jwb.2021.101310>
- Ciravegna, L., Lopez, L., & Kundu, S. (2014). Country of origin and network effects on internationalization: A comparative study of SMEs from an emerging and developed economy. *Journal of Business Research*, 67(5), 916–923. <https://doi.org/10.1016/j.jbusres.2013.07.011>
- Cisneros-Reyes, Y. D. (2021). Evolution of Uppsala model: A literature review through the years. *International Journal of Management Studies and Social Science Research*, 3(4), 91-105.
- Costa, E., Soares, A. L., & Sousa, J. P. (2016). Information, knowledge and collaboration management in the internationalisation of SMEs: a systematic literature review. *International Journal of Information Management*, 36:557–569
- Coviello, N. E., & Munro, H. J. (1997). Network relationships and the internationalization process of the small software firms. *International Business Review*, 6, 361–386.
- Dekel-Dachs, O., Kanda, W., & Tsvetkova, A. (2021). Searching for a new perspective on institutional voids, networks and the internationalisation of SMEs in emerging economies: A systematic literature review. *International Marketing Review*, 38(6), 1291–1319. <https://doi.org/10.1108/IMR-12-2020-0271>

- Doojav, G.O., Luvsannyam, D., Sukhbaatar, B., Sodnomdarjaa, B., Otgonbat, T., Batmunkh, K., Gantumur, M., & Enkh-Amgalan, E. (2020). Development and Access to Finance of Small and Medium-Sized Enterprises in Mongolia.
- Duarte Alonso, A., Bressan, A., O'shea, M., & Krajsic, V. (2014). Exporting wine in complex times: A study among small and medium wineries. *Journal of Small Business and Enterprise Development*, 21(2), 345–364.
- Enkhbayar, D., Tumenbayar, T., & Zorigtbaatar, A. (2019). "Economic Challenges and Opportunities in Mongolia." *Journal of Emerging Economies and Policy Development*, 7(2), 112-130.
- Eravia, Diana, Tri Handayani, & Julina. (2015). The Opportunities and Threats of Small and Medium Enterprises in Pekanbaru: Comparison between SMEs in Food and Restaurant Industries. *Procedia-Social and Behavioral Sciences* 169: 88–97.
- Eriksson, P., & Kovalainen, A. (2015). *Qualitative methods in business research: A practical guide to social research* (2nd ed.). SAGE Publications.
- Franco, M., & Martins, R. (2023). The role of networks in the internationalization process of small- and medium-sized enterprises in the wine-producing sector. *Global Business Review*, 24(5), 990–1006. <https://doi.org/10.1177/0972150920927373>
- Galkina, T., & Chetty, S. (2015). Effectuation and networking of internationalizing SMEs. *Management International Review*, 55(5), 647–676. <https://doi.org/10.1007/s11575-015-0251-x>
- Galkina, T., Atkova, I., & Ciulli, F. (2023). "Networks of internationalizing digital platforms in physical place and digital space." *Global Strategy Journal*.
- Gamage, S. K. N., Ekanayake, E. M. S., Abeyrathne, G. A. K. N. J., Prasanna, R. P. I. R., Jayasundara, J. M. S. B., & Rajapakshe, P. S. K. (2020). A review of global challenges and survival strategies of small and medium enterprises (SMEs). *Economies*, 8(4), 79. <https://doi.org/10.3390/economies8040079>
- Ghauri, P., Wang, F., Elg, U. & Rosendo-Ríos, V. (2016). "Market driving strategies: beyond localization", *Journal of Business Research*, Vol. 69 No. 12, pp. 5682-5693

- Golbeck, J. (2015). *Introduction to Social Media Investigation: A Hands-on Approach*. Amsterdam, Netherlands: *Elsevier*.
- Goncalves, M., Sengur, F. K., Kayac, A., & Celik, E. (2024). Internationalization strategies of Turkish SMEs: A comparative case study approach. In *Advances in International Business* (pp. 45–68). *Springer*. https://doi.org/10.1007/978-3-031-65314-8_3
- Grant, K. (2024). *The impact of the regulatory environment on entry mode choice: Empirical evidence from the pharmaceutical industry* [Doctoral dissertation, Southern New Hampshire University]. ProQuest Dissertations Publishing.
- Halinen & Törnroos, 1998: Halinen, A., & Törnroos, J.-Å. (1998). The role of embeddedness in the evolution of business networks. *Scandinavian Journal of Management*, 14(3), 187–205. [https://doi.org/10.1016/S0956-5221\(98\)80009-2](https://doi.org/10.1016/S0956-5221(98)80009-2)
- Han, X., Goxe, F., & Freeman, S. Internationalization through social networks: A systematic review and future research agenda. *International Business Review*, (2024), 33 (4), [ff10.1016/j.ibusrev.2024.102292](https://doi.org/10.1016/j.ibusrev.2024.102292)ff.
- He, C., Baranchenko, Y., Lin, Z., Szarucki, M., Yukhanaev, A. (2020). From global mindset to international opportunities: the internationalization of Chinese SMEs. *Journal of business economics and management*, 21(4), 967-986.
- Healthtech Finland. (2023). Overview of Finland's healthtech and pharmaceutical innovation ecosystem. <https://www.healthtechfinland.fi/>
- Håkansson, H., & Ford, D. (2002). How should companies interact in business networks? *Journal of Business Research*, 55(2), 133–139. [https://doi.org/10.1016/S0148-2963\(00\)00148-X](https://doi.org/10.1016/S0148-2963(00)00148-X)
- Hu, L., Filipescu, D. A., & Pergelova, A. (2024). "Understanding SMEs' internationalization through digital platforms: the role of knowledge sharing and consumer education." *International Marketing Review*.
- Hughes, M., Cesinger, B., Cheng, C.F., Schuessler, F., & Kraus, S. (2019). A configurational analysis of network and knowledge variables explaining Born Globals' and late

- internationalizing SMEs' international performance. *Industrial Marketing Management*, 80, 172-187.
- Jeong, S.W. (2016). Types of foreign networks and internationalization performance of Korean SMEs. *Multinational Business Review*, 24(1), 47-61.
- Jin, B., Jung, S. (2016). Toward a deeper understanding of the roles of personal and business networks and market knowledge in SMEs' international performance. *Journal of Small Business and Enterprise Development*, 23(3), 812-830. <https://doi.org/10.1108/JSBED-08-2015-0104>.
- Johanson, J., & Vahlne, J. E. (1977). The Internationalization Process of the Firm-A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*, 8(1), 23-32. <https://doi.org/10.1057/palgrave.jibs.8490676>
- Johanson, J., & Vahlne, J. E. (2009). The Uppsala Internationalization Process Model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40, 1411-1431. <https://doi.org/10.1057/jibs.2009.24>
- Johanson, J., & Vahlne, J. E. (2003). Business relationship learning and commitment in the internationalization process. *Journal of International Entrepreneurship*, 1:83–101.
- Kiss, A. N., Danis, W. M., & Cavusgil, S. T. (2012). International entrepreneurship research in emerging economies: A critical review and research agenda. *Journal of Business Venturing*, 27(2), 266–290.
- Knight, G. A., & Cavusgil, S. T. (1996). The born global firm: A challenge to traditional internationalization theory. *Advances in International Marketing*, 8(1), 11–26.
- Lis, B., Nienstedt, H.W., Proner, P., Yalazi, G., Mauch, A. (2012). SMEs Going Global: A Comparison of the Internationalization Strategies of Publishers and Online Social Networks, *International Review of Management and Marketing*, 2(1), 1-9.

- Magni, D., Chierici, R., Fait, M., & Lefebvre, K. (2021). A network model approach to enhance knowledge sharing for internationalization readiness of SMEs. *International Marketing Review*, 38(6), 1275–1299. <https://doi.org/10.1108/IMR-03-2021-0110>
- Massa, S., Annosi, M.C., Marchegiani, L. and Messeni Petruzzelli, A. (2023), “Digital technologies and knowledge processes: new emerging strategies in international business. A systematic literature review”, *Journal of Knowledge Management*, Vol. 27 No. 11, pp. 330-387, doi: 10.1108/JKM-12-2022-0993
- Munro, D. (2013). *A Guide to Financing SMEs*. New York: Palgrave Macmillan
- Musteen, M., Datta, D. K., & Butts, M. M. (2014). Do international networks and foreign market knowledge facilitate SME internationalization? Evidence from the Czech Republic. *Entrepreneurship Theory and Practice*, 38(4), 749–774. <https://doi.org/10.1111/etap.12025>
- Nam, H. & Kannan, P.K. (2020), “Digital environment in global markets: cross-cultural implications for evolving customer journeys”, *Journal of International Marketing*, Vol. 28 No. 1, pp. 28-47, doi: 10.1177/1069031X19898767
- Narooz, R., & Child, J. (2017). Networking responses to different levels of institutional void: A comparison of internationalizing SMEs in Egypt and the UK. *International Business Review*, 26(4), 683-696.
- Naslund, J. A., Aschbrenner, K. A., & Bartels, S. J. (2020). Social media use and mental health: Benefits, risks, and opportunities for research and practice. *World Psychiatry*, 19(3), 337–343. <https://doi.org/10.1002/wps.20803>
- Nyuur, R.B., Brecic, R., & Debrah, Y.A. (2018). SME international innovation and strategic adaptiveness: The role of domestic network density, centrality and informality. *International Marketing Review*, 35(2), 280-300. <https://doi.org/10.1108/IMR-11-2015-0239>.

- Ojala, A. (2009). Internationalization of knowledge-intensive SMEs: The role of network relationships in the entry to a psychologically distant market. *International Business Review*, 18(1), 50-59. <https://doi.org/10.1016/j.ibusrev.2008.10.002>
- Oviatt, B. M., & McDougall, P. P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 25(1), 45–64. <https://doi.org/10.1057/palgrave.jibs.8490193>
- Paul, J., Parthasarathy, S., & Gupta, P. (2017). Exporting challenges of SMEs: A review and future research agenda. *Journal of World Business*, 52(3), 327–342. <https://doi.org/10.1016/j.jwb.2017.01.003>
- Paul, J., & Chavan, M. (2021). Internationalization challenges for SMEs: Evidence and theoretical extension. *Journal of Business Research*, 128, 557–567. <https://doi.org/10.1016/j.jbusres.2021.03.020>
- Pavitt, K., Robson, M., & Townsend, J. (1987). The size distribution of innovating firms in the UK: 1945–1983. *Journal of Industrial Economics*, 35(3), 297–316
- Popovic, T. (2024). Internationalization of Small and Medium Sized Enterprises – Insights from the literature. *Ekonomska misao i praksa*. 33. 585-603. [10.17818/EMIP/2024/2.12](https://doi.org/10.17818/EMIP/2024/2.12).
- Radulovich, L. P. (2008). An empirical examination of the role of international SME networks in the internationalization process of SMEs. *Journal of Business & Entrepreneurship*, 20(1), 59–75.
- Rowe, N. (2018). ‘When you get what you want, but not what you need’: The motivations, affordances and shortcomings of attending academic/scientific conferences. *Research Evaluation*, 27(2), 102–114. <https://doi.org/10.1093/reseval/rvy005>
- Saunders, M. N. K., Lewis, P., & Thornhill, A. (2019). *Research methods for business students (8th ed.)*. Pearson Education.

- Sharma, D. D., & Blomstermo, A. (2003). The internationalization process of born globals: A network view. *International Business Review*, 12(6), 739–753.
<https://doi.org/10.1016/j.ibusrev.2003.05.002>
- Singh, R. K., Suresh K. Garg, & S. G. Deshmukh. (2009). The Competitiveness of SMEs in Globalized Economy, Observations from China and India. *Management Research Review* 33: 54–65.
- Steinhäuser, V. P. S., Oliveira, P. F., & Lewé van Aduard de Macedo-Soares, T. D. (2020). Internationalization of SMEs: A systematic review of 20 years of research. *Journal of International Entrepreneurship*, 19(2), 164–195.
<https://doi.org/10.1007/s10843-020-00271-7>
- Stuart, E. (2011). Making Growth Inclusive: Some Lessons from Countries and the Literature. *Oxfam Research Report*. Nairobi: Oxfam, pp. 1–43.
- Takawira, B., & Pooe, D. (2024). Challenges and opportunities for pharmaceutical SMEs from South Africa in embedding into global supply chains: A systematic literature review. *International Journal of Business Ecosystem & Strategy*, 6(3), 1–22.
<http://dx.doi.org/10.36096/ijbes.v6i3.506>
- Themistocleous, S., & Argyropoulos, C. D. (2024). Perspectives of European patient advocacy groups on volunteer registries and vaccine trials: VACCELERATE survey study. *JMIR Public Health and Surveillance*, 10(1), e47241.
<https://doi.org/10.2196/47241>
- Waktole, G.D., & Negera, T.T. (2024). "Partisan Impacts and Determinants for Internationalization of Ethiopian Pharmaceutical Products." *International Journal of Health Economics and Policy*.
- World Bank (2010), "A universal definition of small enterprise: a procrustean bed for SMEs", available at: www.worldbank.org/en/search?q=SME6definition
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). SAGE Publications.

- Zain, M., & Ng, S. I. (2006). The impacts of network relationships on SMEs' internationalization process. *Thunderbird International Business Review*, 48(2), 183–205.
- Zhang., Yanlong., & Xiu, Z. (2012). The Effect of Entrepreneurial Orientation on Business Performance: A Role of Network Capabilities in China. *Journal of Chinese Entrepreneurship* 4: 132–42.
- Zhang, X., Ma, X., Wang, Y., Li, X., & Huo, D. (2016). What drives the internationalization of Chinese SMEs? The joint effects of international entrepreneurship characteristics, network ties, and firm ownership. *International Business Review*, 25(2), 522-534.
- Zhou, L., Wu, W. P., & Luo, X. (2007). Internationalization and the performance of born-global SMEs: the mediating role of social networks. *Journal of International Business Studies*, 38:673–690

Appendices

Appendix 1: Statement on the use of AI tools

OpenAI's ChatGPT and Grammarly are employed as language enhancement tools.

In this research writing, ChatGPT AI was used exclusively for the following purposes:

- Improving sentence clarity and grammar.
- Finding better words and organizing sentence structure for improved readability.
- Receiving suggestions on academic tone and structure.

Grammarly Premium is utilized to improve grammar, punctuation, spelling, and enhance clarity and sentence structure.