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'Boarding the Digitization Train'

The impact of digital technologies on the facilitation of internationalization strategies of the SMEs: The case of Born-Digital companies

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ABSTRACT :

With the growing prominence of digitalization and the push for globalization, there is increasing research on how the transformation and adoption of technology have changed the entry of companies and if it has made it easier or harder. The impact and benefits of technology achieved through being born digital are said to be found in the literature to provide the companies with unique skills and capabilities that help these small but innovative companies counter and challenge traditional players in the market.

This study examines the unique role and impact of born-digital enterprises in navigating global marketplaces and entering new markets, considering the increasing globalization and digital revolution. The research utilizes a mixed-method approach, combining surveys and interviews with professionals from six successful born-digital organizations to provide the answers. It analyzes the inherent advantages of these entities, such as innovation, agile decision-making, and customer-centric operations, which enable their worldwide development, and the findings further highlight the inherent ability of digital natives to effectively use information and technology to make strategic decisions and respond to market changes, in contrast to the delayed adoption of digital requirements by traditional enterprises.

It also highlights the crucial role of these born-digital organizations in transforming global commerce and emphasizes a shift in the way established companies need to adapt in order to stay competitive; it fills a significant knowledge vacuum by examining how digitalization drives internationalization and transforms it, too. It provides actual evidence and validates existing theoretical frameworks in the literature, as well as highlights areas where further research is required.

KEYWORDS: Born-digital, Globalization, internationalization strategy, technology, native advantage, customer-centric.

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1. Introduction

With the evolution and growth of technology, significant disruption and acceleration have been witnessed in all industries across the globe. With the rapid technological increase, organizations are often forced to undergo significant changes in operating and existing within the industry (Colbert et al., 2016; Jesuthasan, 2017). Digitization is one of the most critical and significant trends transforming society and business (Parviainen et al., 2017; Ritter & Pedersen, 2020). Digitization can no longer be considered an emerging trend, and it has significantly impacted the economics of organizations that are globalized in multiple ways (Wautelet, 2017). These include how the business is carried out across borders, which could take the economic benefits coming from and flowing. Responding to digital change could be considered one of the organization's biggest significant challenges (North et al., 2019).

Digitalization uses digital technologies and information to transform business operations (Fossen & Sorgner, 2021; Niemand et al., 2021). The digital transformation process, called Industry 4.0, results from developing and improving digital technologies like AI, 3-D printing, robotics, and the Internet of Things (Müller, 2019; Rüßmann et al., 2015). The development of new technologies is said to have ensured the fusion of the technologies and their interaction across the digital, physical, and biological spheres. Such an interconnected system is found to increase optimization and automation of the processes, leading to a reduction in costs, improvement in productivity, and an increase in overall profitability. Industry 4.0 is believed to be transforming enterprises and their value chains and leading to new business models like digital platforms and platforms of individual firms to close small and medium-sized enterprises (Parida et al., 2019). The transformation has meant that there is direct contact possible between suppliers and customers, which constitutes the opportunity for SMEs that have a limited Budget to achieve a broader range of new customers at a lower cost, increase their share in international activities, and also gain operation market efficiency at the international level (Savastano et al., 2018; WITTKOP et al., 2013; Yamin & Sinkovics, 2006). The new international ventures are found to be capable of creating new market niches with the use of

innovative technologies as well as the adoption of newer business models that are designed for organizations that help them in the use of the said digitalized technologies along with collection and analysis of data regarding the international markets, as well as client feedback which would speed the decision-making process as they are dependent on incremental and iterative life cycle within the product development (Stavnsager Rasmussen & Tanev, 2015).

Digitalization, thus, is considered to provide SMEs with opportunities that would allow them to participate in the global economy with a reduction in transaction costs, increasing network activities, and improving scalability and speed. That said, most evidence that is presently available shows that most SMEs do not have the skills or knowledge to reap the benefits of such a technological transition, which is mainly linked to the difficulties in adopting these tools (Banalieva & Dhanaraj, 2019). In addition, the companies also need guidance when it comes to the development of digital strategies that would impact the organization and are required to ensure a sustainable competitive advantage for the organization at the international level (Dethine et al., 2020), which highlights the importance and need for research into the topic.

1.1. Background

In a survey carried out for the European Commission, most of the respondents believe that digitalization has a substantial impact on the economy, quality of life, and society. It is important to note that people's lives have been influenced heavily by the digital transformation of business (European Commission, 2017). Digitalization has allowed for the connection of 8 billion smart devices worldwide, modified the value of information and its management, and created a change in the organization linked to their boundaries, operations, and relationships internally and externally. Digitalization is related to the availability of a large amount of data collected from different sources and the utilization of data mining and machine learning tools to make use of it for making decisions like identifying business opportunities, predicting the market requirements and client requirements and attitudes (Gray & Rumpe, 2015; Witten et al., 2016). Globalization has brought multiple challenges along with opportunities. Due to globalization, there has

been an increase in international business transactions. With the rise in growth within the emerging markets and the slowing of the advanced economies, the organizations were forced to rethink how they adapt their global strategies. International marketing has expanded and will be critical, sophisticated, and complex compared to the past (Paul et al., 2017; Samiee & Chabowski, 2012; Schellenberg et al., 2018; Shen et al., 2017).

It has been seen that globalization and the increase in competition have led companies to shift specific operations to those countries where it could be done cheaper or more efficiently. Firms are relocating their facilities to other countries or looking to outsource their activities to specific companies that do these activities abroad. This has led to overall competitiveness (Development of Foreign Economic Activity of Ukrainian Enterprises under Conditions of Economic Globalization, 2020; Zeibote et al., 2019). The relocation and outsourcing of business activities alter the international trade for goods and services. For example, Walmart relies heavily on sourcing products from China with lower production costs. Similarly, Hewlett-Packard, or HP, uses globalization to minimize costs while maximizing output (Schmid et al., 2010).

Internationalization has become an essential focus for international trade and is considered the cornerstone of economic development. As per the 2015 International Labor Office report, it has been mentioned that SMEs represent around 95 percent of all businesses globally and are responsible for creating at least two-thirds of employment in the private sector (International Labour Office, 2015). In all economies, SMEs play a critical role in growth. The contribution is not limited to economic growth but also social development. The social and economic functions have led to an increased focus on the SME sector as a tool for strategic interest for economic growth (Neagu, 2016). Over the years, economists have considered small businesses to be the catalyst that promotes economic development. Small businesses are critical contributors to achieving the fundamental goals of the national economy and have become the backbone of the progress of society and the economy (Galindo & Méndez-Picazo, 2013). Within SMEs, there are two types of enterprises. The first is the traditional enterprise that is not focused on long-term strategies but has a small marketplace that it can target. The focus

of these SMEs is to make goods that they have inherited over generations. The second type is the modern SMEs that use technology, search for new markets and challenges, and have increased competitiveness while looking to maximize and improve their efficiency in all activities.

SMEs are said to make diverse contributions to social and economic well-being. OECD countries are said to be dominated by SMEs as a form of company and are told to be accountable for 99% of the total firms. They are said to be the primary source of employment in the region. They are responsible for over 70% of the jobs and are also a significant contributor to value, which generates between 50 to 60 percent of added value (OECD, 2017). In emerging economies, SMEs contribute around 45% of the jobs and 33% of the GDP. When considering informal businesses, SMEs could contribute more than half of the total employment and GDP for most countries without any division seen in the income level (OECD, 2017). The development of SMEs is also said to help improve the resiliency and diversity of the economy. This is considered critically important, especially for resource-rich countries, and is vulnerable to price fluctuations for commodities like Oil and the Middle East and North Africa region. While not all SMEs could be considered to be innovative, modern companies are considered to be often behind the most radical innovations, which are said to properly economic growth considering that they are capable of being able to work outside of the dominant paradigms, exploit the commercial and technological opportunities that are often neglected by more established and more prominent companies or allow for the commercialization of the knowledge which would have remained un-commercialized within the research organizations or universities (OECD, 2017). For example, it is found that around 20% of the patents, which are often considered to be a measure of innovative capabilities within the biotechnology field, are held by SMEs in Europe. SMEs are also said to contribute to value creation by adopting innovation that has been developed elsewhere and adapting these technologies or skills to meet their market context by making some changes that can be incremental or decremental and then supplying these niche products to the customers.

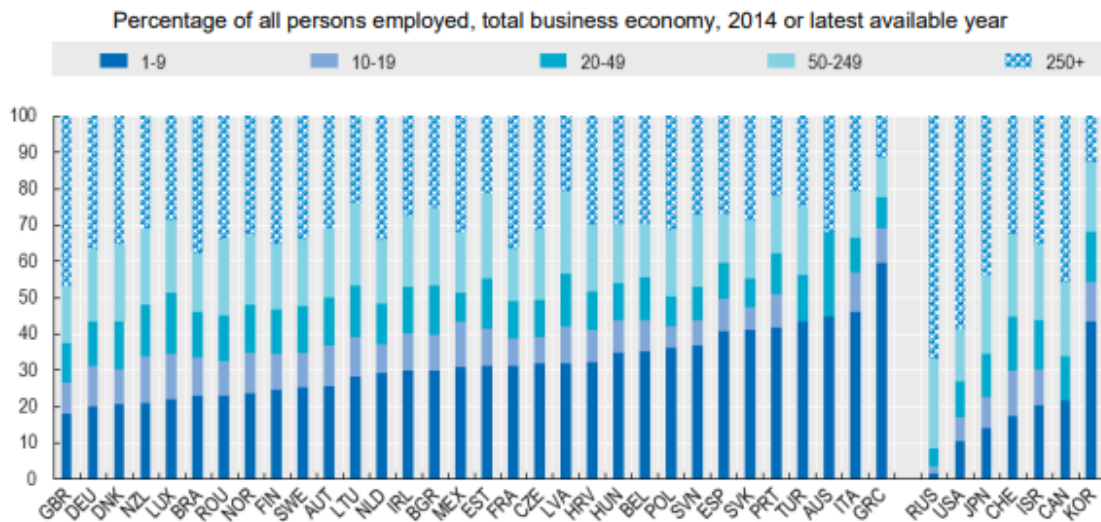


Figure 1. Employment Source in OECD (OECD, 2017)

It is mentioned that the rise of non-technological innovation and the emergence of a network-based model for innovation that is also open-networked have allowed new firms to enhance their contributions in the field (OECD, 2017). SMEs' innovation is often linked to knowledge spillovers, opportunities to partner with significant players and network access. Globalization and its growth have prompted improved collaboration in innovation to obtain input from abroad and exploit outputs within foreign markets. A significant challenge for most SMEs is the capability to identify and connect with the appropriate partners of knowledge and networks at all levels of activities. There are also issues with developing the proper skills and management practices required to coordinate the knowledge integration that external companies or partners develop (OECD, 2017).

Both traditional and modern types of SMEs have their strengths and weaknesses. These are said to manifest based on the involvement of the leaders with their human resource capacities. These companies survive and operate on the muscles, motivation, leadership quality, and founders' talent. The enterprise leaders are genuine entrepreneurs who risk their assets and fortune. To better understand the situation of the traditional SMEs, it is to be noted that 20% of the new SMEs do not last more than a year in developed countries, while 20% last just two years, and 50% do not last more than five years. Just 10% of SMEs often survive beyond five years (Neagu, 2016). Small and medium

enterprises are established under a flexible, dynamic, heterogeneous, and adaptable reality. The economy's health is digitized to depend on the dynamicity and number of SMEs and their success within the market. Specific characteristics like market dynamics are said to customize a particular approach for the companies' management (Neagu, 2016). The SMEs are identified as taking over specific activities on specific coordinates, depending on those features. These include (Neagu, 2016):

- The reduced size limits the potential for growth and market share.
- Alerting the rate of establishment.
- Strict specialization is dictated by the market's reduced capacity and low-rate share.

That said, those could be considered advantages for better-requesting knowledge as well as higher flexibility under potential risks or challenges that could be faced by the companies while entering or outputting within a specific market. SMEs are said to play a critical role and are considered or defined as a strategic interest for economies. For G20 countries to achieve a growth rate of 2%, it will only be possible by empowering the private sector and promoting entrepreneurship. (Bayraktar & Algan, 2019). Those policies that support the increased competitiveness of the economies are found to be more supportive of growth that can be considered healthy, inclusive, and sustainable. We looked at how the traditional SMEs have played a role. Still, the digitalization of the international market has allowed for reshaping the entire market structure, which has changed who can participate, how the business is carried out across borders, where the economic benefits are flowing, and how rapidly the competition moves. To better understand the difference in the situation, the table below compares how the concept of globalization has changed from the 20th century to the 21st century.

Table 1. Difference in Globalization 20th century vs. 21st century (Hervé, 2021)

20th Century	21st Century
Flows: Physical goods, capital, labor-intensive	Flows: Data, information, and knowledge

Mostly monetized transactions	Greater exchange of free services or content
Primarily seen in advanced companies and among big companies	More participation from other SMEs and individuals.
Transportation infrastructure was the most important for the success	Digital infrastructure is the key
Information diffusion was slow across the borders	Instant distribution across the walls and easy access to information
Innovation capabilities and flows move from advanced economies to emerging economies.	Innovation capabilities flow in both directions and are not just limited.

Creating the space for new virtual markets and resizing all the business digitalization has been found to reduce costs, shorten transactions, and increase the market knowledge gained through improved interactions. Digital technologies are found to have the potential to significantly impact the firm's operating capabilities along with its geographic configuration. This has also been seen to have changed how the firms are known to engage with customers and arrange their operations or production activities. The new technologies are said to impact firms' globalization process critically. This could be in terms of the pace and time of internationalization. The new technologies have reshaped the organizations' entry choices, democratized global consumption, and created a new way to have a comprehensive database for knowledge acquisition from foreign markets. It has also presented the opportunity to improve communication in the exchange of information and facilitate cross-border transactions by increasing intangible flows and reducing the dependency on location (Hervé, 2021). With new technologies like IoT (Internet of Things), robotics, and 3D printers, there is potential to transform the location and production organization globally. This means that firms often make decisions based on the proximity of their supply to the customers instead of the costs involved (Hannibal & Knight, 2018; Strange & Zucchella, 2017).

Based on the available insights, it has been said that there is a significant impact on the internationalization process, and it is a tool that has provided organizations of all sizes with the opportunity to explore their opportunities on a global scale. It is critical to note here that considering that SMEs often face challenges regarding the lack of resources, digital medium or technologies like online portals allows businesses to try and experiment with new paths under internationalization, which could lead to increased agility within the target market and will enable them to expand their contracts and network (Foscht et al., 2006; Mathews et al., 2016; Watson et al., 2018). With increased fluidity and non-linearity across time and space, digital technologies provide more variability for innovative or entrepreneurial activities focused on expanding the business value (Nambisan, 2017). With the increase in opportunities for entrepreneurs, the growth of digital technologies for internal and external operations is said to emphasize the change in entrepreneurial behaviours of the companies and thus consolidate the strategic posture of the companies in foreign markets (Giones & Brem, 2017).

Though the opportunities are said to grow due to digitalization, there is also an increase in the overall competitiveness. This is considered to be accurate, especially in the global digital landscape. With the increased reliance on wide scalability and power resources of information processing and storage, digitization is known to help foster a highly competitive business environment (Manyika et al., 2016). The digital context has been said to help reduce the barriers to the global marketplace, allowing new entrants to participate within the market and compete in international trade for market share. Under such a competitive environment, the firms would adopt a more competitive strategy. The individual would also be necessary to have more entrepreneurial-specific behaviours. To help better understand and predict the growth opportunities entrepreneurs often pursue, the individual perception needs to be capable of defining entrepreneurial behaviours regarding what the company could and will not be able to accomplish with the technological resources at hand (Gruber et al., 2012). This understanding is considered to be paramount.

Digital technologies are said to provide firms with immediate global market access quickly. The existing theories of internationalization are often considered to be ineffective or not capable of giving a better account of the pervasive effects of these technological advances (Anderson et al., 2015; Knight & Liesch, 2016; Kriz & Welch, 2018; Welch et al., 2016; Welch & Paavilainen-Mäntymäki, 2014). In the traditional model for internationalization, there is an assumption that knowledge is to be acquired over time. That said, this old theory has been challenged in recent years. Economists believe the change in the business environment and exchanges has led to the assumption that entrepreneurial behaviours are primordial, especially when they respond to a change. That said, the researchers have not explicitly been able to address the specific factors of the technological changes within the internationalization patterns of the MSEs and other firms (Welch & Paavilainen-Mäntymäki, 2014). It is impossible to consider the costs of access to information as constraints within the digitalized world.

The research undertaken by Garner in 2012 mentions that there has been a significant increase in online shopping in the last few years, which has had a considerable impact on how the different industries operate. Globally, SMEs have seen the importance of investment and globalization, and there has been a significant increase in the assets in online trading and increased investment in e-commerce. Under current business conditions, the different business sectors are advised to trade online and ensure that their companies make it a practice with the increase in e-commerce websites on a global scale (Ghandour, 2015). The means of competitive advantage for the organization under the SME category would be the Internet. Thus, opportunities are available for the companies to seize. Still, many uncertainties are attached to the process, with different options available to companies. An online presence would not be enough to remain competitive and survive (Harrigan et al., 2008).

1.2. Research Problem

The rise of "born-digital" enterprises has changed the face of global trade with the introduction of digital technologies. In contrast to more conventional businesses, these companies have always been deeply involved with technology, using digital platforms for

all sorts of marketing, operations, and value creation. Their unique digital characteristics give them an advantage in internationalization efforts across a wide range of businesses and sectors and may even affect their techniques. On the other hand, when these businesses try to expand their digital value chains internationally, the distinctive difficulties and hurdles brought about by incorporating digital frameworks into their very being become apparent. The complex impact of "being born digital" on a firm's internationalization strategy and performance is the intended focus of this research. It is evident from the existing literature that a lot of research has been done on different aspects of international business, entrepreneurship, digitalization, and research methodology. Nevertheless, it should be highlighted that despite an apparent range of work done in these fields, there are still areas where gaps in the research literature are visible because they are less exposed for further studies. For instance, among those areas, the market entry strategies (Glowik, 2020), the internationalization process of firms (Johanson & Vahlne, 1977), and networked internationalization (Rutashobya & Jaensson, 2004) are all included. While these investigations yielded fruitful information about the underlying processes and contributing factors for internationalization, it is necessary to also focus on the specific financial and managerial challenges that small and medium-sized enterprises (SMEs) face in the global expansion process (Halcomb & Hickman 2015).

Additionally, digitalization intersects with the area of international business nowadays, which is one of the topics in international business research. When it comes to digital technologies and linked work dimensions, an examination of their impact on international market growth (Mathews et al. 2016), as well as the transformation of business models (Rüßmann et al. 2015) and their vital role in international entrepreneurship (Ojala et al. 2018), have been undertaken by researchers. While many studies focus on digitalization strategies adopted by born-digital companies during internationalization (Vadana et al., 2020), there is a lack of studies using a global review to examine digitalization strategies adopted by born-digital companies. Recognizing how these companies utilize digital technologies to surmount internationalization barriers

and capitalize on international market opportunities becomes the main focus, which is also a research hole.

In a similar way, academic studies in entrepreneurship in the past mainly concentrated on the elements that usually fuel business start-ups and growth (Gruber et al., 2012), while digital entrepreneurship was highlighted in the recent research by Giones and Brem (2017). On the contrary, there are very few researches that clearly explain the main difficulties and added advantages of high-tech firms during internationalization processes in a digital era. (Muriu, 2021). Researching the influence of digitalization on the internationalization approaches of high-tech companies can give important directions not only for scholars in related fields but also for practitioners. Additionally, researchers have focused on many research methodologies, such as positivism, interpretivism, and critical theory (Ryan, 2018). Nonetheless, the necessity of profound deliberations on methodology choices and shortcomings in studying the intersection of international business, business dynamism, and digitalization is worth noting. Demonstrating how methods used in interdisciplinary studies contribute to their strengths would provide a helpful way to improve the validity and quality of future research projects.

In conclusion, the existing literature has done a commendable job of unraveling the intricacies of international business, entrepreneurship, digitalization, and research methodology; nevertheless, several unexplored corridors point to possible future directions. In this regard, unanswered questions could help progress scientific knowledge while simultaneously establishing an operational framework that companies can use in the high-tech world of globalization. This study explores how these organizations' digital traits impact their capacity to reach a global audience and scale their operations in various market conditions and industries. The physical obstacles to digital expansion have been decreased, and the speed has quickened. Thus, it is critical to grasp the intricacies of this process in order to outline frameworks and tactics that might help born-digital enterprises develop internationally.

While traditional businesses face fewer obstacles on their journey to global expansion, born-digital organizations face unique challenges. Digital operations, data privacy, cybersecurity, and intellectual property rights are all areas where national legal frameworks can differ substantially, making cross-border regulatory compliance a significant obstacle. Aside from that, the tax ramifications and the logistical intricacies of digital service delivery across geopolitical boundaries significantly impact these businesses' internationalization processes. All these things come together to determine the practical, strategic, and financial aspects of the global development of born-digital enterprises. In addition, the study will compare and contrast the internationalization strategies of born-digital firms with those of more conventional organizations to identify the critical success elements for these startups. By exploring these facets, the research hopes to shed light on the key drivers, obstacles, and success factors that define the worldwide journeys of these contemporary businesses and how digital nativity interacts with the strategic imperatives of expanding into new global markets.

In essence, this research problem seeks to elucidate the unique dynamics of internationalization for born-digital companies, unraveling how their digital core influences strategic decisions, operational challenges, and market success in the global arena. By addressing these focal areas, the study aims to contribute valuable perspectives to the discourse on digital business strategies and international expansion, offering empirical insights and strategic frameworks to guide these types of companies in navigating their global growth trajectories.

1.3. Research Questions

Based on the above set of areas, the research aims to delve into and provide answers to the following research questions:

- How does being born digital influence a company's internationalization strategy and success across various sectors and industries?
- What are the significant challenges and barriers born-digital companies face when internationalizing their digital value chain?

- What are the key factors influencing the internationalization of born-digital companies, and how do they differ from traditional companies' approaches to international expansion?

The answers would help provide clarity and in-depth understanding, along with guidelines for future research and guiding future companies to understand how to tackle the issues as they arise.

2. Literature Review

The chapter focuses on introducing the models, theories, and concepts linked to internationalization, SMEs, and digitalization while exploring previous studies that examined the issue from different perspectives and what the results of these studies were able to conclude.

2.

2.1. Internationalization

International business is a complex topic due to the global context under which it is to be explored and the increased importance given to innovation, ownership differences, and location factors, all of which play a critical role. Internationalization would stand to gain by adopting more economic theories but focusing on not emulating them too closely, considering that the economics would lead to the development of a restrictive assumption that would often relegate the main challenges in international business. Over the years, academics globally have mainly focused on market entry decisions, the location of headquarters, and a few other topics, while the oligopolistic rivalries and the functions of the office within an international area are largely neglected (Buckley et al., 2017). The studies in international business started in the 1930s, though the first theories were introduced only in the 1960s and 1970s. The developed ideas could be grouped into three paradigms: market imperfection, market failure, and behavioural (Sharma & Erramilli, 2004). Since the early 1980s, there has been a shift to contemporary approaches, and new methods like resource-based views and contingency theory have emerged to help explain the behaviour of different firms (Cumberland, 2006). The paradigms and techniques have given rise to nine significant ideas. They share various constructs and can demonstrate the firm's strategic decision-making capability, allowing it to remain successful in the global arena (Cumberland, 2006; Sharma & Erramilli, 2004).

The market imperfection paradigm resulted from the industrial organization theory, first introduced in 1956. Industries operating within imperfect markets with few competitors

and a high entry barrier are expected to have higher returns. Market imperfection exists in product markets (e.g., differentiation, marketing skills, and brand name) and factor markets (e.g., unique technology managerial capabilities). The imperfect competition could also result from government regulations and policies limiting entries or due to the economies of scale (Fahy, 2002; Malhotra et al., 2003). There is a higher certainty of a competitive environment within an imperfect market. A firm could obtain a higher market power, which would mean controlling the launched products and their prices, leading to higher profits (Sharma & Erramilli, 2004). Researchers have argued that organizations often try to restrict markets within their home country but are sometimes focused on controlling foreign markets (Andersen et al., 2014). Based on the industrial-organizational theory, international operation is considered more costly for businesses than doing their activities in the home market. Thus, Multinational corporations (MNCs) often look for advantages they would gain by operating or starting their activities in the new market, negating the identified additional costs (Axinn & Matthyssens, 2002).

The second paradigm based on behaviour is linked to the behavioural theories developed by Cyert & March (1963) and those by Aharoni (1966) (Aharoni, 1966; Andersen et al., 2014; Baumol et al., 1964; Cyert & March, 1963). The behavioural-based approaches often consider internationalization a more reactive and progressive learning process. The organization gathers knowledge and drives the firms to enter new global markets (Blomstermo et al., 2006). There are suggestions that the market knowledge of a firm would eventually grow over time. This is a slow process linked to the high cost involved in gaining information, and often, the rationalities are bounded by the managers. Within an imperfect market, the firm seeks short-term benefits, avoids risks, maximizes profits from an operation, and focuses on satisfaction (Sharma & Erramilli, 2004). The behavioural paradigm is said to help propose that investment within the market would increase slowly. The organization could evade inter-firm relationships as there would be a higher need for resource commitment in the long term. The internationalization theory was developed using this approach, and the process is slow and gradual. The process is motivated by experiential knowledge, often resulting from market activities within foreign markets (Blomstermo et al., 2006).

The next market failure paradigm is a theory rooted in the organization's nature. It believes that firms often select markets and hierarchies based on the relative efficiency of the firm. Based on this paradigm, when the competition within the market is under perfect control, modes like exporting or licensing are more effective. If the call fails, the firms could prefer foreign direct investment and look to internalize their activities. The paradigm has been considered a dominant entry mode since the 1970s (Sharma & Erramilli, 2004).

2.1.1. Monopolistic Advantage Theory

Based on studies undertaken on the FDIs made by the US companies after World War 2, the theory of Monopolistic Advantage theory was established. Hymer, who developed the idea, was an economist and one of the founders of an MNC (Buckley, 2006, 2011b; Dunning & Pitelis, 2010). He later adopted more Marxist ideologies and criticized the activities of the MNCs and how they impacted the economy. After his death, a thesis was published in 1976 that led to universal recognition of his ideas. As per Buckley (2006), the pictures could be divided into three phases. The focus shifted from micro-dynamics, which includes transactions and the firm, towards a macro-dynamic approach where the companies from Western countries dominated. The theory argues that when firms are said to own valuable firm-specific assets that their competitors cannot replicate, they can generate higher profits and compensate for their higher investment costs when operating in other countries. Hymer is said to have believed that the firms with superior advantages within an imperfect product would prefer to use FDI. In different situations, companies choose to license. In addition, the direction of FDI relies on the mode of entry and the challenges the company would face in the targeted country. Hymer is said to consider economies of scale and similar structural market imperfections to be knowledge advantages that each firm has and are considered essential factors that would allow the firm to use its advantage in obtaining monopolistic power within the foreign market (Buckley, 2006; Claver & Quer, 2005).

Hymer has mentioned that FDI inflows are unrelated to country-level factors, including higher interest rates. The argument was made that cross-FDI would happen

simultaneously in similar industries, while some sectors can absorb more FDI than others. Hymer mentioned the US as the place of birth for MNCs and viewed the firm's nationality as a factor influencing three aspects. It could affect the firm, the shareholders, and managers (Rowthorn, 2006; Teece, 2006). It is mentioned that firms are distinct based on their nationality. When it came to the globalization push, MNCs' strategic motives were considered to be identifying or seeking new markets, and they entered into these foreign markets to provide their existing products. Though this theory is regarded as the foundation of the international business theory and led to the evolution of MNCs, this theory is often criticized by researchers and academics who argue that it requires a readjustment to adopt the modern concepts of international trade and globalization (Buckley, 2006; Teece, 2006).

Researchers like Sharma and Erramilli (2004) have stated that the theory would be only a partial explanation focusing on the ownership dimensions. At the same time, it cannot explain the conditions or approaches under which firms use a mode of entry, like a joint venture or exporting. In the past, companies could reduce their production by creating scarcity to increase their profits. Still, MNCs often develop new products and offer them to more unique markets to help gain more returns. The firm has also entirely neglected the concept of value creation and is said to expand overseas to acquire new resources and capabilities (Pitelis, 2006). There was a lack of focus on innovation while, at present and before, innovation was considered a major motivating factor behind globalization. However, there are different views on this. Pearce and Papanastassiou (2006) mention that Hymer indeed talks about innovation and its attraction but does not consider the company's product development or technological improvements to progress. According to Hymer, it was just a tool for dominating the economy. Another major issue with the model is the lack of practical tools to measure the welfare of MNCs. The perfect competition was considered the benchmark for his theories, which are complex and rarely achieved. Hymer's ideas were often shaped by his experience travelling in third-world countries, primarily agricultural economies suffering from the post-colonial era. At these times, the governments in these developing countries did not have a popular opinion or outlook on foreign companies, and they did not want these companies in their

countries due to experience, which had influenced the views of Hymer heavily (Dunning, 2006). There was also concern regarding the lack of focus or attention on intra-firm conflict or decision-making (Pitelis, 2006).

2.1.2. International Product Life Cycle Theory

The theory was introduced in 1966 by Vernon and is also referred to as the IPLC model. In this model, internationalization is considered a sequential process linked to the difference in the production cost levels between countries (Reiner et al., 2008). The model provides a new perspective on the delocalization of operations (Ayal, 1981; Glowik, 2020; Jurek, 2012). The theory explains how a firm could move from exporting to FDI. A decline in market demand would be a factor that would lead to the relocation of the production line to other countries with lower technologies and access to cheaper resources (Lankes, 2002). The increase in product maturity justifies the need to relocate the production facilities to new markets. MNCs often introduce and produce new products in high-income developed countries, focusing on taking advantage of the high demand within the local or domestic market (Vernon, 1966). It is also mentioned that the internationalization process would occur during the four stages of the product life cycle: introduction, maturity, growth, and decline.

The production is often in low quantities in the first or introduction location, and there is no standardization. In this, the costs are not considered critical factors as firms are focused on flexibility and control along with improvements in communications. At this stage, US firms are said to benefit due to the export of their products to new potential markets in other countries that are also developed and can be purchased. When we move to the growth stage, it is said that standardization will increase, and the firms will often focus on cutting their production costs and gaining economies of scale. By taking the example of the US, we can see that the firms in this stage are said to invest in economies that could be considered developed but have lower income levels. When the said product is launched and reaches a maturity stage, the competitors within these foreign countries would have the required knowledge or capabilities to develop alternate products focused on gaining more profits and capturing more market share. In

this way, the US firms would then move their production lines to newer markets to concentrate on keeping their position in the market. The product in this stage has been standardized. The firms would have to locate their production in developing countries that offer more competitive advantages and, in some cases, even import the products made by their branches in these countries to the host market to maximize their profits. In the decline stage of development, the market demand within developed markets like Europe or the US also declines. In this stage, the firms from host countries would re-enter the US market and compete with other firms to provide alternatives to dying products and often cheaper ones (Reiner et al., 2008; Sharma & Erramilli, 2004).

IPLC theory provides two models, firm-specific and product-specific, that could be used to explain the trade between the different countries. Though the IPLC models consider the firm level, the focus is mainly on the country level. With an emphasis on the advantages the host country provides, the theory explains why companies decide to invest in these countries and target these markets. In 1993, it was mentioned that the two-stage model of the IPLC was merged, and a three-stage model was developed, which is said to include the product stage, maturity stage, and standardization. The model, though, had many criticisms. The model was considered too general, making it incapable of explaining all the globalization patterns. At the same time, the entry mode choice was supposed to be more strategic and selective. The theory is said not to have viewed the products that are often traded without the required experience in the different stages due to the changes in the technology and its adoption and deregulation of the markets (Rutashobya & Jaensson, 2004). One of the significant limitations is how it explains the time-dependent process and the deterministic evolutionary path (Malhotra et al., 2003). Such models are often suitable for manufacturing firms, but their capability in service firms is far from favourable. In addition to this, IPLC models often cannot adequately explain the products with a shorter life cycle. In those cases where a company has experience in other foreign markets, the model cannot explain the internationalization of these new products.

The IPLC cannot address the choice of different entry forms, such as exporting and joint ventures. This led to the development of an optimal entry mode matrix. The company could choose the correct entry mode suitable for it, which is linked to the product stage in the life cycle or based on the market situation, which is connected to the strategic attitude of the organization (Johansson, 2005). For example, firms start with indirect exporting within an incremental entry, and when the products reach the maturity stage, the companies switch to direct exporting. Other higher control modes are often used when the firms require more control over the affiliates. This is also often a requirement in emerging markets and matured markets.

Firm Strategic Concern	Product or Market Situation			
	Emerging	High-growth	Mature	Services
International	Indirect exporting	Indirect exporting	Direct exporting	Licensing, Alliance
Protected	Joint venture	Indirect exporting	Alliance, Licensing	Licensing
Control	Wholly owned subsidiary	Acquisition, Alliance	Wholly owned subsidiary	Franchising, Alliance, Exporting

Figure 2. Optimal Entry Matrix (Johansson, 2005)

2.1.3. Internationalization Theory

Based on the research carried out on four Swedish firms on their internationalization process in 1975, a new theory was launched, referred to as the internationalization theory (Johanson & Wiedersheim-Paul, 1975). The approach emphasized the need for the firms to have an international attitude, which would be a motivating factor that would propel their business abroad. The mood is said to be impacted by the experience gained by the firm from different activities. When the firms decide to go global, they are told to

face multiple risks and barriers. Knowledge of foreign markets is often needed to help reduce the risks linked to investment. Thus, internationalization based on this theory is a gradual process of knowledge accumulation that allows for expansion into foreign markets and is a stepwise process with four sequential and successive stages representing the firms' higher degree of involvement and resource commitment (Andersen et al., 2014). In the first stage, the firms that plan to internationalize will operate within the domestic market and will not have any export activity. In the second stage, the firm would start exporting its products through agents or other intermediaries established within the host countries. In the third stage, an overseas subsidiary focused on sales alone is found in the host country. Finally, in the last step, the firm would invest in developing its production facilities in the host country. This would mean that the firms would often enter a foreign market through indirect exporting, a standard low-control level mode of entry, and then slowly move towards a way of access that gives them more control. In this process, we could see firms being capable of gradually increasing the involvement and resources they would be committing to the process.

The theory is said to have evolved from the behavioural approach and is influenced by ideas linked to firm growth. The model developers Johansson and Vahlne (1977) introduced the U-model or Uppsala Internationalization stage models. This model uses high control modes in situations where the knowledge of the foreign market is low and when it gains more experience or maturity. The approach has helped inspire further studies in the area, which led to developing models that integrated innovation into internationalization. Before organizations internalize their business operation, they must gain experience from the domestic market. When the firm is found to have low knowledge levels regarding the market or faces greater psychic distance, more uncertainty is perceived (Matlay et al., 2006). To ensure that companies can avoid investment risks, they are focused on entering only those target markets with less physical distance from their home country. The psychic distance includes factors such as education, culture, industrial development, language, and business practices. The difference in these factors hinders the information flow, and the firms perceive higher uncertainty. To help minimize market

uncertainty and exploit market opportunities, firms must obtain the required experiential knowledge through experience working within a specific market. This experiential knowledge is said to be capable of helping them better understand and bear the risks related to resource commitment. This would allow the companies to enter new markets with higher psychic distances and greater geographical distances.

Four central concepts are said to govern the U model. The first is the market commitment, which refers to the total resources committed to the foreign market. It could also mean investment size, including marketing, operation, and human resources. The second concept is market knowledge, which is the knowledge held by the firm regarding the market in the country and the operations within. These are often divided into knowledge regarding the methods of entry, marketing techniques, and the taste or interest of the customer for specific products or services (Johanson & Vahlne, 1977). Market-specific knowledge is also linked to the business environment in which it operates, cultural patterns, and the market structure. The third concept is that of current activities that refer to the current business operations that are carried out by the firm that is a tool that could help them gain the necessary experience, identify opportunities in foreign countries, achieve the required outcomes, and also help in developing or establishing new businesses. The final of the four is the commitment decision, which is the organization's decision to commit the resources toward expanding its operations to a foreign country. These decisions respond to the opportunities and threats that the firm has identified.

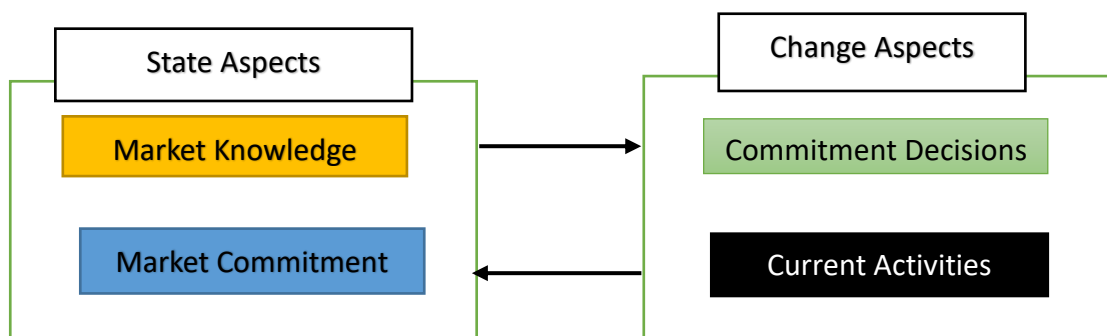


Figure 3. Internationalization Mechanism (Johanson & Vahlne, 1977)

The theory follows another idea regarding the firm introduced in 1959, where the knowledge was divided into experiential learning and objective knowledge. When entering the markets in foreign countries, firms must have both types of knowledge (Blomstermo et al., 2006). Researchers have explained that gaining knowledge often helps decrease the existing uncertainties and reduce investment risk. It would also increase commitment (Figueira-de-Lemos et al., 2011). The developers of the Uppsala model are said to mention that the force concepts are dependent, linked, and can influence each other. It is suggested that firms that focus on increasing their profits in the long term are more worried about taking risks and thus avoid them. The status of internationalization is also said to influence the companies' risks and opportunities, which leads to reluctance in commitment decisions and current business activities (Johanson & Vahlne, 1977). It is mentioned that the theory developers considered the firm a unit that could be used for analysis and a loosely coupled system where the individual has knowledge, opinions, and interests regarding the firm's development. Thus, expatriates or foreign companies focused on working in foreign markets would try to understand these risks and opportunities and look for a solution to increase their overall benefit.

This theory is said to help provide a better dynamic perception of the entry strategy and recognize the increased role of management in the choice of entry mode. When deciding on the best plan for the method of entry, the idea is said to focus on the ownership and allocation aspects (Sharma & Erramilli, 2004). Studies have been undertaken over the years that have validated the mechanism proposed by the model and supported the mutual relationship between commitment and experiential knowledge (Eriksson & Chetty, 2003). 2009, the developers redefined or modified their model by replacing the concept of market commitment with business networks. They have identified more critical factors, including learning, opportunity creation, and trust-building, and replaced the current activities in the older model to be considered process variables (Johanson & Vahlne, 2009). In their 2011 peer review article, markets were identified as networks within which the firms use the relationship, which leads to establishing strong ties with the different network members. The firms could enter the new market through cooperation

with local contacts in their network, who can provide them with the knowledge and resources for operating in the foreign country (Johanson & Vahlne, 2011). Research has mentioned that firms could often change their strategy once they enter a new market due to the market condition or the opportunist behaviour seen by their partners (Santangelo & Meyer, 2011). It is also said that firms would consider the role played by institutional voids and institutional uncertainty within emerging market economies regarding the commitment made by MNCs. The institutional hole reduces flexibility and increases the strategic change cost. This would mean the firms could not reduce their commitment once they entered the market. On the other hand, institutional uncertainty encourages the subsidiaries to increase their commitment and utilize growth opportunities.

However, the model has often been criticized for being an experimental survey-based approach lacking details. It is often challenging to provide a logical link between the theoretical concepts developed for the model and the empirical studies undertaken regarding the model. The model often assumes experiential knowledge can be achieved through seeking or learning (Cumberland, 2006). There is also a belief that the firms can usually avoid the risks. That said, there are some concerns regarding these assumptions and their validity. In addition to this, some of the primary conditions for the model change during the process, which means that the variable becomes constant. The above is considered one of the reasons why the developers in 2009 modified the model. There is also the argument that the internationalization theory lacks rationality and would only be applicable during the early stages of the internationalization process. It becomes less valuable as the world becomes more homogenous, and there is a reduction in the psychic distance (Melin, 1992). The model developers argue that access to greater knowledge will help the organization build trust and increase commitment. Another limitation of the theory is the inability to delimit the different stages and how the firms are found to transition from one stage to another. In addition, the researchers also mention that the steps that are said to be sequential are limited to just a few specific markets and do not apply to all (Andersen et al., 2014). The rapid internationalization of new or born global companies is also an area in which the theory cannot provide an answer. In 2011,

the model developers tried to expand on their model and considered networking a critical factor in answering this question (Johanson & Vahlne, 2011).

2.1.4. Networks Theory

With the growth in internationalization, a new theory was introduced in the 1980s, referred to as networks theory, based on organizational sociology (Cumberland, 2006). The approach emphasizes that having a network relationship could help the firms expand their overseas market much faster. In addition, the traditional models of internationalization would not be applicable (Laanti et al., 2007). Under this model, the internationalization process is said to occur in a more complex way that is less structured and more than what was explained under the Uppsala model (Malhotra et al., 2003; Moen et al., 2004). This is because most of the business activities in a firm are collaborative, which is more accurate when it is in the service industry. The competitive advantage could also be gained through internal resources, achieved through interaction and relationships with various firms.

Networking is said to provide firms with the ability to develop a network of relationships that would facilitate joint and complementary actions and allow the organizations to utilize the synergy from the network in achieving a common goal that has been established (O'Farrell et al., 1998). With the help of the network, the firm could turn around the assets of its partners to be utilized as its resources. Networks of the home country are often the starting point from which internationalization could happen. Networks are considered vertical and horizontal value chains where mutual knowledge and trust increase, and the networks are formed due to the interrelated exchange relationship between the firms. This often results in greater commitment between the various partners within the foreign market (O'Farrell et al., 1998). The network comprises three components: resources, activities, and actors. These components are found to be interrelated and form a network together. Actors could include firms, buyers, customers, and suppliers or sellers. The actors help preserve and build relationships that support each other (Freeman & Sandwell, 2008).

Markets are structured to resemble a network within which a firm is said to depend on its interactions with other actors. Both external and internal forces influence foreign market entry. The interior entry details include linked relationships, network knowledge, and network internationalization. On the other hand, the external entry forces refer to conflict of interests, the firm's visibility to other actors, and the external factors' activeness. The external actors of the network are found to influence the firm's internationalization decision. If the market is internationalized, the internationalization process is much faster, and it has been said that external network relationships and internal networking could speed up the internationalization process (Musteen et al., 2010).

The inter-firm ties in the network are said to be a key player in the firm accumulating knowledge. Network inter-firm ties are specific to a firm and are challenging to imitate. These ties often allow firms to gain information regarding market conditions at the right time and impact the firms' strategies for internationalization (Sharma & Blomstermo, 2003). The central firms within a network are said to be capable of receiving more knowledge and often better and earlier than their rivals. The knowledge developed within the relationship with the help of a partner is unique because it is often formed due to the information transfer happening through the connected relationships (Chetty & Eriksson, 2002). The networks providing more access to information collected through different sources would lead to more learning opportunities, allowing for a shift from focusing on the firm's existing knowledge. To convert the experience gained by a firm into valuable market knowledge, the firm should be capable of absorbing the knowledge to help the firm recognize the value gained through external information. The knowledge thus absorbed would be then applied in business operations. When a firm is found to have prior knowledge, it can evaluate external information. Through the learning process, the firms could identify innovative and creative ideas.

The network theory states that firms use market-specific experiential knowledge, which is considered the familiarity with the business relationship seen among the networks of the target market. When the firms are said to enter a foreign market, they can use both national or local and international relationships to establish their presence in their new

market. Thus, networking with home country suppliers and business partners is said to help the firm expand its operations overseas. Networking with home suppliers and business partners is also crucial in its internationalization plans. If the firm is said to enter different target markets, it will accumulate a much higher international experiential knowledge. Such firms would find the ability more critical and often perform better (Blomstermo et al., 2004). Network theory could be considered an extension of the social exchange theory. The social exchange theory is said to think exchange relations are a dynamic process, and it helps in better understanding the relationship between the seller and buyer (Chetty & Eriksson, 2002). Business networks are said to be made of two or more connected business relationships between the firms that are the network actors responsible for making exchange relations. In addition, the service firms would need to use a collaborative group relationship as one of the main strategies, especially in the service sector, which requires more simultaneous production and consumption of output (Freeman et al., 2007). Social and business networks act as a tool for international expansion potential. They could overcome internal resource deficiencies and help firms gain knowledge and experience that are often not accessible from internal sources (Hutchinson et al., 2006). The firms that are said to be interacting with international actors would develop a relationship that would allow them to exploit their resources and be capable of taking advantage of the resources of the other network company (Laanti et al., 2007). Resources that the firms would acquire with the help of network relationships are referred to as social capital (Musteen et al., 2010).

Nascent firms or new ventures are said to be faced with the challenge of being unique, and the company's liability is small, leading to a lack of resources that they would require to grow and survive within the market. The network social relations are said to be helpful for entrepreneurs in gaining more resources and market knowledge that would help them conquer their limitations. Small firms could take advantage of their networks and quicken internationalization even when they lack the required experience (Ellis, 2011; Kiss & Danis, 2008). These are considered born global firms that rely on networks to compensate for resource deficiencies and decrease the perceived risk related to expansion (Hashai, 2011). SMEs that are taken international would be able to go through

gradual or evolutionary internationalization while using the opportunities available to them and networking that would lead to rapid expansion into foreign markets. Ellis (2011) has mentioned that for entrepreneurs, the option would be to use market potential instead of exchanging values, leading to mutual relationships and collaboration aimed at exploiting the new markets. Thus, network relationships could help firms identify opportunities in the international market.

Networking results from formal and informal relationships in the host and home market. It would include relationships like friendship, collaboration with other firms, or direct links with government agencies (Hutchinson et al., 2006). Some researchers consider business networks to be formal and social networks to be information network relationships. Both upstream and downstream alliances or contacts within the networking and business are critical. Participation with exhibitors, sharing the same buyers and suppliers, and joining associations and joint ventures provide the firms with network relationships. When a firm is found to join a network, the opportunities for the business will increase. That said, recognizing opportunities is considered a cognitive action that is often based on the individual skills of the managers or employees and not the firm. The personal ties of the firm's leaders would help in gaining internationalization at a faster pace. That said, empirical studies have suggested that the exchanges often occur in long-term relationships, and the industrial networks are simultaneously stable and dynamic (Salmi, 2000). The network relationships are said to be developed in a three-phase evolutionary pattern within which a firm moves slowly and progressively from its initial birth to growth and maturity (Zineldin, 2002). The process is considered dynamic, and any relationship that is said to start with recognizing the need for a relationship would end with failure or satisfaction (Zineldin, 2007).

It is stated that the network theory, though, is more focused on the business relationship that happens between different firms. Researchers often have extended the idea to include political actors or government links (Andersen et al., 2014). Managers must be capable of responding to the firm-state interdependencies, political situations and actors, industrial structures, and lobbying if required for the success of the MNCs. Socio-political

player relationships are critical in the development of internationalization and market position. To obtain approval and support from these actors, like the local government, the firms are required to be capable of adapting their activities to the requirements of these network actors (Elg et al., 2008). An effective government system would help and support MNCs by developing regulations and laws to remove trade and investment barriers. This would help reduce the uncertainty and assist the entrant in firms in choosing the suitable mode of entry that provides improved resource commitment and increases control (Williams & Martinez, 2012).

Despite a large amount of empirical data to support the effectiveness of the theory, many researchers criticize the approach. According to some, the idea is incapable of providing a predictive model, and the network relations are considered to be naturally ad hoc and unplanned. Hence, their reactions or possibilities are uncertain and cannot be planned (Malhotra et al., 2003). The qualitative methodology found to be used in the approach is also incapable of testing the theory. The theory cannot explain the process of the firms that are said to have no relationships or show a mechanism that would illustrate how a firm would recognize the network contacts (Andersen et al., 2014). The researchers criticize the network relationships because they are semi-permanent systems with structured interdependence. This is not true in some industries, as the relationship might not last long and would be for just a few transactions. The connections are also not consistently stable, especially during a turbulent time for the business or its network. There would be increased uncertainty and changes due to increased difficulty in gaining reliable information. It is also criticized for neglecting the fundamental power relations dominating service firms' business relationships (Andersen et al., 2014). Service firms often must provide expertise and services that their clients cannot provide alone. The argument is made repeatedly that firms would sometimes imitate the internationalization strategies of successful firms while not communicating with them, which is not considered under the networking theory.

2.1.5. Eclectic Theory

The eclectic theory was introduced in 1977 by Dunning based on the location of the economic activities. The theory is considered a further development of the internationalization theory, with changes made to remove its weaknesses (Ekeledo & Sivakumar, 2004). Eclectic refers to the model that embeds different theoretical approaches like ownership advantages, monopolistic advantage theory, localization advantage, and internationalization theory. The idea was first referred to as the eclectic paradigm because the developer considered the paradigm as a model. That said, the word paradigm is found to have a broader meaning and often is thought to refer to a viewpoint and approach regarding particular phenomena that would consider multiple theories (Hunt, 2014). This is one of the reasons why the idea is considered under the market failure paradigm (Sharma & Erramilli, 2004). In the later years, Dunning himself has been said to have modified and extended the theory (Dunning, 1995, 1998, 2000).

The eclectic theory suggests that firms would try to involve FDI activities and exert control over their resources in situations where they possibly have three critical advantages: ownership advantage, internationalization advantage, and location advantage. This model thus is also referred to as the OLI model. The ownership advantages are focused on showing how the organization is unique and sustainable based on its resource requirement or if they are competitive or would be in a monopolistic advantage market, which allows them to understand better how to compete in the foreign market. The market size, firm-specific resources, and potential in the home country are considered some of the factors. Suppose a firm utilizes the ownership advantages more effectively during entry. The system will attain a superior position in the market even when the assets are not internationally transferable (Andersen et al., 2014). The location advantage depends on the cost and availability of the resources to be committed by the firm within a foreign market, along with the entry barriers and other risks. If the potential in a country is high and the investment risks are considered low, then the firm could become a profitable business. The internationalization advantage is determined by whether a firm would coordinate and

organize its activities through the market or if the firm should internalize them within the value-added chain, which would reduce the coordination and transaction costs involved. The said advantages refer to the relative market's efficiency and ability to manage the different exchanges and information transfer. In a situation where the foreign host nation has high contractual risk, firms would be focused on capitalizing on their advantages mainly through FDI instead of licensing or selling to other firms within the target market (Agarwal & Ramaswami, 1992; Buckley & Hashai, 2005; Canabal & White, 2008; CHOO & MAZZAROL, 2001; Czinkota et al., 2009; Stoian & Filippaios, 2008; Wilson & Baack, 2012).

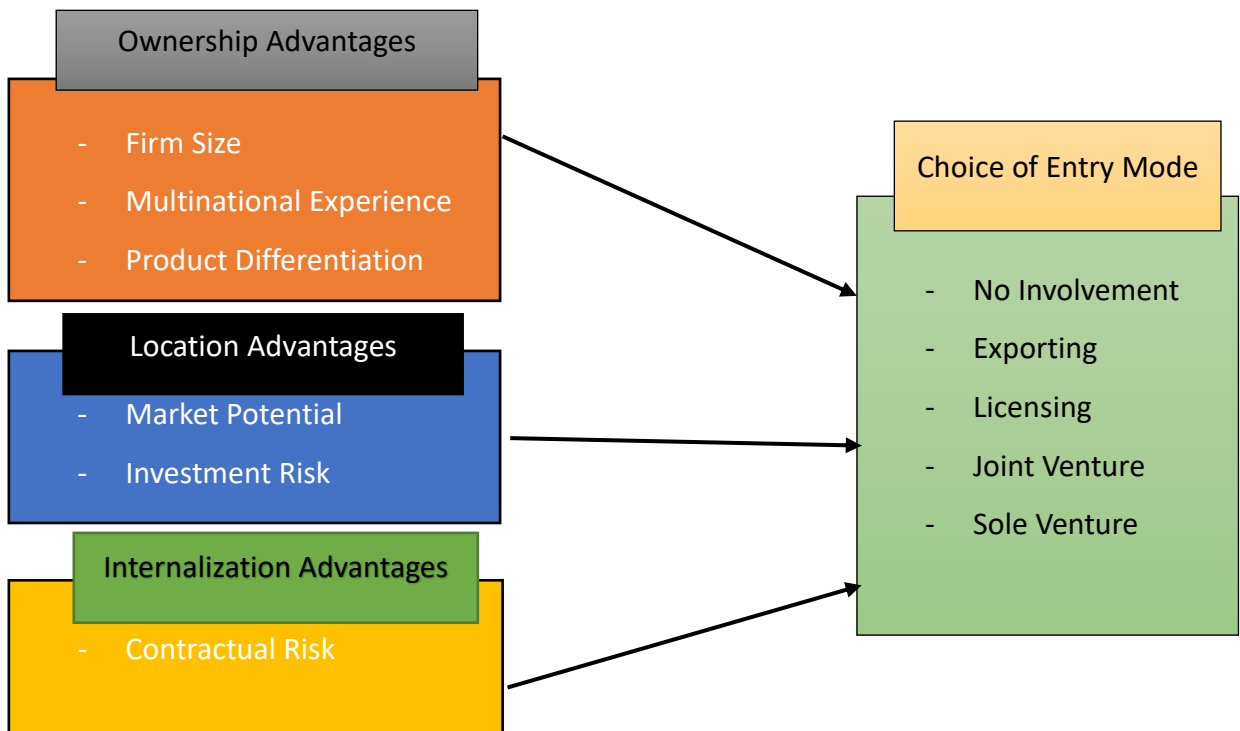


Figure 4. Eclectic Model (Agarwal & Ramaswami, 1992; Choo & Mazzarol, 2001)

The ownership advantage explains who can locate its operation in foreign countries; location advantage would allow for an understanding of where the company could identify its function. Lastly, the Internationalization advantage indicates why a firm would choose to use FDI rather than the licensing option (Stoian & Filippaios, 2008). Based on the eclectic theory, when the firm's home country has a location advantage over the host country, it would also choose to export as a mode of entry. On the other hand, when the

target market has a location advantage, the firm would look to enforce the contracts with their partners. The company will take the FDI route if the contractual risk exceeds the internalization cost. Licensing is considered the preferred entry mode in situations with low contractual risk. Although all the firms would have access to location advantage within a specific market, only some companies would have the required ownership advantage that makes them capable of taking advantage of these opportunities (Nakos & Brouthers, 2002).

The literature mentions that using the location advantage analysis or any ownership endowments approach would not be enough to understand or explain different forms of investment and trade. FDI is only possible when all three advantages are seen to work together. These advantages are interrelated and often a determining tool for the firm's decision of how, why, and where to internationalize its operating activities. FDI is possible when keeping the operations within the firm profitable, and the firm's profitability is based on the estimation or assumption of the trade-offs between the ownership risks and shares (Cumberland, 2006). The OLI model assumes that MNCs are said to mainly operate in those industries that could be classified as technology-intensive. The FDI pattern would depend on the home country from where the ownership advantage is gained. MNCs must react to the imperfection in foreign markets regarding intermediated products like information, management, and technology skills and create them as required. Internalizing the process within such demands provides the host country with capabilities and resources unavailable to them or could only be purchased at a very high cost (Andersen et al., 2014). Market imperfection is one of the significant assumptions made in theory based on the fact that if an organization is in a perfect market, it would not be motivated enough to use FDI as there is no competitive gain. The entry decisions made by MNCs are also dependent on the motives for entry. Firms could enter the market based on their need for a new market, resources, efficiency, or strategic assets, including knowledge-based assets, innovative capability, or technological investments. All the above cases lead to multiple scenarios (Dunning, 1998, 2000).

Firms often identify target markets with high market demand, provide learning or innovative capabilities for the firms, and supply resources and raw materials. These markets are also the source of the management's potential opportunistic behaviour. In countries with low market potential, the bigger MNCs with more offices across different countries would adopt full ownership and joint ventures as a mode of entry. In contrast, in markets with higher potential, smaller firms with a presence in fewer countries would avoid joint ventures to reduce the risk and costs. In those countries with high contractual risk, the firms that provide differentiated products would prefer FDI more than exporting. Countries with high market potential and risk related to investment would choose to export instead of FDI (Agarwal & Ramaswami, 1992). In the 1990s, Dunning changed his theory to consider the technological and political changes during the decade. The theory led to considerations being given to the partners and their capability, spatial integration between the locations, and the joint structures of the firms. The broader concept of ownership advantage is provided with factors beyond the firm's boundaries, like location advantages, including strategic alliance success factors, accumulation of knowledge capability, technological standards, innovation, and the involvement and role played by the different trading blocs. In addition, the theory modification led to internationalization advantages to exceed the transaction costs and consider the dynamics of the objectives, including asset-seeking or efficiency-seeking, which are strategic considerations for the firm (Malhotra et al., 2003; Sharma & Erramilli, 2004).

The eclectic paradigm emphasizes static market failure and would not provide a dynamic model. Based on it being rooted within the traditional hierarchy, this will not be valid within alliance capitalism, which is considered the dominant perspective of the global economy (Li, 2007; S. Li et al., 2005). Also, a purely static model cannot reflect the rises linked to strategic factors, competitive forces in the environment, and contingency of the situation (Li et al., 2005). To develop a dynamic model, it is essential to move the focus from market failure to the need for MNCs to create or enhance their resources, structures, and strategies to increase rents. Another criticism of the theory is that internalization can often not solve contractual problems. The efficiency of the internalization process is heavily dependent on the compatibility of the different units

and the capability of the firms. The theory uses four criteria in decision-making: return, risk, resources, and control, which often makes the mode of entry choice more complicated (Malhotra et al., 2003).

Some criticize this because internationalization and ownership advantages are the same (Tahir & Larimo, 2004). While clarifying this, Dunning mentioned that such a situation only arises when no external market offers a competitive advantage for the firms. Others differentiated between the two factors. It was said that internationalization factors are often linked to industry and firm-specific ownership factors (Li et al., 2005). Over the years, a new element was added: the strategic intent. There is also criticism about how the location advantage is focused in theory. It often could lead to confusion regarding the relationship between the choice of entry mode and the market selection (Cumberland, 2006; Malhotra et al., 2003). The literature pointed out that the theory considers the host countries to be markets for their goods and services and markets of financial capital. Financial advantages are vital, especially for MNCs to be motivated to operate in a market that is in an emerging economy. The OLI model is found to overlook this aspect. The theory also does not consider the role played by the decision-makers when it comes to the mode of entry choice. It also ignores the impact of home country factors, transportation costs, currency exchange rate, and other firm-specific resources on the decision-making.

2.2. Impact of Digitalization on Internationalization

2.2.1. Benefits Of digitalization and transformation

The above theories of internationalization have been used over the years to decide the mode of entry and strategy for the organization in a new market. That said, the emergence of digital technologies has rapidly changed the scenario. Digitalization is said to be the process of transformation where the organization's services, products, and procedures are altered into data packages that are compatible with the internet, which could be stored, created, and transferred as bits and bytes along with information that is associated with them for marketing, distribution, and sales (Chen et al., 2019;

Sambamurthy et al., 2003). The transformation through new technologies like smartphones, big data analytics, Artificial intelligence, and machine learning are key factors driving digitalization. Since the start of the 1990s, online sales have led to a new internationalization model, which dematerialized borders and reduced costs, and e-commerce has changed how business is done. Exporting to foreign markets through online sales has become an important strategy that organizations use to remain competitive, and it is more accurate for SMEs (Gabrielsson & Gabrielsson, 2011). For SMEs, the lack of resources has been one of the main factors that increase the agility and focus on targeting specific markets and expanding their network. Digital technologies are said to have democratized global consumption. It also paved the way for a broader database that could be used to acquire knowledge within foreign markets, facilitate cross-border transactions through increased tangible flows, reduce dependencies, and improve communication and information exchange (Coviello et al., 2017). These technologies are said to help lead the firms to improve their decision more on the proximity to their customers rather than on production costs like in the past (Hannibal & Knight, 2018; Knight & Liesch, 2016).

Herve, Schmitt, and Baldegger (2020) conducted a study that focused on understanding the impact of digitalization, how it helps companies and the associated risks. In literature, it is found that digital does have a positive impact and provides assistance to organizations in managing the risks associated with the potential additional costs that result from operations abroad, which are also referred to as the liabilities of foreignness (Brouthers et al., 2016, 2018; Coviello et al., 2017). The argument is based on the fact that technological advancements helped in dematerialized distribution channels. The said circumstance would allow the companies to focus on decreasing transaction costs within foreign countries. For example, using IoT would result in management change for geographically dispersed value chains and enable the firms to reduce the costs linked to global production (Strange & Zucchella, 2017). Internationally active firms could significantly reduce the assets required in operation by reducing the amount of assets and the cost of location-based specificity. Since commercial activities would be managed

remotely, SMEs operating digitally within the international markets can generate alternate revenues without additional investments. Resource allocation found in several markets, time-saving for transactions, and a more optimized decision-making process are some of the additional effects of digitalization.

Based on stage model theories, a firm's speed of internationalization depends on its ability to acquire new knowledge regarding the target market. In the digital context, there has been a significant change regarding the acceleration of online exchanges and the ability to collect, analyze, and exchange information. With the advancements seen in technology, it has become easier for companies at present to communicate and interact with their customers and also other potential partners, which allows them to gain a better understanding of the requirements of their customers and what services should be provided or what offers would be effective for the customers. This type of information was lacking in the past. Digitalization has also increased the interactions between machines and between machines and humans. The Internet of Things (IoT) has helped facilities increase product customizability. Other technologies like 3D printing give customers more significant influence over product designs and, in some cases, over the control of manufacturing origins (Strange & Zucchella, 2017). These technologies have revolutionized the products and services to meet the end-user requirements better and provide fundamental experiential knowledge that organizations could use.

The combination of theoretical principles emphasized under Lean Entrepreneurship with digital technologies that include big data and analytics allows the organization to conduct market experiments faster and reach more countries (Hervé et al., 2020). This helps the organization in testing the products and the services directly on future customers or in new markets, and the market knowledge that the company gains from these experiments would allow them to understand better how to improve their product or services and also how to benefit from the direct contact with consumers by making adaptations or changes based on the feedback from the consumer. This would mean the companies are more capable of introducing advanced or modified product versions. When it comes to improving their access to the international market or position within

the global market, the companies could use the feedback and share the users' opinions on social networks to improve or decide if entry into the market is viable for the company. This provides a lot more data on the situation of the need and allows for making a more informed decision compared to the past. With the growth of social media and online applications, idea sharing has become a fundamental aspect of digital technologies. This allows the companies to anticipate their market efforts and deploy better-targeted marketing strategies and other promotional activities. Through communication with the users and communities, the organization would understand the necessary measures and tools to be implemented, which would then help optimize the market gains and the speed with which these gains are made (Hervé et al., 2020).

The new technologies depend more on the accessibility of internal and external data. The availability and collection of this extensive database allow the company to make better decisions while reducing cross-border information asymmetry (Hervé et al., 2020). The newer technologies have also led to the development of forecasting and predicting algorithms that use these massive databases, allowing firms to model and interpret the collected data for strategic purposes. The market knowledge, deployment of user communication, collection, and new sources of accessible information highlights the market-based approach gained due to digitalization (Hervé et al., 2020).

Digitalization has also been found to influence internationalization's distance and location aspects. As mentioned before, digitalization has helped dematerialization and increased internationalization. Currently, the company can manage its international activities online while reducing the psychological distance and reaching more countries. The business networks and the user communities would lead these activities. As mentioned before, nascent technologies have transformed the location and organization of manufacturing production globally, encouraging firms to make decisions based on proximity to the customers instead of costs. Digitalization allows firms the capability to transfer a firm-specific asset. This would allow the smaller internationally active firms to reap the rewards as a result of the reduced dependence of the companies on location-bound assets in both their home country and other host nations (Coviello et al., 2017). Due to the growing digitalization, small and Medium Enterprises are often encouraged

to use the rapid accessibility available for international trade. These leading firms would help create new opportunities, help manage their activities from a distance, and allow the company to reach more markets while using the same productive resources. Brouthers et al. (2018,2016) highlight that when an organization enters a foreign market, it will face multiple obstacles, which are referred to as liabilities of outsiders. This concept would suggest that when a firm reaches a new market, it would usually have a few relationships that it has established with other firms, and this would consequently lead to the company being considered as an outsider, from often using nascent technologies that could act as a counter to this liability and would generate value by the creation and coordination of a network of multiple users via the development and management of a digital platform. Although the platform could be easily replicated from one country to another, transferring a user base is complicated. Small firms will need to reach a critical mass of users if they want to establish themselves in a foreign market (Brouthers et al., 2016, 2018). If the company cannot reach these numbers and is well below the number of users, then the company would find no advantage in continuing the interactions. This would further increase the difficulty for the company in entering the market. The company's expansion would be significantly slowed down because platform costs would exceed the profits in such a situation. To counter this phenomenon, the company would need to focus on creating marketing strategies that attract potential users, adopt and populate their platforms with smart strategies, and rapidly develop and add more users.

Markets are often considered relationship networks that an organization aims to maintain with the help of suppliers, distributors, and customers. Over time, internationalization theories have focused on the importance of having networks and integrating these networks on a global scale. In the digital context, network theory's actual applicability is challenged, which means there is a need to rethink the fundamental understanding of relationships in international trade (Hervé et al., 2020). The number of buyers and sellers driving this is increasing; thus, the number of participants is rising. In addition, as mentioned before, the development of technologies has allowed companies to include customers in their decision-making or consider them

crucial information providers or even local manufacturers (Hervé et al., 2020). The literature points out that the relationship between firms and customers has changed dramatically, and the definition of their relationship has been altered significantly in many ways. Markets also contribute to this challenge as they are momentaneous, dedicated, and current to specific transactions (Coviello et al., 2017). The situation would make it increasingly difficult to conclude the long-term relationship with actors as they are integrated within the network at any time. Considering digital technologies, there is an increasing number of interrelated interactions that are brief or instantaneous. The pace of these encounters is also said to be accelerated. This would allow the firms to speed up their adaption in the market to help reach multiple new markets simultaneously (Coviello et al., 2017). Digital technology and its growth have also contributed to developing and amplifying the single global market for social and economic transactions and exchanging tangible and intangible goods. This has meant that the marketing scope has broadened and helped afford better access for the local partners and market actors.

With digitalization and the increased data flow, companies, specifically SMEs, are often more oriented toward exchanges than production (Coviello et al., 2017). These exchanges are found to help provide new opportunities required for international trade. Some companies have increased the accessibility to local knowledge and simultaneously enhanced the reliability of their primary relationships. With data sharing and having skilled partners, SMEs and big companies have identified the possibilities of integrating the targeted network. To maintain the said exchanges, the management team would need to set up processes and activities that would allow for the development of the relationship, diversify this relationship and disperse among multiple actors both externally and internally, and not be reliant on a single actor (Coviello et al., 2017). The literature encourages smaller firms to multiply their user communities in several countries while also using social networks and mass media in these countries. Collaborating with influencers or change agents in foreign markets could influence the companies (Brouthers et al., 2016, 2018). These people, who are well-known figures in public, would act as robust levels in social media and user communities worldwide. This

would help boost the company's popularity and improve its reputation, which would help with faster internationalization.

Digitalization has removed multiple barriers and allowed companies to engage within international markets and, in some cases, act like micro-multinationals. The impact of uncertainty, which has been a fundamental part of the system, and the need to consider the internationalization process's nonlinearity and interdependencies increase the complexities for companies. Also, it directly impacts the competencies required to enter a new market (Kraus et al., 2019; Ojala et al., 2018). Herve et al. (2020) mention that digitalization would involve redesigning the firm's business model, enabling new opportunities for internalizing, developing customer relationships, and creating more value. Digitalization is said to act as a facilitator of servitization transition for some companies, which would mean adding other services that would complement earlier product offers and add support for the customers on a broader scale. Within the network theory, it is noted that internationalization has changed. In the past, where the past research focused on the market or hierarchies, the transformation allowed companies to explore a third option beyond markets and hierarchies: international joint ventures and networks (Buckley, 2016). Based on the sociology of networks, one of the primary arguments that have been made is regarding the relational capital within the networks that is said to mitigate the transaction cost with the help of trust and reciprocity (Banalieva & Dhanaraj, 2019). There has been an increased emphasis in the literature concerning network economics and the increasing return to scale (Bharadwaj et al., 2013). Networks and their significance are based on the network externalities inherent with digital platforms, demanding consideration of network advantages, which are considered a distinct category of traditional asset-based and transaction-based benefits (Collinson & Narula, 2014).

2.3. Impact on internationalization

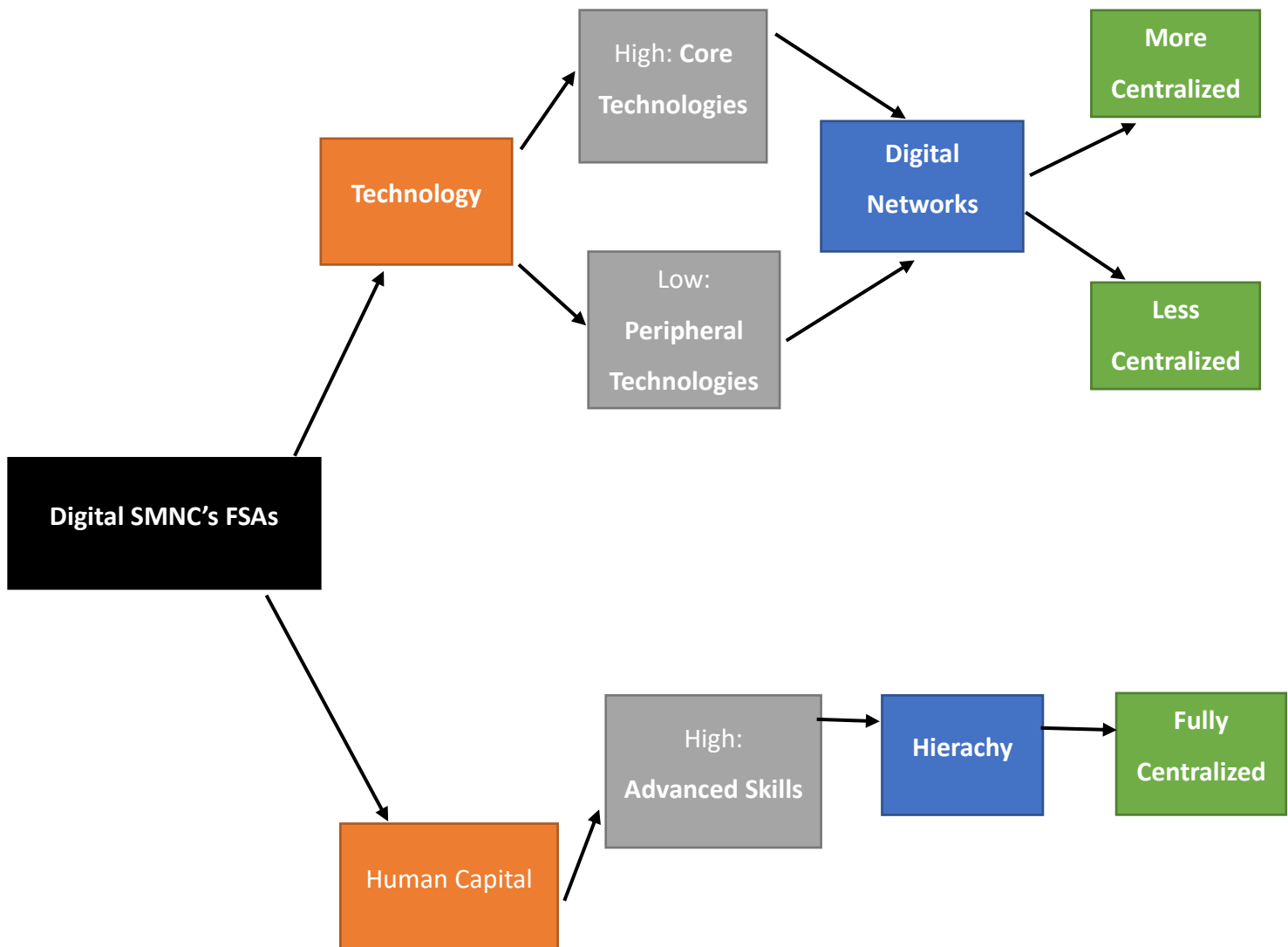
The digitalization and near-decomposability of the firm-specific asset (FSA) are considered complex and thus require complex and tacit knowledge that would be

embedded within the firms, forming the core advantage of Multinational companies. The knowledge structure behind the FSA is complex, and the architecture of complexity provides an easier understanding. In the architecture of complexity, the term near decomposability is defined to link to how a complex system could be simplified into simpler subsystems with weak but non-negligible interaction across the various subsystems. (Banalieva & Dhanaraj, 2019). Complex systems are found to have multiple parts and multiple interactions between these parts. Similarly, decomposable systems would have a modular and integrated layer that makes them quasi-modular (Gawer, 2009). Literature suggests that components in a nearly decomposable system often behave like they are independent, but there would be greater component interdependencies within the system instead of between the modules (Asmussen et al., 2016). Thus, near-decomposability could describe a complex, hierarchical organization and convert it into more straightforward, aggregated parts without generalization loss. Based on this, it could be assumed that FSAs could be decomposed into two forms: technology (core vs. peripheral) and human capital (advanced vs. generic).

Most studies focused on e-commerce firms primarily linked with service-intensive firms like Facebook and Amazon. The difference could be seen in how a company like Marriot, a global brand, took 100 years to expand to 122 countries, but Airbnb has been in 190 countries in just eight years (Banalieva & Dhanaraj, 2019). Service multinational corporations (SMNC) are often said to be light on physical assets and use technological platforms. The leverage is gained by scaling their FSAs with local partners and resources (Collinson & Narula, 2014). Banalieva and Dhanaraj (2019) compare two service firms in McKinsey, a sophisticated management consulting firm, and Uber. McKinsey's FSA depends on human capital as it provides specific consultancy services. Thus, human resources add value to the company and are responsible for creating value for its customers. The value of the technology component without a specific human capital would be low for such a company.

On the other hand, Uber's FSA is considered to be heavily dependent on technology. Thus, we can say that the decomposability of FSA in terms of technology and human capital would depend on knowledge attributes. The tacit knowledge embedded in the

human capital would make the situation difficult to decompose. While some difficulties are seen in trading for such expertise within the market, it is often mobile within a firm (Banalieva & Dhanaraj, 2019). One advantage embedded in human capital is sustainability through HR practices. The technology-intensive factors are only supported by ongoing innovation. Technology FSAs could be modularized, which would mean that the creation of the technology would also be protected, centralized, and deployed through the bundling of the FSA of the organization with the assets of the local partners. A model was developed by Banalieva and Dhaanraj (2019) that highlights the impact of digitization with a focus on governance choice prediction. The model was developed for digital Service-oriented MNCs.



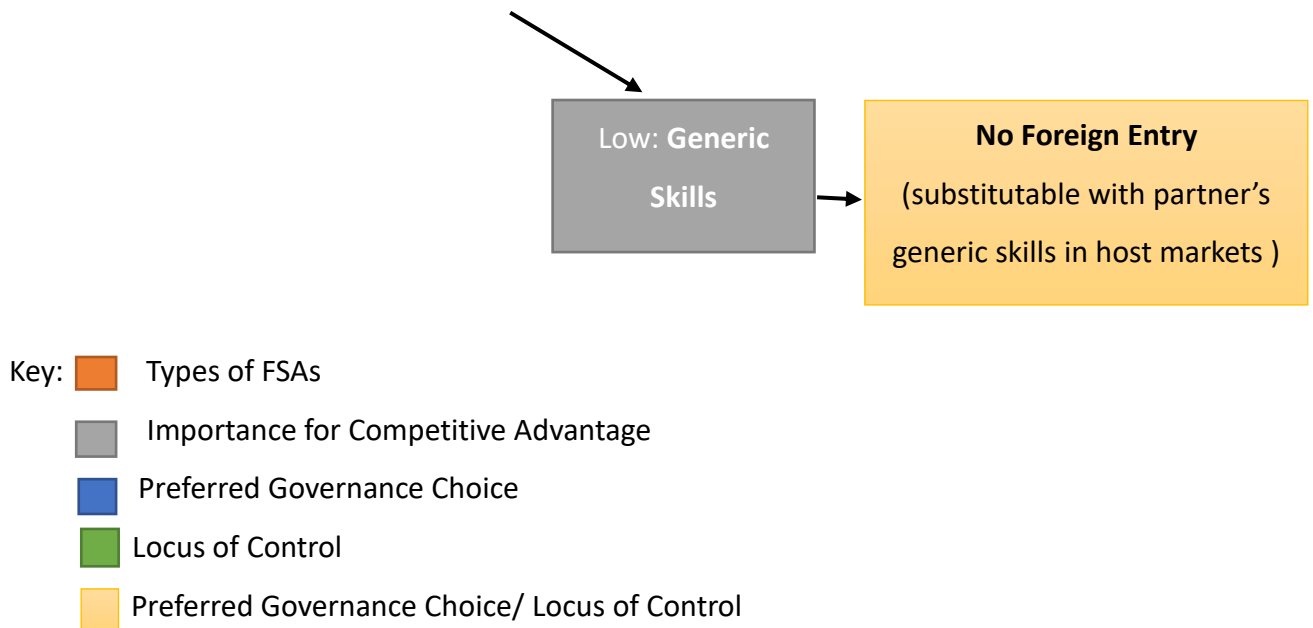


Figure 8. Digitization effect on governance choice for digital service multinationals (Banalieva & Dhanaraj, 2019)

2.3.1. Impact of Digitalization of Technology FSAs

Technology FSAs would consist of the firm's portfolio of IT-based innovative patents, processes, trademarks, and copyrights as a result of the new technology that has been developed. Service-based MNCs require specific core knowledge that would need to be developed at the corporate level, and peripheral knowledge, which is necessary at a certain service delivery point (Banalieva & Dhanaraj, 2019). This can be explained by taking Uber as an example. In this case, human capital could be decoupled from the technology asset, allowing Uber to build its core knowledge, which would be the corporate technology asset. Using this as leverage with local partners would contribute to their assets, such as driving and physical assets.

One factor that is said to enable the rapid internationalization of the service-based MNC, especially those born digital, is their capability to modularize the technology FSAs and integrate these technologies with the knowledge assets of the host service providers. Modularity is considered a set of principles that would help reduce the system's

complexity, achieved through segmentation or breaking the system into smaller separate pieces, which would then communicate with each other using a standardized interface (Langlois 2002). Modularity also ensures that the designs are decomposable when communication between the different methods is negligible (Gawer, 2009; Langlois, 2002). Research undertaken in international business has extended the concept of modularity. It would also include asset-bundling and recombinant advantages, enabling firms to compensate for the weaknesses seen with one FSA by having the required access to another (Collinson & Narula, 2014). Further research in IB has highlighted how modularity is linked to creating architectural knowledge regarding the system's interrelated components that often work together (Asmussen et al., 2016).

In situations like internationalization, for modularity to work well cross-border, there needs to be a design that allows flexibility and is adaptable at the service end. Digitalization is said to enable this using Application Programming Interfaces APIs, which are used in both core and peripheral technologies. An API is a set of routines, tools, and protocols for developing software-based applications. This would specify how the different components in the software would need to interact (Gawer, 2009; Gopal et al., 2003). One example of this could be seen in the case of Netflix, which transformed from 100 engineers working on developing a monolithic DVD rental system to a microservices architecture that has multiple small teams that are responsible for different activities or different microservices that are under development constantly, which all work together in creating the streaming platform for digital entertainment that we see today (Mauro, 2015). The monolithic services have reduced the ease of scalability due to the full service being upgraded, even if there were some system changes. API technology is said to break the services into smaller tasks integrated with multiple digital applications, increasing the deployment speed. The best example would be Airbnb, which uses this digital platform to manage information and finances. At the same time, foreign independent service providers would interact with local customers using their platform (Banalieva & Dhanaraj, 2019).

APIs are known to provide modularity for intangible assets and physical assets, as in the case of Uber and Lyft. This would increase global scalability and relative physical asset-lightness for digital companies (Banalieva & Dhanaraj, 2019). Uber is said to have recently made advances in opening its peripheral APIs to encourage the bundling process on its platform and use complimentary app services that include restaurants, hotels, and others (Banalieva & Dhanaraj, 2019). APIs, as such, are considered to be the building blocks used for other platforms that would allow developers to build new technical capabilities without having to develop the system from scratch. Literature highlights two critical conditions for strategic independence from asset bundling. These are co-specialization and non-exclusion. Both of these conditions are said to characterize the digital platforms and would allow multiple partners to collaborate within the platform. By leveraging specialized resources through the local players, the platform would create incremental value, which all the partners and the workers gain as a unit (Banalieva & Dhanaraj, 2019).

That said, there is also a limitation of technology, FSA, which is based on the fact that the barriers to geographic transferability bring a higher risk of appropriability. The competitive differentiation is said to result from the superior quality of the knowledge of intangible resources and the causal ambiguity surrounding them (Reed & DeFillippi, 1990). It is mentioned that performance that can be deemed sustainable would arise from the ability of the firm to protect its knowledge against imitation while also being capable of transferring its knowledge across borders. One interesting observation would be that digitalization is said to make the technology FSAs easier to transfer, and it also could make it easier to copy. Digital or service-oriented companies often could raise the barrier imitations that would help them sustain their competitive edge, which is achieved through the investments made in multiple layers of protection for technology FSA that would help raise the switching costs for the platforms as their users. One of the first lines of defense would be the investment that would grow the technology's overall complexity, increasing the casual ambiguity while reducing the imitation threat (Reed & DeFillippi, 1990). In the situation where standard technology components are used, there would be simple ambiguity, and the complexity of the services would be highly

compromised as the rivals would be able to imitate the platform, making them capable of undertaking similar integrations. Capabilities embedded within the proprietary core components are considered observable to competitors when the interface is standardized, becoming an easy target for imitation purposes (Banalieva & Dhanaraj, 2019). An example of this could be seen in China, where Didi, the main competitor for Uber, created a ride-sharing application similar to Uber, which commoditized the technology of matching the users or riders with the drivers registered under them. The development led to the increased spread of this application. Finally, it led to the ousting of Uber from China, which is now facing similar challenges in other countries like Brazil, India, and Southeast Asia (Pham, 2018).

The second line would be the use of proprietary components. Without these, foreign rivals would be able to complete the system assembly. Vertically integrated firms, through their assets in the form of proprietary technology, could help raise the barriers to acting against imitation (Reed & DeFillippi, 1990). One company that did this is Netflix, which developed a proprietary algorithm that has helped the company understand the consumer's preferences, which in this case would be their TV show preferences (Banalieva & Dhanaraj, 2019). The investment made by the company in its proprietary algorithms has enabled the company to amass more subscribers compared to its rivals and also be ahead of its competitors on the global count, where 80% of the 125 million international subscribers are on Netflix (Banalieva & Dhanaraj, 2019). Google's search engine also uses similar algorithms that rank the customers' preferences and then provide results based on user preferences. Thus, proprietary algorithms help solve specific problems and offer organizations information that can help companies make decisions to help sustain competitive advantages within the digital economy (Banalieva & Dhanaraj, 2019).

The third line of defense would be encryption technology that would ensure that reverse engineering would be complex. This, in essence, would mean walling the core proprietary assets. An example of this would be Amazon, which is still able to have the edge over its competitors, which is said to be the triple-walled barrier the company has

invested in, which makes the system more complex with regards to its design, the use of proprietary algorithms, and components and also building an encryption system that is superior which adds value to the users within its platform (Banalieva & Dhanaraj, 2019). Alexa, owned and developed by Amazon, is a function that allows users to customize their virtual assistant for different tasks, allowing them to dominate 70% of the market for virtual home assistants (Banalieva & Dhanaraj, 2019).

Integrating these three technological layers, FSA leads to the fourth layer of defense. This would help provide more value to users and further strengthen the network effects on the platform (Katz & Shapiro, 1986). This is a result of the fact that digital networks thrive within cross-sided network effects, where the value for the users on one side of the platform increases with the increase in the quality and quantity of the users on the other end of the forum. With more people using the platform globally, it would be more attractive to other agents like vendors, advertisers, and subscribers looking to be a part of the journey. Along with the FSA protection, the platforms that often would reach a specific use size would also become dominant in their market and would make it difficult to dethrone them, which further enables them to use their competitive advantage within the foreign or international markets (Banalieva & Dhanaraj, 2019). Some international network effects are known to be more location-specific based on the total number of global users with a similar preference to join the digital network, which would only be a small share of the entire user base worldwide (Suarez, 2005). One example of this could be seen with millennials who would on a digital platform care more about how many other millennials with similar interests are using the same platform across the world, which would provide them with a platform to interact with. In this situation, the competitors would create their alternative platform to target this specific user group, which would lead to a rise in risks within the incumbent platform (Suarez & Kirtley, 2012). The best example of this can be seen in Google and Amazon. Despite having established a multi-layer protection technology, they often compete to adapt AI technologies to understand the vernacular Indian market. The situation is unique in this case, with consumers using multiple dialects of languages, making it hard to communicate. These tech giants focus on preventing startups like Voxta and Liv.ai from capturing the market

by using the appeal of local language preference. In general, thus we could say that the internationalization success of digital networks would be modulated by the integration of the several protection layers in technology FSA and the international network effects that are seen to be found among similar users that reduce the appropriability hazards on a global scale for the existing digital networks (Banalieva & Dhanaraj, 2019).

2.3.2. Impact of digitalization on human capital FSAs

In most situations, human capital is often left undiscussed when it comes to internationalization theory. This exists mainly due to the focus on proprietary knowledge. Human capital refers to the knowledge that has been amassed and skills that an individual has developed through education, experience, interaction, and training (Coff & Kryscynski, 2011; Mahoney & Kor, 2015). By exploring the International Business literature, we find that the expatriate community has been an essential component of transferring capability and knowledge to foreign subsidiaries (Harzing et al., 2016). Knowledge can be classified as being explicit or tacit. Tacit knowledge is also known as know-how and is found to be embedded within people, organizations, and systems. It is often challenging to codify or articulate. Explicit knowledge, on the other hand, can be easily identified, shared, articulated, and employed in systems (Banalieva & Dhanaraj, 2019). The knowledge can be a general type of industry or firm-specific knowledge. The evolutionary theory finds skills and routines to be central to it. We could use advanced and generic skills as two human capital types for theorizing purposes. For example, it could be explained that a consultancy firm like Ernst & Young would need advanced skills, while a cab service like Uber requires generic skills. Digitalization is a double-edged sword that helps improve competitive advantage based on human capital, which relies on specialized skills but focuses on commoditizing the generic skills of the people (Rasmussen, 1983).

Advanced skills are found to be more critical when the individual faces unfamiliar situations, and there is little guidance due to previous encounters. The skills are said to require ingenuity and intuition. Intuition is said to include making spontaneous judgments that are often not a result of a conscious train of thought (Banalieva &

Dhanaraj, 2019). Ingenuity is said to be aiding intuition through idea arrangement and prior knowledge. The advanced skills would include abstract thinking, which would consist of things like writing complex codes that are built for a platform and later integrated with other applications; being engaged with different engineers for continuous upgrades and improvements, which are often complex, or with branding teams or service development specialists; forecasting the revenue growth through the digital technologies; negotiating the contracts for vendors that would be being a part of the platform; integrating the insights with the help of predictive analytics and many others (Banalieva & Dhanaraj, 2019). From all this, three characteristics are highlighted. First, these are programmatic, as they would be made of a series of steps that must be executed sequentially. The second would be the underlying knowledge, which would be tacit, and the third is that there are multiple stages where choices need to be made, and in most cases, the options are to be made subconsciously. Literature states that advanced skills could be considered impervious to digitalization and would only be transferred across countries through highly socialized communities (Banalieva & Dhanaraj, 2019).

On the other hand, it can be seen that the generic skills often would perform routine, rule-based tasks like monitoring and reporting updates or conducting system quality checks. These skills are said to be ubiquitous or could be generated in any location as long as investments can be made. This means no physical transfer of human capital would be required. When exploring if digitalization allows the human capital FSA and its transfer over borders, it can be seen that the answer would change for advanced and generic skills. As seen in the literature, advanced skills are challenging to embed in technology, and thus, digitalization would not add much to its tradability (Banalieva & Dhanaraj, 2019; Chi, 1994).

An example would be checking McKinsey's work, which is still said to use hierarchy mode in transferring its expertise into a foreign market while simultaneously using digital technologies that would help in the movement of the interfirm advanced skills to their subsidiaries (Banalieva & Dhanaraj 2019). Digital connectivity thus can be credited with

providing a platform that would help reduce the associated training costs, socialization, and monitoring costs. At the same time, it also enables the advancement of human capital FSA, allowing it to be mobile within the firm and, sometimes, across borders. Thus, it can be claimed that digitalization would increase the degree of firm-specificity of the advanced skills and the ability to be internally trained and build human capital using digital technologies (Banalieva & Dhanaraj, 2019).

On the other hand, generic skills, as we have mentioned, are based on rule-based, repetitive tasks that could be codified and copied (Kogut & Zander, 2009). As mentioned, these skills are not unique to a location, and they can be widely available across borders and be established with minimal training and selection. Digitalization commoditizes generic skills. The transferability of generic skills is not questioned, as the company could train or depend on local partners to deliver the same services. The more generic the skill required, the easier or substitutable it becomes in the foreign market with the help of local talent in these countries, which could then be bundled with digital platforms (Banalieva & Dhanaraj, 2019). An example of this could be seen with Uber, which uses its drive-assist digital technology. It is said to be an apt illustration designed to allow novice drivers unfamiliar with the area's geography (like roads and places). Customer support or pricing is needed to develop or transform themselves into operator partners through little training. Thus, digitalization could reduce the firm-specificity of generic skills and enable easier adoption or bundling within other foreign markets (Banalieva & Dhanaraj, 2019).

Overall, it can be argued that digitalization would shrink or reduce the transaction cost required to bundle human capital skills across boundaries while increasing scalability and abilities. Uber can again quickly scale its operation worldwide as needed due to its digital platform allowing foreign drivers to deliver services specific to their markets. In this process, the generic skills become less firm-specific and easier to codify through the platform. On the other hand, advanced skills are more complex to codify, which makes them more firm-specific (Banalieva & Dhanaraj, 2019).

2.4. Digitalization and its impact on governance choice prediction

The literature claims that digitalization extends the choice of the governance structure and emphasizes whether the digital Service MNCs would deploy human or technology capital-based FSAs outside. A study undertaken on the internationalization theory finds that theory is linked to the precise configuration of the governance architecture, which would be the firm's organizational structure (Buckley & Strange, 2011). The governance structure is influenced by the organization's context where the transactions occur. A multi-choice governance structure aligns with the research and notes that firms use a combination of multiple foreign entry modes (Benito et al., 2019; Hashai et al., 2010). When we look at digital service-oriented MNCs, the governance structure is based on creating rules focused on how to open the platform the company uses to external parties (Parker & van Alstyne, 2018). Digital networks are considered a hybrid governance choice, and this platform is said to create a market structural mechanism focused on matching the requirement with supply, which would be managed internally through the different levels of centralization. The Digital SMNCs could be found to have more or less centralized locus over the control for the network depending on how open the said platform is and also based on how important the open forum and control are for the firm's competitive edge (Eisenmann et al., 2009).

To better understand the situation, there needs to be an understanding of the ownership advantage and how it differs from the traditional asset-based and truncation-based benefits. For Uber, the asset-based benefit is based on its user-friendly platform, comprising a digital interface and other algorithms used in driver guidance, workload allocation, reputation score-keeping, and many other activities (Banalieva & Dhanaraj, 2019). The transaction advantages are focused on the ownership advantages gained from the system's ability to learn from its operation and become more sophisticated in its operations. Learning with the help of advanced technologies like machine learning would help reduce transaction costs. The company also has network advantages that are said to be based on the increasing returns of the network effects that make the user base more determinant of the cost structure for the service, ability to develop new ideas, and also act as a potential barrier for future entrants (Evans & Gawer, 2016).

Digital networks are different from traditional strategic alliances that are said to be important in different ways. Network research within International Business primarily focuses on the relationship in the physical space, often requiring tangible face-to-face interaction (Banalieva & Dhanaraj, 2019). When companies are in the digital ecosystem, it is found that they would benefit from the increased number of relationships developed due to a larger group of partner complementarities focused on their roles. This relationship in the digital networks is said to be at the level of the part or groups of actors. In addition, the traditional alliances are not focused on mitigating the risk found in such dyadic relationships, and the digital network is focused on maximizing the value of the ecosystem (Jacobides et al., 2018; Strange & Humphrey, 2019). To gain the benefits from the digital network, it is essential to subscribe to it while the users within the traditional system do not have to do the same (Jacobides et al., 2018).

2.4.1. Governance Choice for Technology FSAs

Under traditional theories on internalization, it is predicted that hierarchy-based governance choice is often practical when controlling and protecting the core technology FSAs (Kobrin et al., 1977; Narula, 2001). Peripheral technology FSAs are said to be capable of being outsourced since the firm's competitive advantage is not reliant on them. Literature states that digitalization and digital networking are more effective than hierarchy under this category mainly due to the network advantage that comes with it (Sun & Tse, 2009; Teece, 2018). With the increase in digitalization, there has been a rise in network size, and quality has emerged as an essential resource. The economies of scope, linked to data analytics, enable the digitalized companies to collect more data and a larger diverse dataset that yields more business insights than smaller non-integrated datasets. Digitalization also allows value maximization that is spread across the network, thus reducing the transaction costs that would have been required to achieve the same value in the traditional hierarchy system, which is said to push the advantage of digitalization in internationalization further (Collinson & Narula, 2014). When we check the example of Netflix and how it entered India, we can see that the company linked with large telecom carriers and integrated its core technology with their payment

systems and even set-top boxes, which would allow the consumers to connect and pay for the required access with the help of phone or TV box contracts. This helps the company reduce the costs it would incur in deploying its technology, as the local vendors under this system would bear most of the expenses related to entry and setup. This is also considered more efficient than developing payment or vendor systems in-house, considering that the company would not be fully aware of the market but would ensure that the technology is neither market-acquired nor entirely firm-owned. However, they would be governed within a quasi-internalization mode under which the partners within the network are said to cooperate and co-specialize them (Banalieva & Dhanaraj, 2019). The increase in digital technologies is said to help improve the functionality and the user experience of the software deployed on the platform.

Research on digitalization has also suggested that the level of openness of the digital network is also a critical consideration for the organization, which influences its competitive advantage (Parker & van Alstyne, 2018). When it comes to the locus of control, this will vary based on the fact that the technology FSAs are peripheral or core. Digitalization and digital companies prefer having centralized control over the network and limiting the accessibility for external developers. Under such, the network would need to operate under closed sponsorship, which would lead to excellent value appropriation. On the other end, digitalization also decentralizes the network's control and provides third-party developers with improved access to the platform. This is said to most occur for peripheral technology, under which the developed world is responsible for serving users with other network partners to help orchestrate value creation. Decentralization would increase the value adoption by external users. (Banalieva & Dhanaraj, 2019).

2.4.2. Governance Choice for Human Capital FSAs

The human capital FSA is said to be complex and implicit due to the inability to transfer these to third parties at an international level. This would mean that they will not be acquired through external transactions and are often a result of organizational

development. Although generic skills could be outsourced, the firm's competitiveness is not reliant on them (Banalieva & Dhanaraj, 2019). It can be argued that the traditional logic could be considered valid for digital companies and their advanced human capital FSAs. Still, digitalization is said to require a more nuanced argument. Tacit knowledge often requires more interaction than face-to-face. Under this, the hierarchy would continue to be the efficient form of governance structure that could spread or expand their human capital to other countries. New digital technologies have been seen to have increased the need for human capital but with more advanced skills that focus on managing and operating or gaining value from these operations of different technologies. As a result of the strong isolating mechanism that is present for co-specialized knowledge that often exists between AI and humans, advanced skills are bound to AI. This is considered to be a sticky situation and is also highly firm-specific. That said, due to digitization, which increases the intensity of advanced human capital skills, there needs to be a more effective and efficient manner by which human capital skills can be acquired. (Banalieva & Dhanaraj, 2019).

Acqui-hiring is the practice of hiring a highly specialized team of individuals. The hiring is said to eliminate the inefficiencies that would be present from the time and investments needed to develop the teams' talent internally, which would often be less efficient. It is also said to help the organization eliminate the inefficiencies often seen where they overpay for acquitting a new foreign company when the specific talent team is considered to be the only value that would be added that is of interest to the organization (Banalieva & Dhanaraj, 2019). There is also the benefit that the company gains from targeted hiring, which provides a portfolio of skills and removes the need to identify specific simple mechanisms and individuals that would yield success for the foreign team. These teams are often entirely integrated within the hierarchy of the new firm, which would reduce the risk associated with knowledge leakage. It also allows the company to expand its foreign footprint by cherry-picking advanced human capital within host countries (Banalieva & Dhanaraj, 2019).

On the other hand, generic skills are considered a commodity that does not justify the company's spending to manage or control them internally. Employees with generic skills are said to be highly mobile, which highlights the risk of losing them if investments are made in improving them. Given that generic human capital skills are often substitutable with local partner companies, they are said to avoid sunk costs. MNCs often do not find it effective to enter a foreign market with only generic skills as they are easily substitutable. Thus, for generic human capital skills, the focus is on contracting human capital skills in the host nations. Therefore, it could be argued that digitalization would enhance the firm's capability to explore the human capital FSA in the foreign market at a lower price through internalization (Banalieva & Dhanaraj, 2019).

The literature has highlighted three observations on how digitalization impacts internationalization. Digitalization is said to challenge the definition of MNC, which has often been based on investing physical assets in another foreign country. Under the digital transformation and digital world, MNCs can exchange information and enter the market without investing in physical assets (Banalieva & Dhanaraj, 2019). The digital age thus helps companies that are born digital by providing access to global consumers with the help of a digital platform that could be used to enter a new market or host country through the digital network ecosystem (Kobrin, 2017). Thus, digitalization has shifted from physical territorial characteristics to digital and information-flow-based features. The firms under this context cannot be considered to be stand-alone entities.

The second factor would be that digitalization would challenge the market's critical underlying role, price-setting. Before digitalization, consumer preferences were simplified mainly and condensed to price due to information processing limitations within the analog economy (Li, 2018). Digitalization plays a role in transforming the market from a physical entity to a data-rich environment where suppliers and buyers are said to co-create with the help of digital technologies. Data-rich platforms are found to provide firms with the required capability to characterize their consumers. They are not just based on price preference but are also linked to factors like individual taste and convenience. Under this new system, the prices are driven not by marginal cost but by the user value added. The final factor or change that digitalization has brought about is

the transformation of marketing into data-rich environments, which has already led to the debate on the social implications of these transformations. With increasing digitalization, the question is not how it would alter the governance but also shows possibilities where human-capital FSAs could be replaced by technology FSA, which could increase the income inequalities and unemployment in different countries (Banalieva & Dhanaraj, 2019).

2.5. Born digital companies and past studies

In order to understand born-digital companies, it is critical to understand the digitalization of the value chain. The value chain for an organization is said to be focused on the different activities a firm would need to perform that would allow it to bring its products and services to the user from the conception to the after-sales support provided (Vadana et al., 2019). A company must design a distinctive value proposition that would cover the requirements of the market niche (Porter & Kramer, 2011). The firm would gain a competitive edge when it can configure the value chain or the different activities involved with creating, producing, marketing, supporting, and delivering its products and services. The term global value chain has been coined based on the fragmentation and dispersion of the various activities spread across the globe (Gereffi & Fernandez-Stark, 2011). In addition, other terms, such as global factory, were introduced when some activities were located in other countries (Buckley, 2011a).

The dynamics' evolution depends on the market changes that play a role in determining the structural modification in the value chain. The first is said to retain some core in-house activities and often allocate more time, resources, and effort (Buckley, 2011a; Hernández & Nieto, 2016). Digital technologies provide online businesses with an increasingly simple tool to internationalize their value chain or some parts of the value chain. These companies could be technology-based and are in different industries. Ft industrialization is only possible in a highly technologized industry (Vadana et al., 2019). To survive in a challenging and dynamic environment, internet-enabled companies are

often required to adapt quickly and increase compared to traditional firms (Bell & Loane, 2010; Brouters et al., 2018; Wentrup, 2016).

The born-digital companies could be analyzed using a digital framework that would describe the internationalization dimension of these firms based on their online and offline presence (Hennart, 2014; Wentrup, 2016). A 2x2 matrix classification of the digitalized firms is also needed to find the main patterns within these companies. Figure 9 provides an illustration of born-digital companies that are based on two dimensions. These two dimensions are the degree of digitalization of the value chain and the dispersion of their activities on the geographic scale.

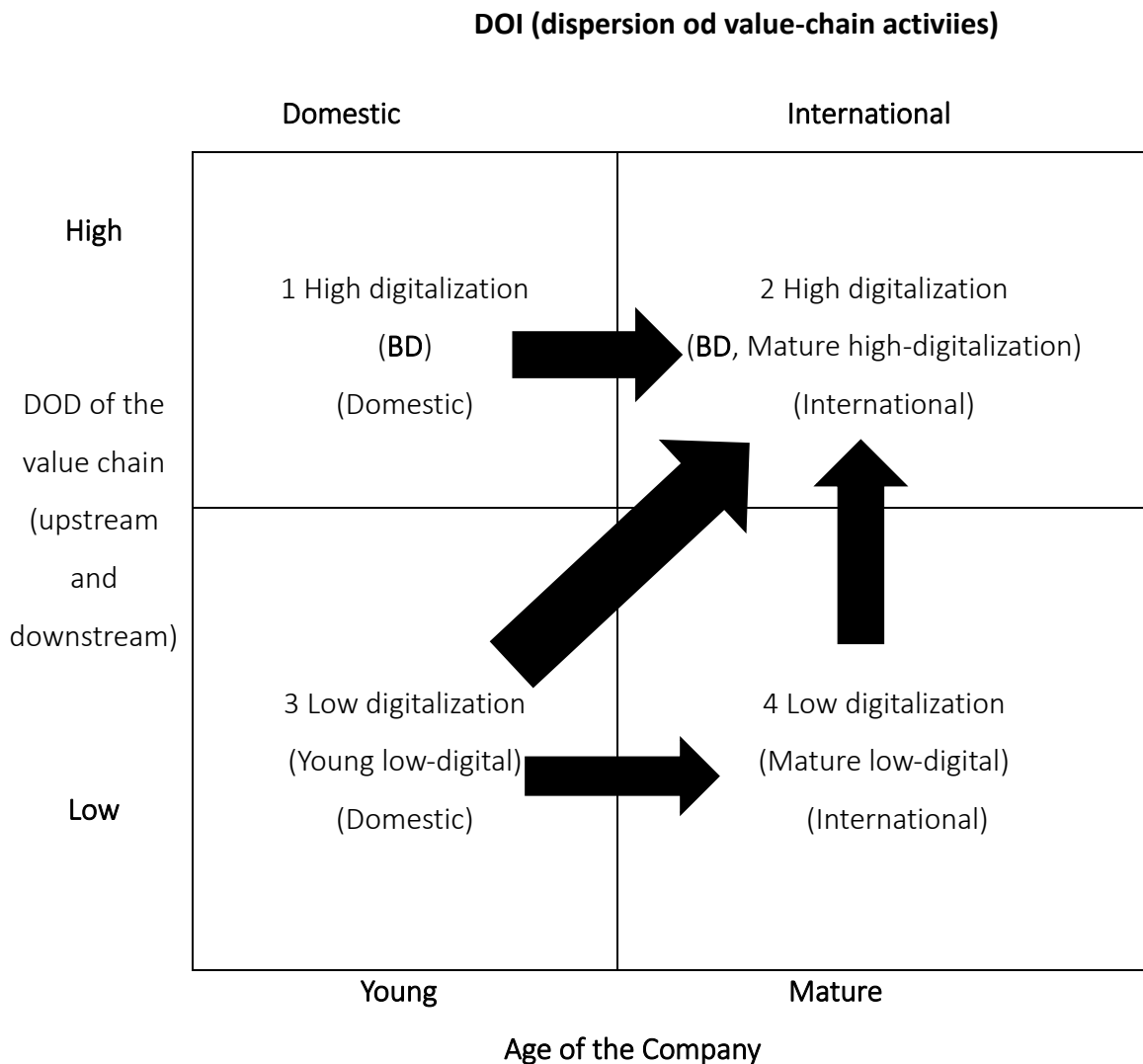


Figure 9. Internationalization of digitalized firms (Vadana et al., 2021)

Internationalization is expressed through the horizontal axis. It would consist of the number of countries the company is active in and the number of localized websites or domains in other official languages. The first two quadrants are made of born-digital companies, and the next two represent the different types of firms in various stages of digitalization (Vadana et al., 2019). The two quadrants show that the digitalization level is limited to domestic or international value chains. The higher a company's digitalization, the higher the degree of internationalization. That said, not all born-digital companies would have intense international activities even though they can start selling their products to international customers immediately. Born Digital companies, thus, under the research consideration, can be considered as companies with all parts of the value chain that are highly digitalized right at the start of their operation or foundation or soon after. Born-digital companies can be easily distinguished from other firms as they would be providing their products and services online early in their life cycle and due to a digitalized value chain that is often developed later among the other companies where some of them have not even experienced the digital transformation yet (Vadana et al., 2021). As shown in Figure 9, the company's age is also a factor showing its transition as it matures. Though internationalization of Born Digital companies is possible, only mature ones would be able to achieve high digitalization on an international level. The born-digital companies could not move internationally without the required operation and activity maturity.

Mature companies have often begun their digitalization process long after being established in the markets and usually have a physical presence that combines both online and offline activities (Monaghan et al., 2020; Vadana et al., 2020). That said, many companies still have not yet completed their transformation or have just begun the process. These companies and their value-chain would thus rely more on offline activities, and the internationalization processes are often slower as their learning speed is slower (Autio et al., 2000; Hennart, 2014; Sinkovics et al., 2013). The value chain could be grouped into categories based on upstream or downstream criteria. Upstream refers to activities like creation and production, while downstream includes marketing, customer support, and delivery.

Born Digital companies often use high-level digitalization of their value chain and intensively coordinate the different activities using the technology and internet infrastructure. In a study undertaken and use of the empirical cases and literature review, it was found that the decision to control the multinational born-digital companies would be the home country, and the geographical and psychic distance between the home and foreign market is often a critical aspect of the success (Vadana, 2020). Research has suggested that BD companies are often dictated by their business model responsible for revenue generation. These companies are often considered capable of rapidly internationalizing due to the high degree of digitalization right from the start. The studies also highlight knowledge's critical role and influence on internationalization. It is mentioned that an interplay between online and offline is necessary, and the degree of digitalization is said to increase the available knowledge regarding the users and the free market, allowing for the quicker expansion of their value chain activities. It has also been seen that even when companies are not born digital but digitalize their value chain, there has been an improvement in their opportunities (Vadana, 2020). These findings show digitalization's influence on value chain activities and how it would improve internationalization capabilities. Though being born digital and having maturity, the born-digital companies are ahead. As long as they can develop their products and services that match the customers' requirements, it becomes easier for them to expand and provide services on a global scale. Vadana (2021) mentions that the knowledge capabilities supplemented by the international experience allow the exploitation of the digitalization of born-digital companies and their value chain. These findings are similar to those of other studies highlighting bricolage processes. Some studies called into question the technique's capability to enhance the domestic and foreign markets. Bricolage and experience have been found to influence success (Baker & Nelson, 2005; Vadana et al., 2021).

In a case study approach, it was found that 16 of 18 companies examined digitalization both inward and outward right from the beginning of their operation or immediately after. This shows that born-digital companies are often found to undergo the transformation process right at the front, showing the value of the digitalization of the

value chain and its importance in its internationalization (Vadana et al., 2019). The process of internationalization, based on the case studies, is often made up of multiple steps. This includes the gradual expansion followed by internationalization speed achieved with the support of internet technologies. The quickness of internationalization could be best explained by the born global phenomenon, ICT, and Internationalization-related theories, while the gradual regional patterns are supported through the Uppsala model. There are some discrepancies in the findings of the case study-based research, which show that the digitalization of the value chain activities is often not linked to internationalization. The degree of digitalization of the value chain is thus not impacting the internationalization of born-digital companies (Vadana et al., 2019).

Another case study-based research study used interviews and surveys for a particular company to understand the situation and focused on the different adaptations a firm could make to help them succeed in a foreign environment (Muriu, 2021). Based on the study, business networking, model, geographical distance, the company's culture, location, and market size were crucial factors that influenced the choice of entry for a high technology-based organization focused on entering an emerging market. There are also multiple other challenges the born-digital company would face in its internationalization. These would include the management transition, lack of financial resources, and, in some cases, the lack of information regarding the critical mark in identifying their strategy. The study also states that despite the nature of the born-digital companies, which is based on their ability to use technology in quickening the internationalization process achieved through the availability of digital knowledge, the decision-making process reliant on technology and network creation there are many challenges that these companies face during their entry into an emerging foreign market. Some of these challenges the companies face would include the institutional voids and liability due to being a foreign company, which are the main obstacles and highlight the need for the organization to conduct a proper environmental analysis. The case study focused on Arctic Space Technologies, which is often needed to create a relevant business network. The study identified that the company's digital foreign market entry mode was Joint ventures. South Africa is keen to attract new investments considering

the targeted foreign market. The joint venture allows for investing in the country with minimal risks. It was found that such an approach would help develop more significant relationships with existing public and private companies and would also help unlock more opportunities (Muriu, 2021). The study states that there are challenges, but the decision needs to be made based on a complete analysis. Though it is easier to internationalize with digital technologies, importance should be given to understanding the market.

Another study was undertaken that focused on how the internationalization process differs between regular companies and companies that are born digital or are internet-based. Based on the study's empirical and theoretical approach, four findings are necessary to understand the difference (WITTKOP et al., 2013). The first is that the condition within the digital market environment is said to change a firm's strategic approach. It is noted that digitalization changes the way competitive advantage is gained in the market due to the difference in characteristics between the goods and services provided. The attributes above of the products and services are said to be reflected within their approach that has changed internationalization, which leads to the need to adopt theories like Uppsala or Internationalization strategy. International entrepreneurship theories, the most recent advancements in internationalization theories, are found to be better capable of reflecting the rules that govern the digital market environment mainly due to these theories being developed considering how the smaller companies would behave. It is also found that the business model concepts help provide the required structure for multiple variables within the IB theories. The business model literature is said to have introduced various approaches to defining a business model. The differentiation in the value proposition, delivery and creation, and value capture is recommended as a framework for the different strategies. The study undertook the differentiation analysis, showing that intern-based companies are often viewed as capable of developing heterogeneous groups. The study also highlighted that no individual business model component could uniquely influence or determine their internationalization strategy for the digital business (WITTKOP et al., 2013).

To better understand the impact of digitalization on the speed of internationalization with a focus on lean Global Startups, a study was developed that used an interview-based methodology where 73 interviews were conducted with senior managers (Neubert, 2018). Some of the key findings from the study include (Neubert, 2018):

- The Lean global startups are often said to have limited theoretical knowledge regarding digitalization and lack practical experience in internationalization.
- Most startups are said to be focused on gaining benefits based on their international networking ability, like lead generation, which is one area where some of these companies do not use any digitalization processes.
- These startups expect a more considerable impact from the digitalization process on profitability, productivity, and sales revenues.
- Lean startups are said to select software that supports digitalization based on transparency regarding data collection and analysis, benefits, and the ability to integrate within the ERP systems that are currently being used.
- The main challenge in selecting and using a software tool that supports digitalization would include a lack of support seen in training and configuration.

The study claims that lean startups often expect a significant impact on internationalization due to digitalization (Neubert, 2018). It is found that the transformation allows for the creation of a broader knowledge base and the faster development of networks, which would help increase the decision-making process and efficiency, which is considered the fuel for the speed with which internationalization would occur. The increase in the speed of internationalization results from using internal and external data that help predict future market development that would allow the companies to act on multiple levels. These would include the development of a structure and disciplined process or strategy that would consist of regular review and reduced workflow, mediation between local market realities as well as strategic goals, analysis of

the foreign markets permanently, and optimizing the decision-making and also to better plan for long-term due to the availability of more information (Neubert, 2018).

2.6. Conclusion

In conclusion, this literature review highlighted the main principles and theories of international business, entrepreneurship, digitalization, and research methodology. The present body of literature represents good foundations for these domains, and there is a definite place for developing a new theoretical model that will serve as a guide for empirical research and planning business operations since many factors influence the competitive environment today.

On the theoretical base that includes the Uppsala model of internationalization (Johanson and Vahlne, 1977), the resource-based view of the firm (Barney, 1991), and the digital transformation framework (Bharadwaj et al., 2013), and other similar theories, it could be constructed the theoretical framework that would unravel the complex nature of internationalization, entrepreneurship, and digitalization.

At the center of this theory, one can see the technological devices as tools that make international entrepreneurship feasible, as they provide the grounds for creating, distributing, and exploiting entrepreneurial opportunities internationally. By combining the findings of network theory (Parker & van Alstyne, 2018) and platform theory (Parker & van Alstyne, 2018) and considering the eclectic paradigm (Dunning, 1980) from IB theories, the model placed digital platforms and networks as the key pillars that impact firms' internationalization strategies.

Central to this framework are the following key elements: Central to this framework are the following key elements:

Digitalization Capabilities: This is applied to firms that use digital technology to deepen their global competition depending on the nature of these activities, like market entry, market development, and customer engagement. It includes whether corporations are

ready digitally, how IT is organized in individual companies, and how quickly they can adapt to digital disruptions.

Entrepreneurial Orientation: By expressing the organization's willingness to innovate, take risks, and perform an active approach in international business, the brand speaks of its inclusions. Its study approach looks at the role of a firm's entrepreneurial attitude in relation to its digitalization effort and its international outcomes.

Network Effects: Enthusiastically accepting the impact of the social networks, digital platforms, and ecosystems' dynamics in the firms' international business expansion. It is about how firms use networking relations to gain market access, capital, expertise, and knowledge from an international market.

Internationalization Strategies: Investigating the paths the companies choose in the process of accessing markets and process of expanding in the digital age. It concentrates on the function that information and technology platforms (websites, digital marketing channels) and data analytics have on the internationalization strategy of the firms.

With this approach integrated into a single theoretical system, scientists will have testable hypotheses and research propositions that contribute to the general knowledge of how international business, entrepreneurship, and digitalization interact. The above structure is the one that should be the center of research, as it will help managers, officials as well as business leaders to acquire a more comprehensive understanding of how to run complex economies unsteadily along with the technology that has contributed to the emergence of the globalized nature.

Eventually, the article review builds a base for studies of the future that investigate the processes and the dynamics of digital age business internationalization. Considering this, approaching the present-day business dynamics with a well-grounded theoretical frame of reference can enable the researcher to work with the complexities of the environment and contribute to the development of practical and theoretical insights.

3. Research Methodology

Research methodology is a tool used to explain how a researcher intends to undertake their research. It would be a logical and systematic plan that would be used to find answers to the research question or solve a research problem. The researcher will make many decisions during the research methodology design. One of the primary decisions to be carried out is to identify the research philosophy and the data type used in the research (Kothari, 2004; Kumar, 2017). The chapter is focused on identifying and discussing the right philosophy that would be used for the study, along with identifying the right tools that would be used in data collection and its analysis.

3.1. Research Philosophy

Research philosophy is the belief that dictates how the data would be collected, analyzed, and used for the research (Khatri, 2020; Novikov & Novikov, 2013; Tsang, 2016). Epistemology (what is known to be factual or accurate) compared to doxology (what is believed to be correct) would encompass multiple philosophies within the research approach. Research methodology aims to help transform what is known into factual, such as moving from doxology to epistemology. In studies, there are three essential functions of philosophy. These are (Tsang, 2016):

- A better understanding and dissection of the methods researchers could use would clarify the conditions needed for efficient usage.
- Demystifying is linked to criticizing, exposing, and explaining some unsustainable assumptions and the confusion and inconsistencies these assumptions might lead to.
- It allows the researcher to understand the position in the research regarding knowledge-producing activities and be aware of the potential areas and research gaps and how to explore them.

In short, it can be claimed that research philosophy helps one be aware of the beliefs and assumptions of their research. The research onion provided in the figure below helps

show the different layers of how the chosen philosophies lead to certain assumptions and methods (Aleksandras Melnikovas, 2020). Each stage is said to have its hypothesis regarding the source and the nature of the existing knowledge, and based on these, there are four commonly used research philosophies.

In this study, a pragmatist research philosophy is followed. The pragmatism of this research is in line with its explicit goal, which is to provide practical implications in regard to complex issues such as international business, entrepreneurship, and digitalization. By putting pragmatism front and center, the research recognizes that these are the meat and drink of most businesses – firms with a worldwide footprint and advanced digital operations.

While pragmatism emphasizes the applicability of the research in modern-day situations and problem-solving, there are additional approaches as well. It offers the liberty to employ different theoretical perspectives and methodological approaches to develop practical, actionable knowledge. Indeed, the pragmatic approach enables the incorporation of various theories and notions from international trade, entrepreneurship, and digitalization that can be conducive to a comprehensive approach to the internationalization strategies in the digital age of companies.

With the adoption of a pragmatic approach research philosophy, the study intends to solve the issue of the theory-practice gap, this way offering viable recommendations for government officials, company managers, as well as business founders, who are all trying to tackle the complications of today's globalized and innovating business environment. The pragmatic nature of research paves the way for flexibility and adaptability, leading to the collection and analysis of information that is deemed relevant and practical to the needs of academicians and professionals at companies (Morgan, 2014).

3.2 Research Method

This research uses a mixed-methods approach to achieve a holistic understanding of the research problem. Such a methodological approach goal is aimed at combining the best of both worlds: the strength of the quantitative and qualitative aspects of the research

that results in a more comprehensive and comprehensive understanding of the relationship between variables in the globalization, entrepreneurship, and technology space (Dawadi et al., 2021; McKim, 2017).

The part of the research that deals with the quantitative aspect is gathering numerical data to find correlations between the data's characterization and the pattern they may depict (Creswell & Creswell, 2018). The methodological approach will rely on surveys, statistical analysis, and econometric modeling to detect the influence of digitization on the international activities of companies, thus generating empirical evidence of the study's hypotheses.

On the flip side, the qualitative element takes us to the process that needs to be conducted, observing various strategies such as in-depth cross-sectional interviews, case studies, and content analysis to compile the story in context and depth. Quantitative techniques provide the foundation to explain how and why companies choose to internationalize, with the underlying motivation, reasoning processes, and organizational structures being a few examples (Caldas, 2003).

The research strategy used in this study is hybrid, with the data collection step being the intersection of quantitative and qualitative approaches. This strategy aims to triangulate the results of both approaches to enhance the validity, credibility, and depth of understanding of the research problem. The mixed-methods strategy provides space for different voices, understandings, methods, and data sources, allowing for an integrated, holistic view of the digitalization and internationalization strategies that are strongly related (Creswell & Plano-Clark, 2011).

3.3 Data Collection

Both quantitative and qualitative tools have been used to collect the required data. A survey is used for the quantitative tool, while an interview-based system is used for the qualitative tool. The questionnaire was developed based on the findings and experiences within the literature regarding the same topic. A theoretical framework has been

developed based on the literature explored, the transition seen in internationalization, and the benefits gained from the process.

Based on the literature and the framework, the study developed a survey questionnaire that covered 25 questions. Of these, the first nine questions were focused on questions that explored the respondents' experience, position, industry, company size, globalization expectations, and presence and analyzed if the organization has undergone digital transformation. The remaining 16 questions made use of the five-point Likert-scale system. In this, the respondents were provided statements and were asked to choose between strongly agree, agree, neutral, strongly disagree, and disagree. Similarly, the interview questionnaire included reference questions like industry, experience, company policies, and history and expansion strategies. There is a total of 12 queries.

The interview centered on born-digital enterprises, probing their perceptions of the evolving landscape amid heightened digitalization. It sought insights into whether operational paradigms remained static or underwent transformations in light of these shifts.

The survey, facilitated through Google Forms, was disseminated electronically after securing requisite permissions from participating entities. The subsequent interview sessions, conducted via Zoom, were predicated upon the acquiescence of management cohorts within Born Digital firms, contingent upon their expressed willingness to engage in the study.

3.4 Sample size

The questionnaire was circulated among 300 workers employed across diverse enterprises throughout Europe after obtaining consent from the companies and participants to engage in the research. Only those responses deemed to be comprehensive were included in the study. Regarding the interview component, outreach was conducted to six companies, soliciting their involvement in the research initiative.

3.5 Data analysis

The data collected from the survey underwent analysis, and informative charts were created to address the research inquiries. Descriptive statistics were utilized as a tool where deemed appropriate. A meticulous content analysis was conducted using qualitative data derived from interviews. This method enabled the exploration of recurring themes within responses, discernment of nuanced distinctions in individual experiences, and formulation of comprehensive insights based on diverse perspectives.

3.6 Research ethics

Research ethics is critical when it comes to research that involves people. The study first contacted different organizations across and requested their team member's participation in the study. In this mail, the research purpose, the type of questions that would be asked, and sample questions were sent to the company to gain the required approval. Once the company approved, individuals identified by the company were sent the survey. The communication was through e-mail, and the individuals were also provided a briefing regarding the study and what is expected and a request from the researcher to complete it within a specific time frame. A reminder was sent to the participants after a week, requesting them to participate in the survey. Beyond this, communication was limited. The survey was designed to ensure no name or identification details of the unfair or the organization will be used or collected. Those details were filtered if any were collected, and only the required data was used in the analysis.

For the interviews, invitations were extended to heads and management leaders of born-digital enterprises, outlining the study's purpose and question types. Interview dates were scheduled upon receiving permission, considering participants' availability and preferences. Conducted online, participants were informed of a discussion duration ranging from 20 to 45 minutes. Transcripts of the discussions were analyzed, focusing on presenting data and findings aligned with participants' intentions and devoid of personal biases.

4. Results

The section will be divided into two, where the results from the survey and interviews will be provided separately, which will then be discussed in the next chapter.

4.1 Survey Results

The survey encompassed approximately 145 responses, with varying degrees of completeness noted among them. This variability necessitated a meticulous examination of each question and its corresponding response frequency to discern insights into the perceptions surrounding born-digital companies and their associated challenges.

The initial inquiry focused on the industry sectors represented by respondents to achieve comprehensive sectoral coverage and enhance the robustness and generalizability of findings. Results revealed a predominant presence of respondents from the finance sector, closely followed by those from advanced manufacturing. Nonetheless, a discernibly diverse representation across critical sectors was observed, underscoring the comprehensive nature of the survey sample.

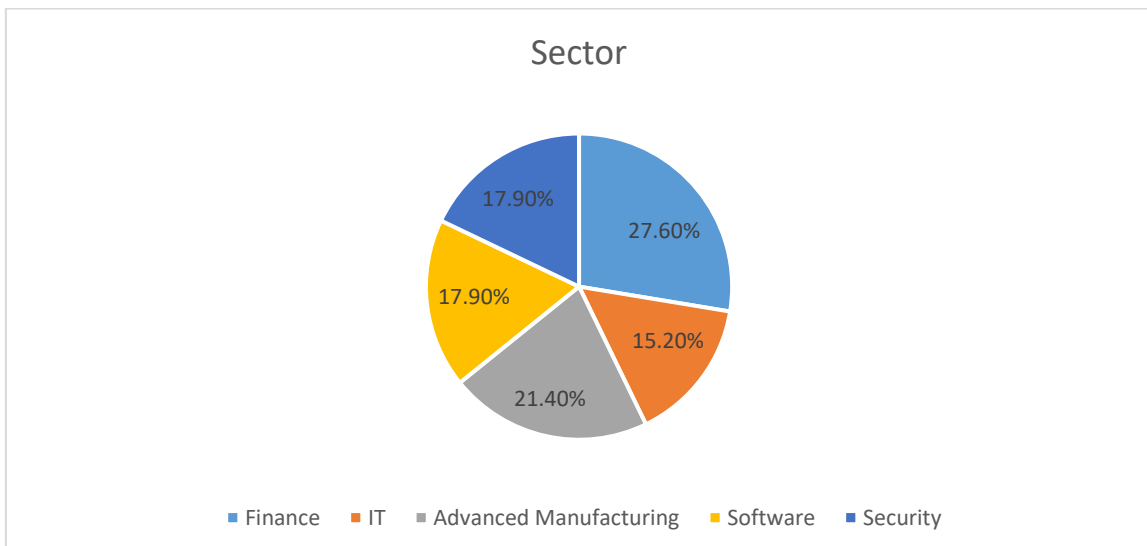


Figure 12. Sector representation

The next question explored how old these born-digital companies were, and interestingly, most of these companies were found to be 1-5 years old, meaning they are relatively

new. In addition, from the survey, it is also clear that no companies were more than ten years old, while around 14.5% were 5-10 years old, and the remaining were more recent. This shows that the group of respondents have seen the rise of globalization and are companies born during this period, and the majority have seen the rise or success of their companies during recent times and are capable of showing how they are different from each other, which is a good mix of respondents. While older companies would have showcased differences in the barriers or challenges, they might not be relevant at present, and the younger age allows us to look at the current challenges that might be impacting the companies.

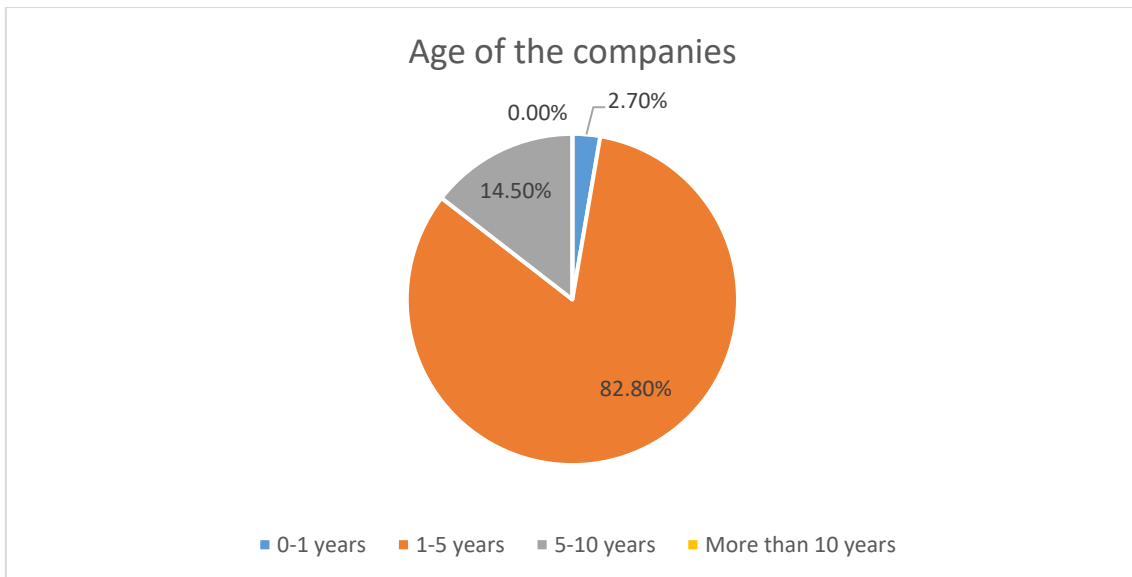


Figure 13. Age of the company represented

The next question explored the number of employees in the firm, and from the response, we see the majority are from companies that could be considered medium-sized, with 25 to 50. Eighty-one respondents were from these medium-sized companies, while 54 were from companies with 10-25 employees. Only one company is represented that could be considered significant with over 100 employees; there were 4 with below ten employees and five between 50 and 100. This showcases that most respondents were from medium-sized businesses that have been established and growing.

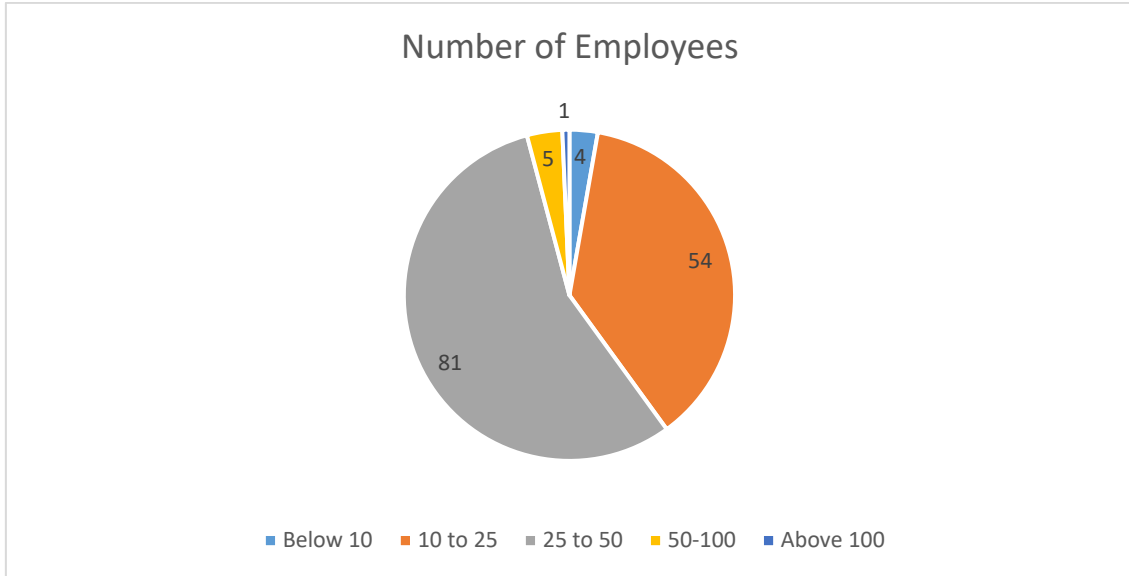


Figure 14. Number of employees

Here, in the following question from the responses, it is clear that the majority of the respondents that is 115 of the total 145, are in middle management, which means these are people who often deal with the day-to-day challenges and work between the different layers of the organization. There are also 30 upper management respondents, which would highlight a perspective from the top and how they view the issue on the topic. That said, there were no respondents from lower management. This would not be an issue as most of the decision-making would be undertaken at the top and middle, and most of these individuals, with their experiences and roles, would be well-versed and understand the complexities and challenges. This serves the study well and its overall quality.

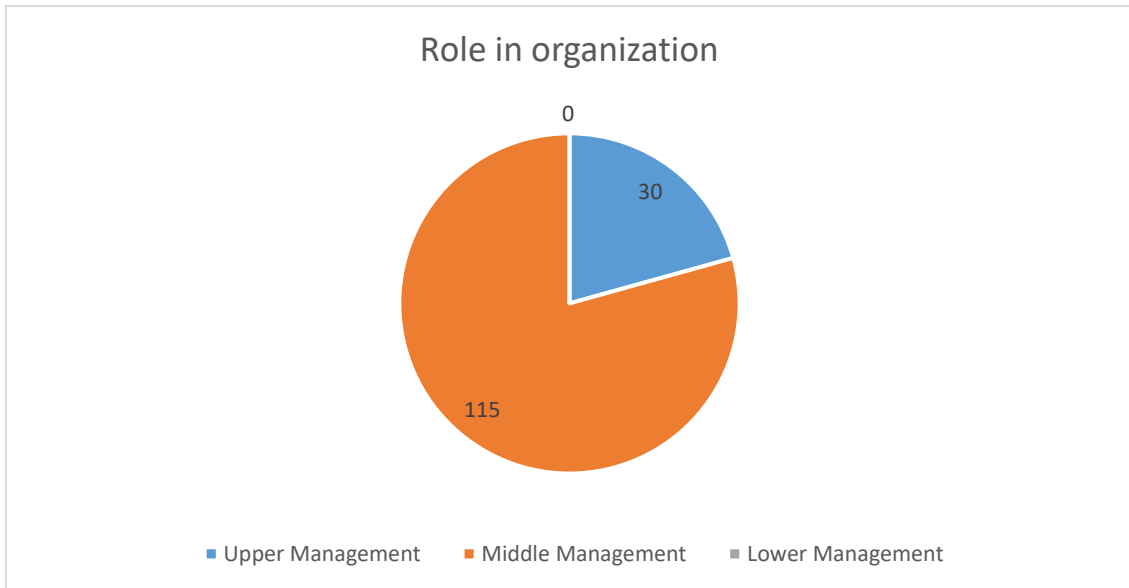


Figure 15. Position in company

Following this question, we move on to more yes or no types of questions exploring the focus and expectations of these born-digital companies. The first question explores if the company is focused on expanding into global markets, and interestingly, 98.6% of all 143 respondents who answered it highlighted that they are interested, while the remaining said they are not interested in expanding globally. This highlights that most of these companies focus on expanding their services in other parts of the world and see that as one of their main goals.

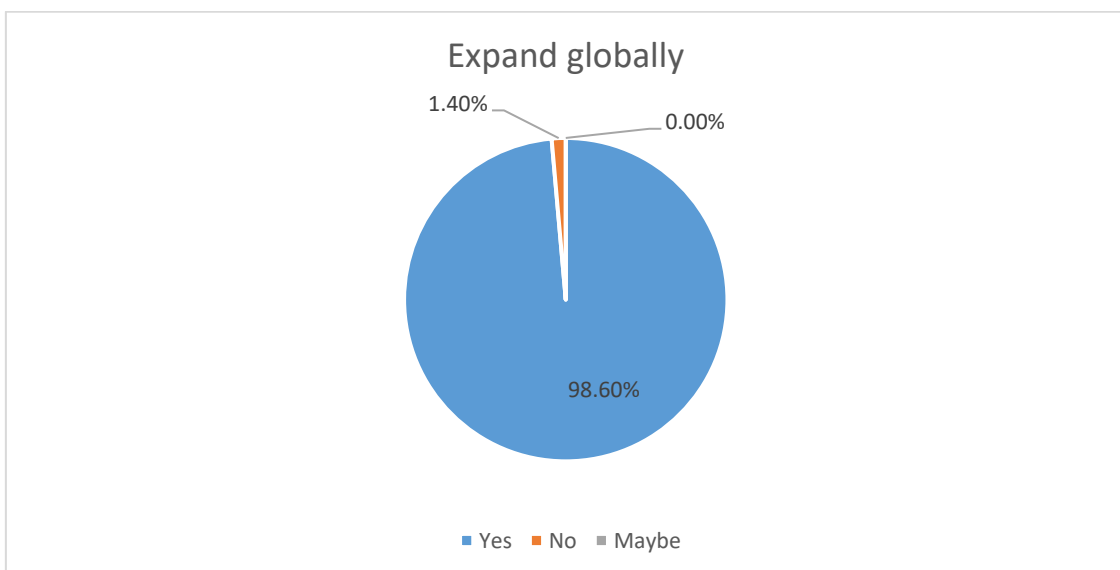


Figure 16. Global expansion

The next question explores whether the companies currently have any branches in other countries, and of the 141 respondents, 99.3% mentioned that they do have a branch outside, which already shows these companies have shifted or established their presence in other countries.

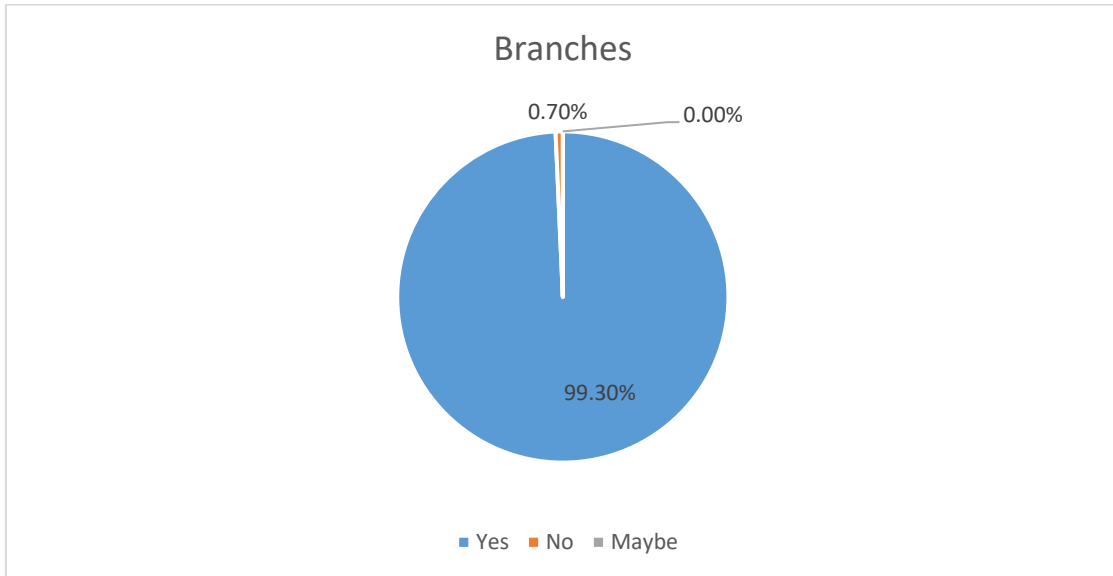


Figure 17. New Branches

The next question focused on whether the expansion to other markets has led to market transformation, and of the 144 responses to this question, we see that 99.3% agree that the company has undergone market transformation due to expansion, showcasing the impact of globalization. According to the survey findings, digitalization has brought about a profound change in consumer preferences and shopping habits, and traditional shoppers tend to turn more toward online channels and digital experiences. Digital platforms and ecosystems are the main factors behind the market transformation, providing innovative approaches to value creation, collaboration, and competition among market participants. Furthermore, the survey pointed out that digitization has disinvited the demarcation lines of industries, and they are now converging with respect to products, services, and business models. The culmination of these two factors has led to new markets for emerging companies and nascent revenue streams; simultaneously, it has intensified competition and magnified the already-existing market volatility.

Overall, the analysis of the survey results suggests that digitizing is a multi-faced transformation that implies the necessity of companies' reconceptualization of their internationalization strategies in order to be effective in such dynamic and complex markets. This means that these companies have had to adapt their business models, services, and approaches to operate in these new markets, as it is critical to align the digital offering with the diverse market demand, customer behaviours, regulatory environment, and competitive landscapes across the various countries. This process would be critical for born-digital companies as it would tap into new revenue streams and increase their reach, but at the same time, there are complexities involved due to cross-border operations, data governance issues, and other barriers. Adapting to these international market requirements and nuances is critical for competitive and sustainable growth, and the response highlights that the companies have made these changes.

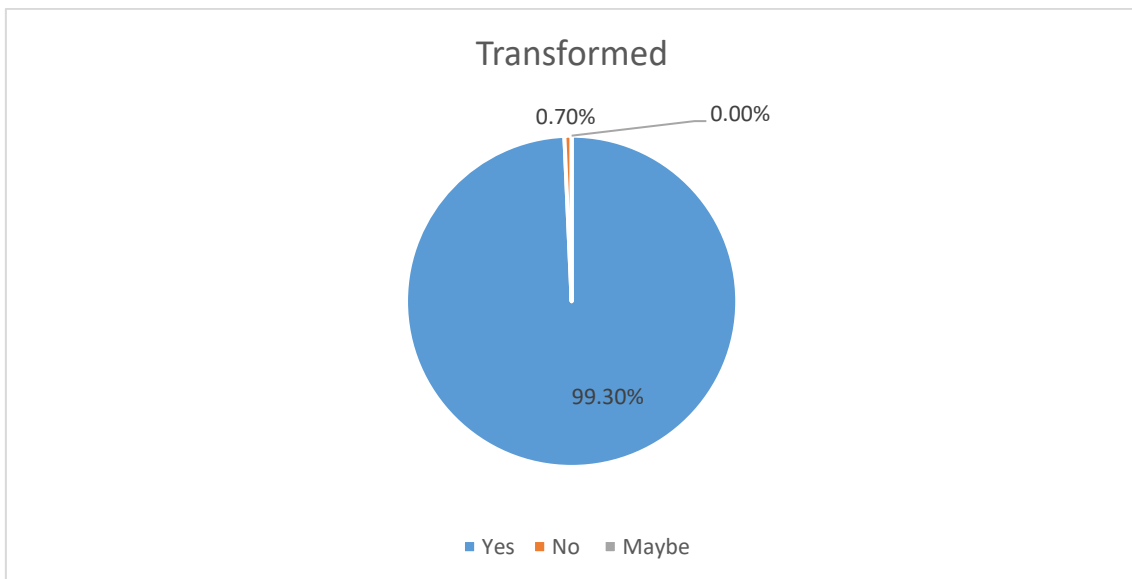


Figure 18. Seen transformation

The next question was focused on whether they believe that the growth of digital technology has led to transformation within the industry and an internationalization approach or strategy. The response from 145 respondents is in the affirmative of the statement that digital technology has indeed led to transformation within the industry and how companies approach globalization. The consensus could be a result of digital technologies' role in overcoming some of the geographical and operational barriers and

improving communication and capabilities in operations to help provide innovative products and services tailored to diverse global markets. In addition, as explored in literature, digital tools and platforms can develop and assist in creating more agile, responsive, and cost-effective strategies that would help enter and compete within new areas, highlighting the capabilities of digital technology's transformative power.

The next question explores whether being born digital has helped the company against other companies that have had to adapt and learn these new technologies. The response shows that 99.3% of the 145 respondents believe it provides an advantage. Considering most of the respondents are from the finance industry, this is highly true as modern banks with new digital technologies have become increasingly popular among the people while traditional banks are still looking to recover and adopt the technologies. They are playing from behind, which has led to companies losing their clients, threatening their existence. Digital technologies in literature have shown to be increasingly improved and a preferred medium for people, and thus, companies that adopt these technologies slowly would face an existential crisis in the long run, and the respondents believe that they do have the edge over traditional companies due to their knowledge and specialization.

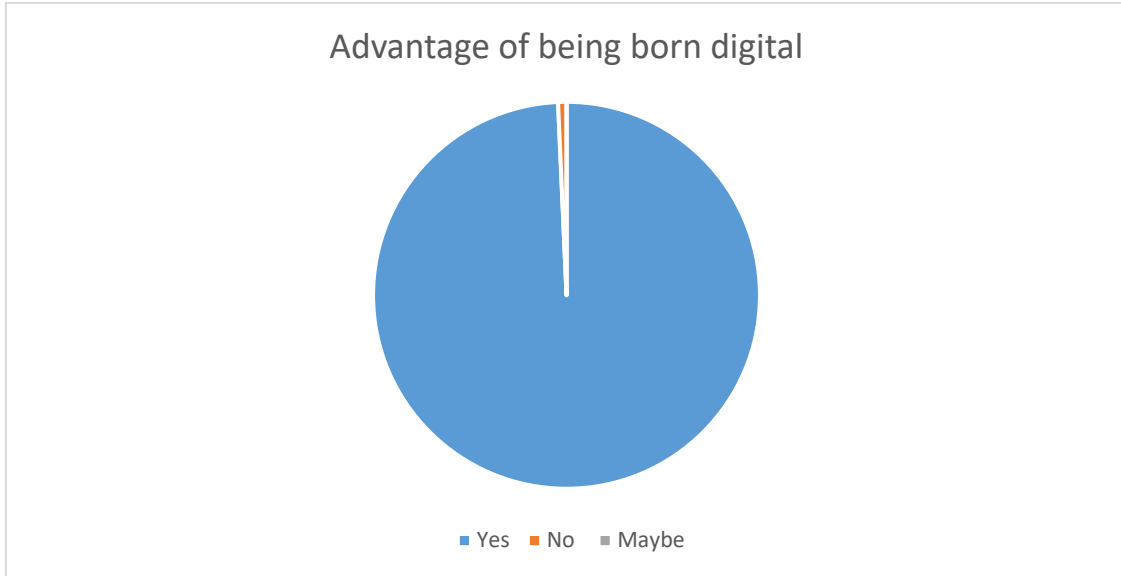


Figure 19. There is an advantage to being born digital over traditional

The next question explores whether the traditional competitors have increased their investment in digitalization based on their understanding of the situation. The response shows that the majority (81.9%) of the respondents agree with the statement. In contrast, seven strongly agree with the statement, highlighting that the majority believe that the traditional players have recently increased their investment in digitalization. The disagreement was just from 1 individual who strongly disagreed, and 18 of the 144 remained neutral.

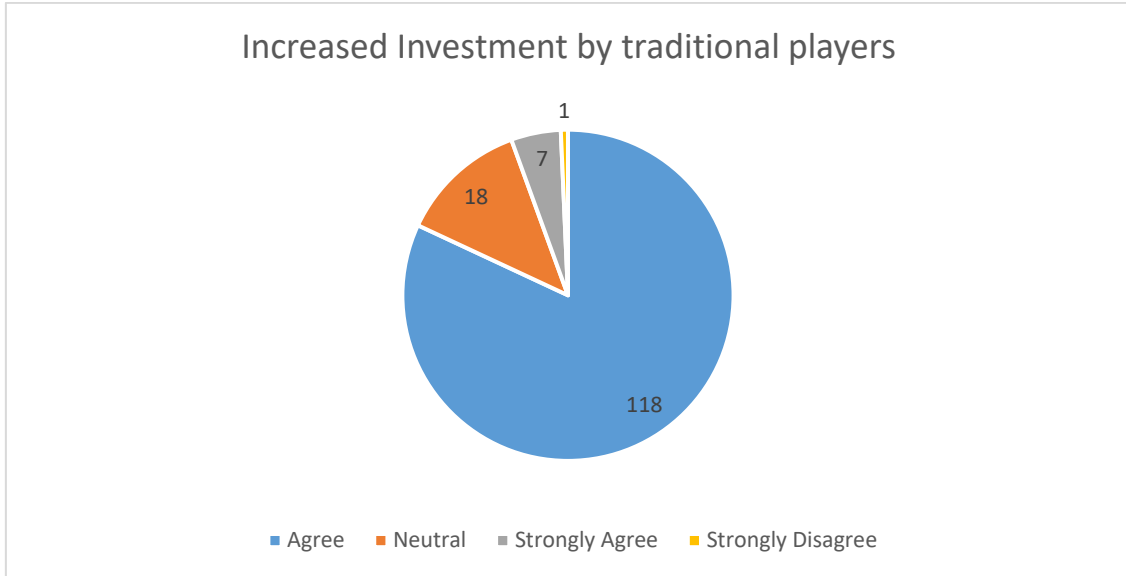


Figure 20. Increased investment

The next question explores whether the adoption or growth of digitalization has allowed for an increase in alternative revenues, including:

Digital Infrastructure: Companies invest in tech products to make digital infrastructure, e-commerce, mobile intelligent apps, and cloud computing more robust and reliable. The primary objective of these investments is to provide better digital abilities as well as to bring out online shopping experiences that are without any hassle to the customers.

Digital Marketing: Companies' digital marketing investments are increasing, including search engine optimization (SEO), social media marketing, and content marketing. Efforts of this kind focus on increasing brand awareness, attracting and retaining target audiences, and artificially stimulating customer acquisition and retention in virtual social media.

Data Analytics: In the investment of data analytics instruments and technologies, firms acquire the ability to collect, analyze, and use big data sets to gain insights into consumer behavior, market dynamics, and competition. Companies can help firms make ideal final decisions and develop their operations for better productivity and effectiveness using data analysis tools. Partnerships and Collaborations: Investments in partnerships, alliances, and collaborations help to tap the complementary resources, expertise, and

skills, both of which are key to growth and innovative activities in the digital area. Utilizing forging strategic partnerships with startups, tech providers, and other business agents, companies may leverage their shared networks and ecosystems as a spring board for venturing into new markets and combating market challenges together. Additional revenue streams make adopting technology more attractive for organizations and act as another factor influencing the decision to internationalize. If digitalization did not create any new revenue streams and the market was the same, unless the market has been attractive and competition is limited, the companies might not leap. From the response, we see that the majority of the respondents, 144, agree with it, leading to new revenue streams, with 89.6% agreeing to it, while around 7% disagreed. This shows that alternate revenue streams have been analyzed, explored, and dignified before internationalization to develop their strategies and approaches.

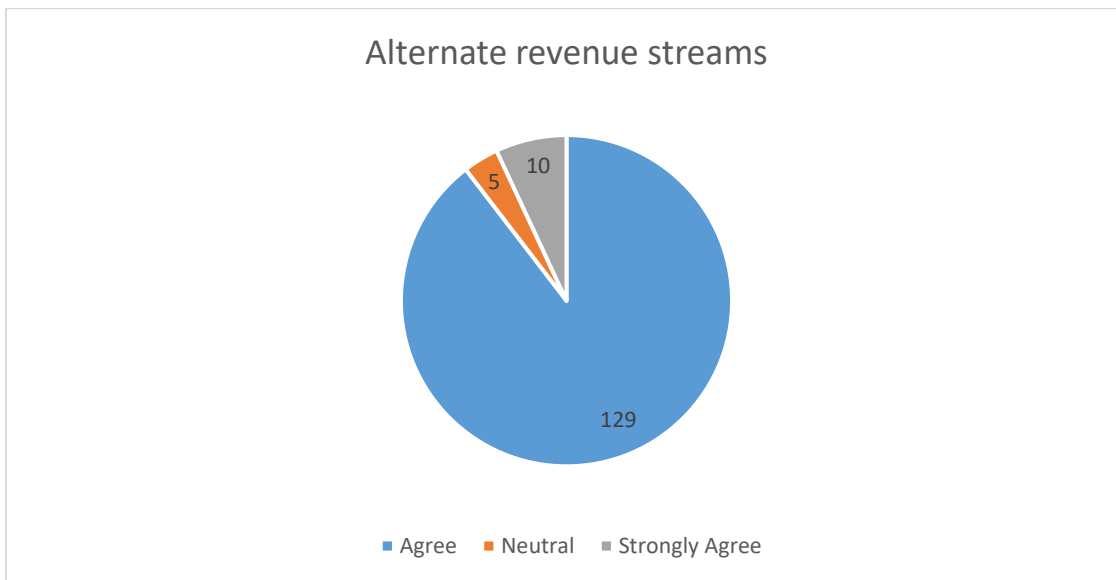


Figure 21. Alternate revenue streams

The next question explores whether being born digital allows companies to be more flexible and agile in the dynamic market. Digital companies, as seen from the literature, are said to have more streamlined processes critical for innovation and product development, and this could lead to understanding how being born digital could inherently create a culture of innovation and meet the changing market requirements. From the response, we see here, too, that most people agree with the statement, with

just one person strongly disagreeing with it. Around eight, they decided to remain neutral as they were unsure if that was the reason for the flexibility or agility of the organization. The remaining 134 of 143 agree or strongly agree with the statement, highlighting that digitalization companies have the added advantage, as mentioned in the literature, of being flexible and agile to the changing requirements, which makes them able to respond faster to new market dynamics and adapt to changing requirements.

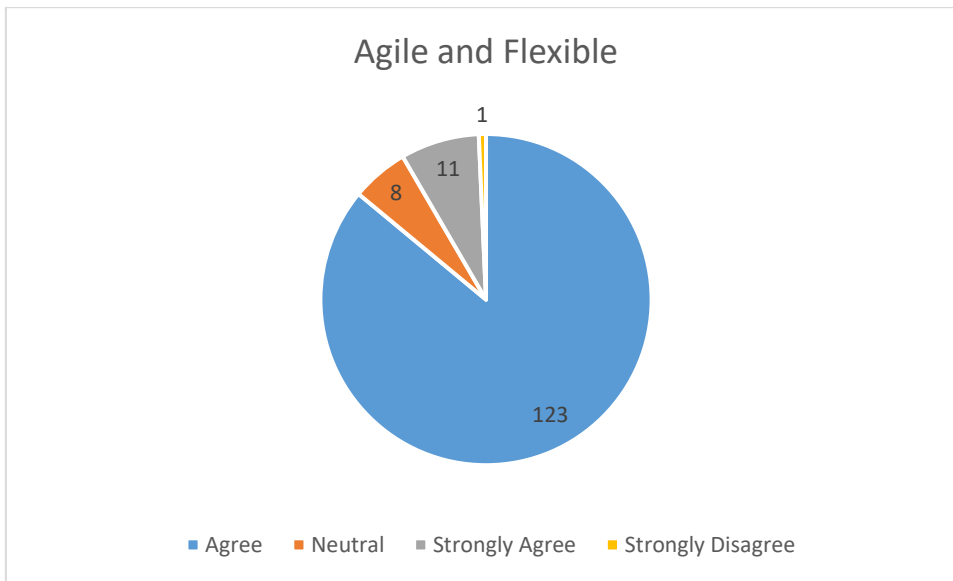


Figure 22. Agile and Flexible

The next question is focused on whether being born digital makes companies quicker in decision-making. This is due to their increased reliance on data-driven analytics that enables them to make faster and more informed decisions while having a flat or less hierarchical organizational structure that allows for faster decision-making where individuals are free to communicate and share information more freely, enabling quicker responses. The response shows that 88.97% of 145 respondents agree with the statement, while eight strongly agree, and only eight remain neutral as they are not entirely sure. This shows that, as mentioned in the literature, the perception of the people within born-digital companies is that the decision-making is much faster in the companies than in traditional companies.

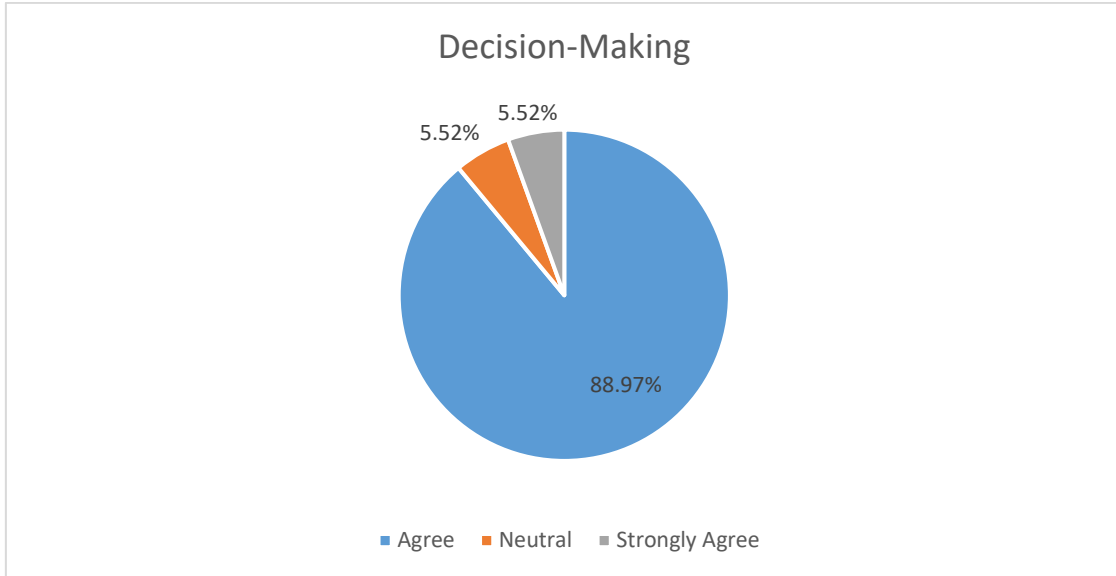


Figure 23. Faster decision making

The following statement focuses on whether digital companies provide direct and continuous accessibility. Technology has been able to reduce distance and bring people closer, and this has meant the previously limiting boundaries are no longer a significant constraint for organizations. From the responses, 93.10% of the respondents agree with the statement while 6.21% strongly agree with it, highlighting most agreeing on the impact and growing customer accessibility. Just one person remained neutral, while all the others reacted positively to the statement.

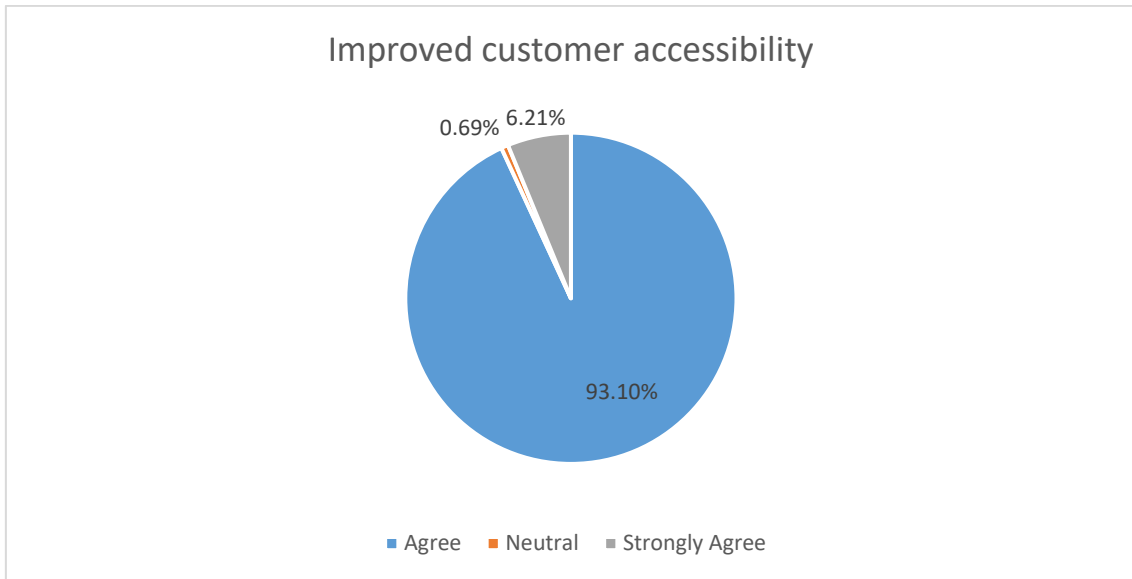


Figure 24. Improve continuous and direct access for customers

The next question states that digitalization is critical in transformation and recovery. Based on her response of 145 individuals, we see that 91/7% agree with the statement. In contrast, 8.3% strongly agreed with the statement, showcasing that all participants believe in digitalization's transformation role and how it helps recovery in some sectors.

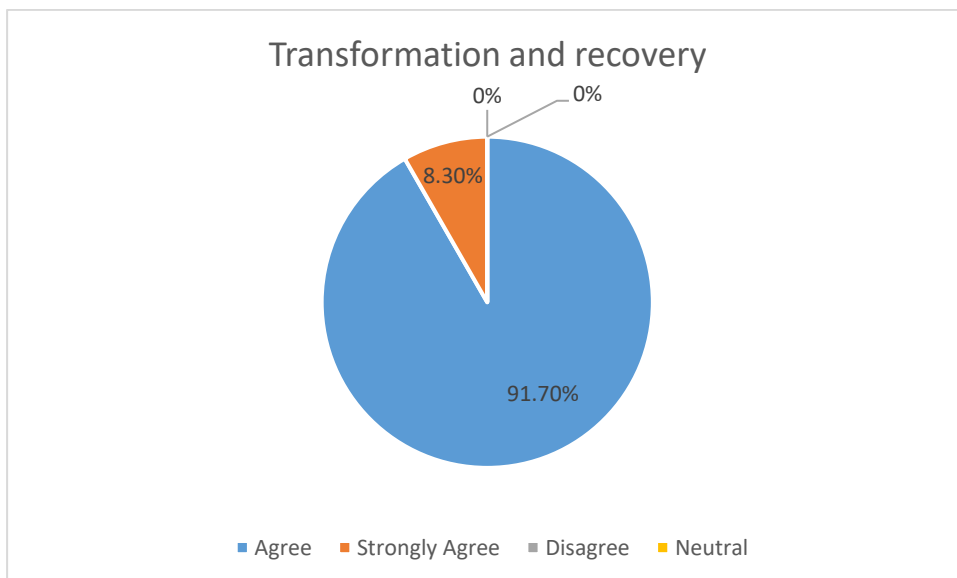


Figure 25. Transformation and Recovery

The next question focuses on the statement that born-digital companies have improved access to market knowledge facilitated by digitalization and information analytics, which

all help their internationalization strategy. From the responses of 143 individuals, we see that 131 agree with the statement. Eight strongly agree, showing an overall positive sentiment. This can lead us to conclude that most believe that the born-digital companies, due to their digital technologies and information analytics, have more information on the market and can use that to develop an ideal internationalization strategy.

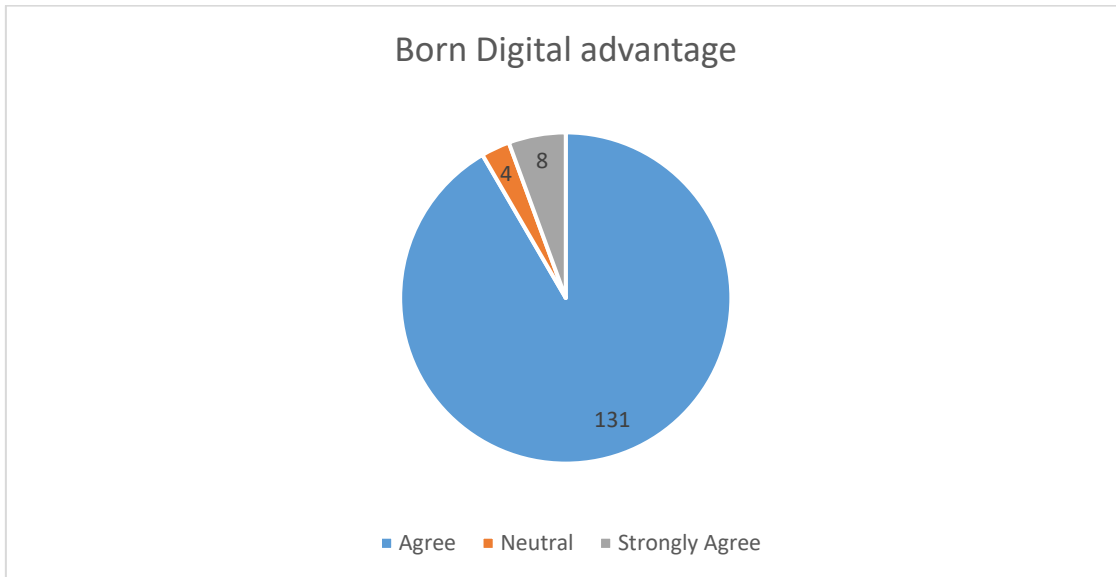


Figure 26. Access to Broader Market Knowledge

The next question explores how being born digital and the information available to them allows for reaching more markets using the same resources. From the response, we see that 84.83% of the respondents agree and 5.52% strongly agree with the statement, which shows another positive sentiment to the statement and agreement with the view in the literature that born-digital companies can use the same resources to reach more markets. There were 8.28% of respondents who were unsure whether this could be true, while just one disagreed with the statement completely.

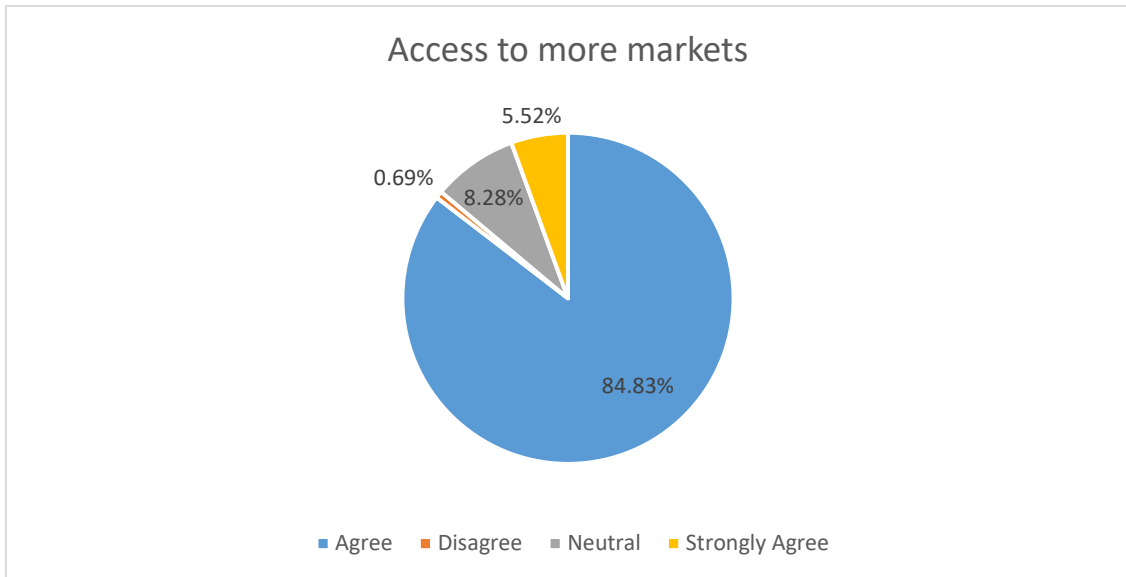


Figure 27. Access to more markets

The next question explores whether adopting digitalization increases acceptance and provides more international opportunities for companies. From the response, 134 agree with the statement, and seven of 145 strongly agree. This shows that respondents believe digital technology provides an edge for companies by allowing them to transfer technology and introduce new technology that could significantly improve the economy and help companies in certain areas with their business. Thus, from the survey, we can say that digitalization does increase the initial opportunities based on the survey responses.

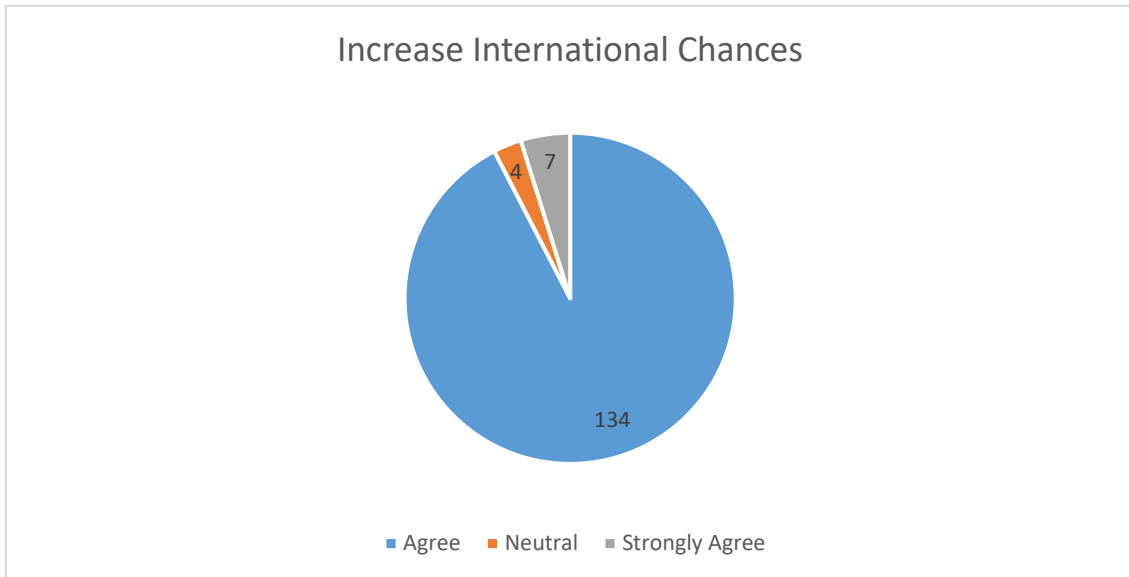


Figure 28. Increase international chances

The next question explores whether digitalization has helped improve the value stream on a global scale, and here, we see a positive sentiment or agreement with the statement. In order to enhance the Value Stream, the activities should be limited to those associated with improving the customer experience, such as faster delivery times, personalized services, and interactive digital touch points. Alternative revenue strategies can employ different methods to bring in money, focusing on adding breadth to revenue sources while improving quality and customer satisfaction to introduce superiority in the overall experience. Of the 145 responses logged, 92.41% agree with the statement, while 6.90% strongly agree. Just one person had a neutral opinion on the term, highlighting that digitalization has helped improve the value streams for companies on a global scale.

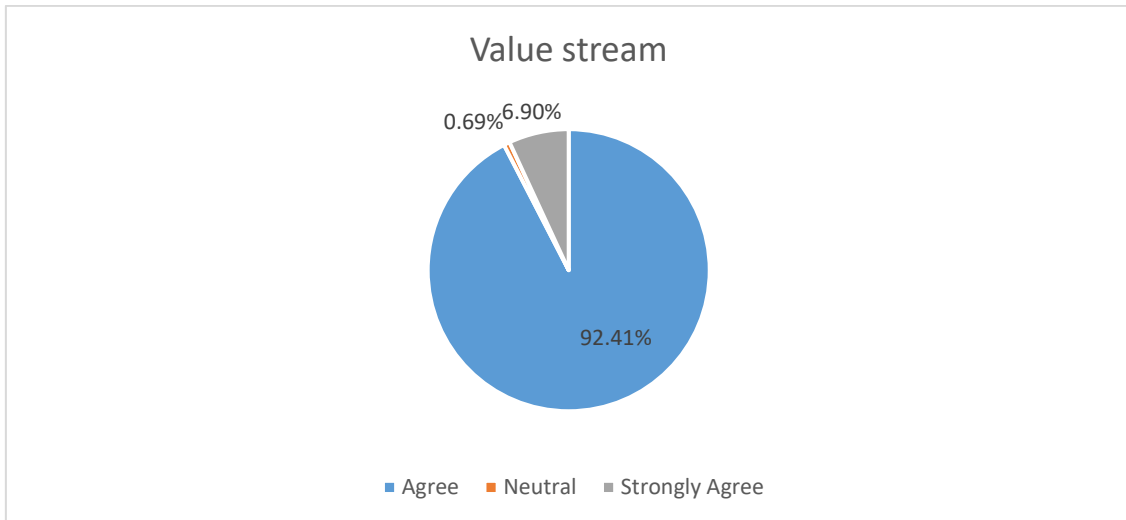


Figure 29. Improves value stream

The next question explores whether digitalization helps open external markets and improve the multiple entry options at reduced costs and risks, which makes entry or globalization more attractive. Based on the response, we see again that people have a positive perception of the statement, with 90.34% agreeing and 6.90% strongly agreeing, while 2.76% remaining neutral. Literature has also shown that digitalization or technology is attractive in new markets where the technology is unavailable, and the survey result agrees with this view.

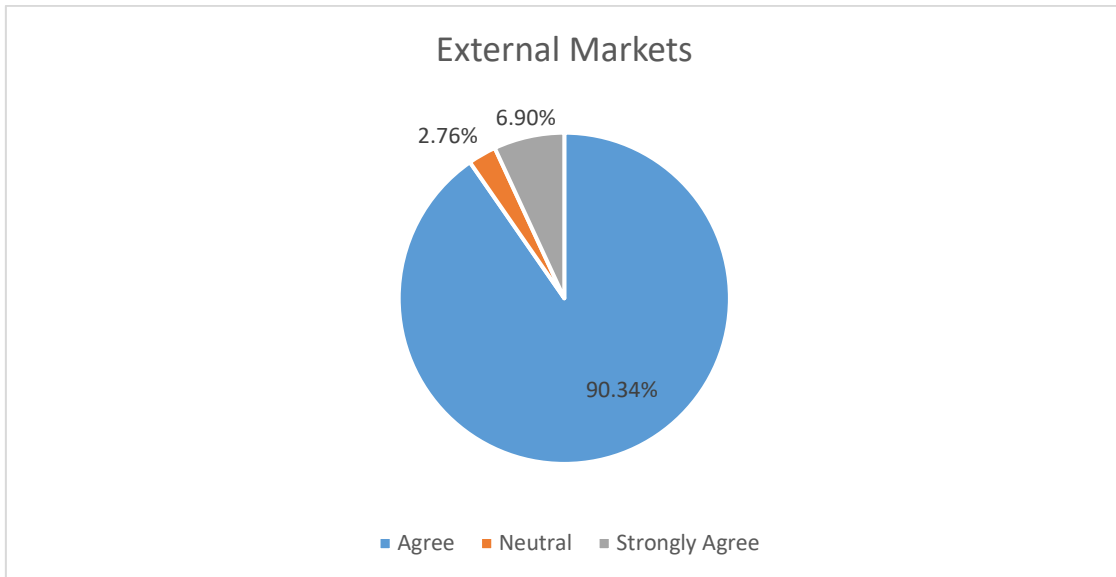


Figure 30. Opened External Markets

The next question explores if born-digital companies have limited financial capability as they are often not big and depend on funding to run their businesses in the initial stages. From the response, we see that 76.39% disagree with the statement and 0.69% strongly disagree, which shows an overwhelming majority disagreeing the companies being limited by finances. Around 14.6% agree with the statement, showcasing that some companies feel their finances limit their opportunities and have less access to acts than traditional firms.

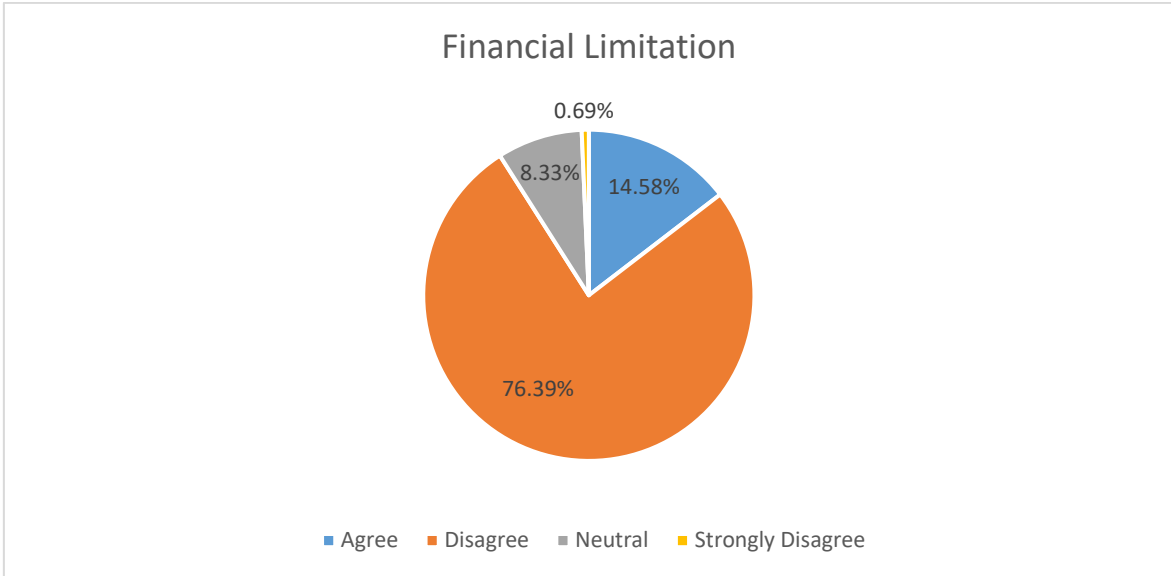


Figure 31. Financial Limitation

The next question was whether or not the digital transformation undertaken by competitors impacts or limits the company's opportunities. Based on 144 responses, 60.42% agree with the statement. This shows that the majority believe that competition is one of the barriers or challenges that limit their growth opportunities, while 29.86% disagree with the statement and are of the view that it does not limit them. 8.335 remained neutral and was not sure of the impact.

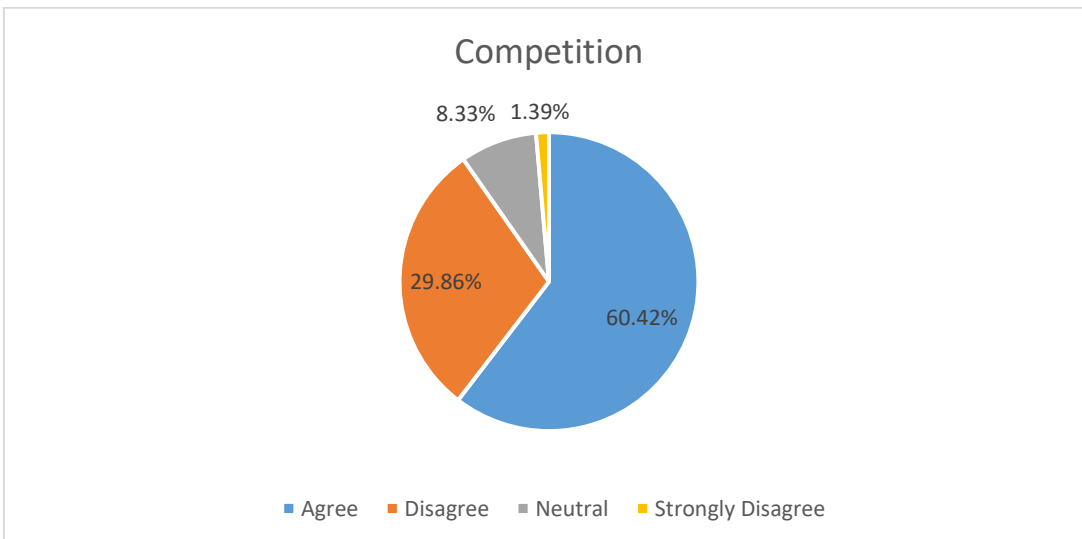


Figure 32. Increased competition hinders opportunities

The next question explores whether digital transformation has increased competition and whether this complicates or makes internationalization harder. From the response, it is quite clear that 114 agree with the statement, and they view the competition as a challenge to their globalization dreams, while there are a few respondents, around 19, who disagree or strongly disagree with the statement, showing that majority believes the competition has increased with the transformation and this has also increased the challenge of internationalization.

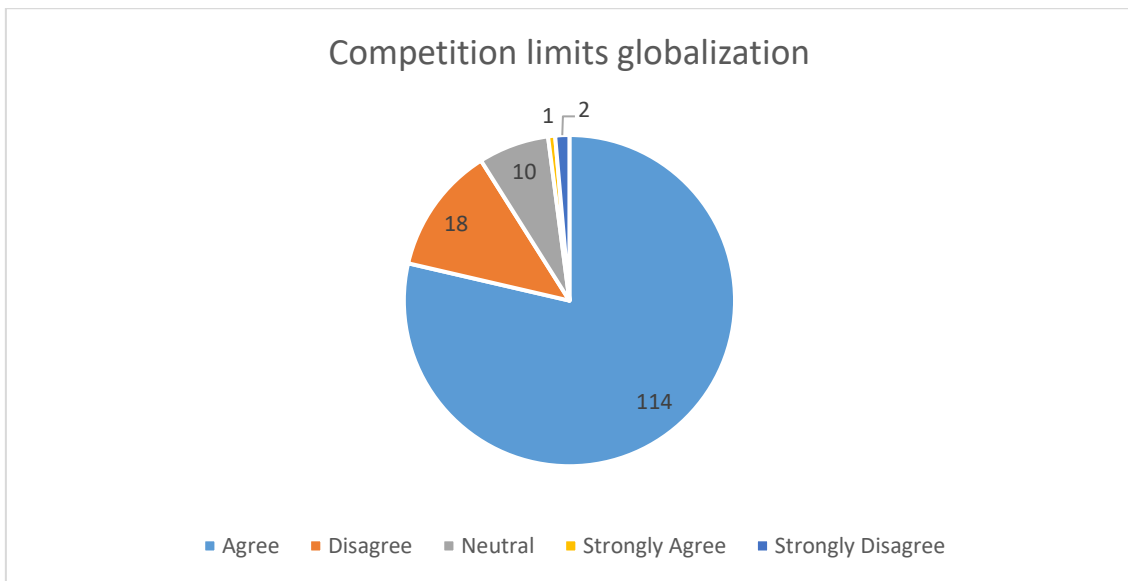


Figure 33. Competition makes internationalization harder

The next question explores if the born-digital companies are ideal for meeting the current digital requirement compared to those going through change, and from the response, we see that the majority of the respondents agree with the statement and twelve strongly agree. This means that a significant majority of the respondents agree that companies are focused on technology and born-digital have the edge over those transforming as they have developed these technologies, while others have to learn and adapt slowly and are less flexible.

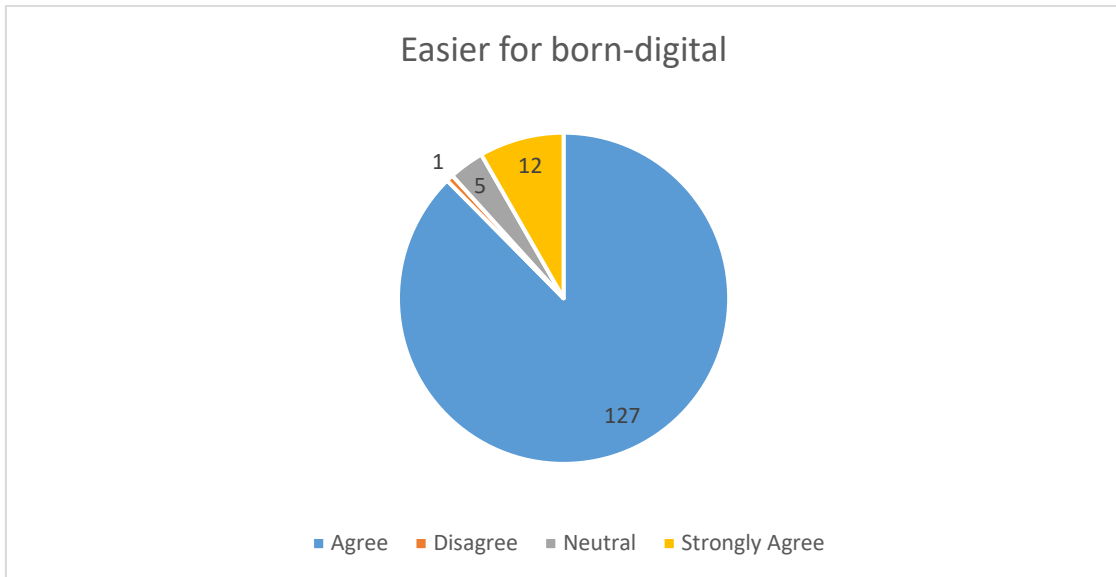


Figure 34. Easier to meet digital requirements

The last and final question is whether establishing a digital supply chain at the beginning helps improve flexibility. From the response, we see 86.905 respondents agreeing and 10.34% strongly agreeing with the response, highlighting the importance of having an established digital supply chain.

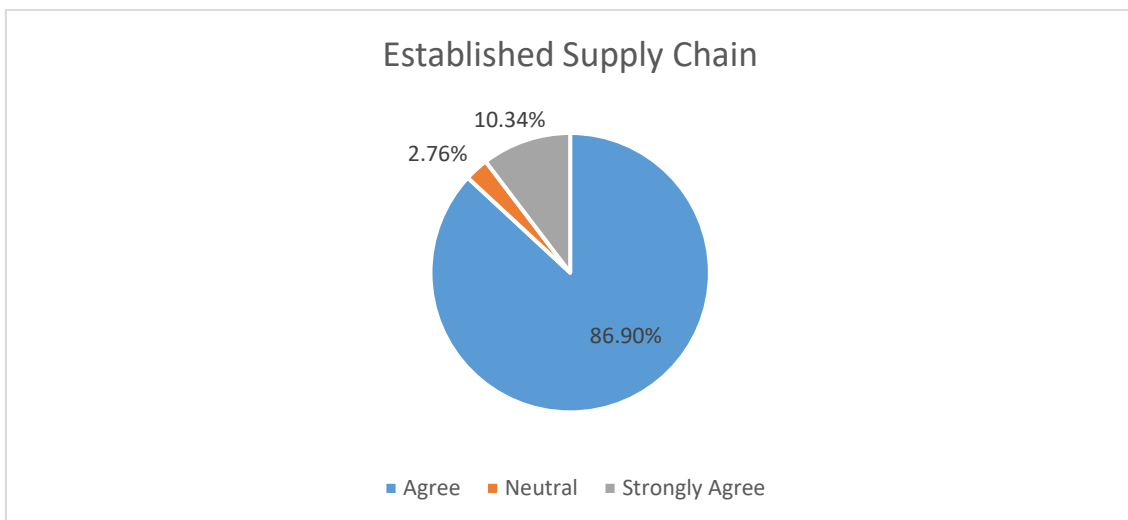


Figure 35. An established supply chain provides flexibility

This ends the survey, and the results provide insight into how the respondents feel regarding digitalization and the challenges of internationalization. We further explore these issues using interviews to highlight the reasons behind their views.

4.2. Interviews

Six specialists from born-digital companies participated in structured interviews for this research. Their responses were meticulously recorded and transcribed for subsequent analysis. To safeguard the companies' anonymity, pseudonyms prefixed with "RP" followed by numerical identifiers corresponding to each company's response were assigned. Thematic analysis was employed to derive insights from the transcribed data, involving iterative processes of data familiarization, coding, and theme development. Themes were iteratively refined through scrutiny, ensuring alignment with the research objectives. The resulting thematic framework comprehensively elucidates the research findings, providing a robust foundation for addressing the research questions. Please refer to the table below for an overview of the themes generated and associated codes derived from the respondents' feedback.

Table 2. Themes identified

Theme	Code	Quotes
Digital native Advantage	Operation Efficiency and Market Research	"Being Born Digital has enabled streamlined operations and global market access" (From multiple responses)
Regulatory and Compliance Hurdles	Adaptation to International Regulations	"Adapting to varying international regulations and compliance requirements is a major challenge."
Market Challenges	Localization, Cultural Adaptation, and Customer Understanding	"Understanding local market preferences and adapting offerings is crucial for success."
Infrastructure and Digitalization Influencing Expansion	Easy to expand, increase reach, and opportunity beyond	"Demand for solution.... reach customers globally....seize

		opportunities...beyond the country of incorporation.”
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Before exploring the themes, it is critical to explore the six companies that are a part of this study and gain a better understanding of their business.

Operating in the e-commerce industry, RP1 (Italy) specializes in online wine sales and offers customers a diverse selection of wines worldwide. Since its inception in 2012, it has expanded its reach beyond Italy into many European and Asian regions by using its digital-first nature to improve customer interaction and operations. The company has been a digital company from the beginning, and they value this capability. They are said to have built their platform from scratch and tailored it to their needs and customer requirements, focusing on user-friendliness and efficiency.

A Danish online wine company is next, which would be referred to as RP2; they have a website and an app that people use to find and buy wines, and this has been connecting wine lovers all around the world since its 2010 founding, exemplifying the qualities of a born-digital firm. Digitalization drives Vivino's expansion strategy, allowing the company to break down traditional market barriers and impact areas where wine is loved. The company employs over 500 people in the UK, the US, and other European countries. Their service has ensured access to a global audience beyond the limitations of the traditional stores in which they often used to be sold. It also ensures secure payment processing and personalized customer experience, which makes the brand valuable and attractive to the user.

RP3 is a company in the UK, a platform where individuals from all over the world come together to purchase and sell one-of-a-kind fashion goods. Its digital-centric strategy has promoted sustainable fashion practices and creative expression since its 2011 inception. The company uses data-driven insights to personalize the user experience and finds its services in countries like the US, Italy, France, and many other developed countries.

The French company, which is part of the insurance industry and provides digital insurance solutions that make buying and managing insurance easier, is the next

representative and would be referred to as RP4. The company's digital backbone, established in 2018, has allowed for data-driven product personalization and simplified consumer interactions. In spite of its youth, the company has already grown beyond France, adjusting to different legal environments and customer tastes—a perfect example of how digitization is influencing global expansion but is still restricted to European markets.

The following company is a Danish startup, henceforth mentioned as RP5, which is working to end global energy poverty by developing and marketing sustainable energy solutions, such as solar-powered lights and chargers. The company is positioned at the crossroads of renewable energy and social impact and has been present in Sub-Saharan Africa and other areas with high energy demands since its 2012 founding, using digital technologies to optimize operations and scale effect. The company has evolved to have around 47 employees and focuses on providing clear, renewable energy. It uses data analytics to map user behaviour and power its systems, optimizing the products and services to meet the requirements of its customers. They also have a presence in Latin America and Asia and often partner with local organizations and governments to tackle the energy crisis.

Last but not least, we have a company from Austria that focuses on smart home technology, especially smart door lock systems, referred to as RP6. Using its digital capabilities to improve home security and convenience, it has achieved a solid market position across Europe and beyond since introducing its first product in 2016. At present, the company has over 100 employees in manufacturing and development. The company is in other European countries, such as the US and Canada. All these companies highlight the depth of experience and knowledge in tackling the challenge and understanding how being born digital has helped them. Exploring the answers, we see that they all use data-driven techniques in decision-making and highlight how important it is in their product or service development.

4.2.1 Digital Native Advantage

The theme focuses on the concept that born-digital companies are often inherently embedded with digital technologies at their core, which would position them distinctively within the global market, and this ring is said to equip them with innate agility and innovation as well as a customer-centric approach that helps with the international expansions as well as competition. These companies would have higher flexibility, which we also confirmed in the survey, along with being faster in decision making, allowing them to navigate and adapt to the diverse international markets quickly, and their business agile models would be underpinned by the digital infrastructure, which would facilitate the cross-border operations along with quick market entry along with developing effective strategies to scale-up when the time is right. This agility is critical and highlighted in surveys to help capitalize on opportunities and meet the dynamic requirements of the market much more efficiently.

"Being born digital has given us a significant advantage over traditional competitors when it comes to internationalization... Our digital-first approach inherently positions us to adapt and thrive in the rapidly evolving global landscape." (RP4)

Almost all the respondents agree that the born-digital companies have the advantage of being technologically integrated as they are more capable of using data-driven approaches that allow them to adjust their strategies or understand the requirements of their customers better and create a product or service that meets this demands which the tradition companies are not capable of providing. As per the respondents, these companies are more adept at adopting and innovating new technologies, which allows them to have a competitive edge that is not seen with traditional players. Their knowledge is their strength and what keeps them ahead of the competition, and while the technology is being widely adopted, the uniqueness of their approach and their integration of technology right into the framework does make them unique and provide them with the advantages that are what referred to as digital native advantage.

"Firstly, being born digital allowed us to build a scalable and efficient e-commerce platform from the ground up. This has enabled us to provide a seamless user experience to our customers, making wine discovery and purchasing a convenient and enjoyable process. Secondly, digitalization has played a crucial role in our internationalization strategy, as it has empowered us to access a global audience and expand beyond Denmark's borders without the limitations of traditional physical stores." (RP2)

Technology and agility are a part of the companies and their DNA, which makes it easier for them to adapt, while traditional firms, having relied on other operations, find it hard to change their ways quickly. Respondents like RP1 and RP4 mention that the leadership or knowledge has allowed them to leverage it to gain a competitive edge, which has allowed them to set new benchmarks for customer experience and improve their operations within the industry, highlighting the benefits and advantages of the system.

"Our proactive approach to leveraging digital technologies allowed us to differentiate ourselves from competitors, establish a strong brand presence, and capture the attention of consumers seeking modern, sustainable energy solutions." (RP5)

While all agree they have some advantages, they also understand that the new markets are also filled with challenges, and one big challenge, regardless of their technological superiority and knowledge, is brand recognition and lack of trust among consumers. Technology is primarily considered tricky, and trusting the technology is quite challenging due to the increase in the issues; new technologies are often looked at with apprehension. Thus, a born-digital company that has not gained a global reputation might find it hard to compete against traditional players in new markets. Thus, most do agree that while there are significantly many advantages of being born digital and it helps in creating new strategies and approaches along with the business model that allows agility and flexibility, all being positive, there are limitations that would hinder its growth and foray into international markets which is mainly due to the large inexperience and lack of recognition across the border. It is also difficult for companies to adjust and understand the differences in preferences and cultural norms, as highlighted by RP1.

“After entering international markets, we encountered challenges in understanding local consumer preferences and cultural norms. Adapting our marketing messages and product offerings to align with each market's unique tastes and trends required continuous market research and customer feedback.” (RP1)

Most agree that the main benefit has been communicating and reaching more customers, which might not be possible without having these digital channels or infrastructure. This direct line of communication is critical and has benefitted the customers and their future. Considering that the company is relatively new in the market, the preferences are unknown, and the digitally born companies are found to take pride in customizing and providing tailored solutions to their customers, understanding and gaining feedback are critical, which also helps them gain recognition. This flexibility and need for feedback is already a part of their culture and framework, which makes them capable of adapting to the situation as required.

“Moreover, digital channels have provided us with a direct line of communication to our customers, enabling us to gather feedback, address concerns, and build strong relationships that drive brand loyalty and advocacy.” (RP6)

4.2.2 Regulatory and Compliance Hurdles

All respondents directly or indirectly infer the challenges of regulatory bodies or frameworks and the compliance requirements.

“Adapting to different regulatory frameworks, tax implications, and cultural differences in each country requires meticulous planning and compliance efforts. Moreover, effectively localizing our platform and marketing strategies is essential to resonate with diverse international audiences and cater to their unique preferences. Ensuring efficient international logistics and customer support is crucial for maintaining customer satisfaction across borders.” (RP2)

This is challenging as the requirements, specifically digital ones, differ across borders. For example, in the EU, the regulations are monitored or governed by the General Data

Protection Regulation (GDPR), which is said to impose a strict rule on data privacy, and this would often involve the company needing to revisit their data handling or storage processes to ensure that there are consistent and robust mechanisms in place to ensure data protection and also appoint data protection officer to oversee the required compliance. The same standard is not applied in Asian or US companies, with some Asian countries still not having regulations similar to GDPR, and the US had most recently adopted a framework similar to GDPR to ensure privacy.

“Yes, adapting to different regulatory frameworks and tax implications in various countries required careful planning and compliance efforts.” (RP1)

Entry into a market without understanding the regulatory requirements or compliance hurdles could lead to incitant challenges and financial implications, and thus, there is a need to adapt to the varied frameworks and choose the countries for entry based on the frameworks. Some companies might need to make changes to their digital platforms to ensure they are compliant with the regulations, and this could require them to rework their system and, hence, might need to delay their entry into the new market. Similarly, there are also tax implications, and the service cost could vary based on this. In the European example, there is the value-added tax, which is a prerequisite, and in many Middle Eastern countries, a goods and services tax has been introduced. Knowing these regulations and ensuring compliance is critical, and these could change rapidly with the dynamic of the global situation. These changing requirements and different frameworks required them to be able to adopt different strategies or choose their entry into markets carefully. If a company that cannot meet the GDPR requirement tries to enter the market, it will fail, and it could lead to them losing money. Strategies must consider these elements in the decision-making to time and plan their entry, which are often overlooked. All respondents agree that the difference in regulation and lack of standards is challenging, but the companies also highlight that they have used their expertise with digital technologies to create strategies and navigate the complexities in the global market.

“Leveraging data insights and analytics has enabled... to optimize its global expansion strategy and stay ahead of competitors. Building trust and credibility through collaboration with local partners and addressing cultural differences have also been essential in its internationalization journey. By prioritizing these key factors, it has effectively navigated the complexities of global markets and established itself as a leading fashion peer-to-peer marketplace worldwide.” (RP3)

This can act as a barrier as well as an enabler, as when the regulations are conducive for businesses and provide transparent and clear guidelines, adopting them and following them is easier. Lack of standardization is also a challenge as there is a need to change based on one's requirement, but a standard regulation or framework could help ensure faster adoption and integration for companies.

4.2.3 Market Challenges

Adapting to market dynamics is crucial for a firm to successfully enter and thrive in new geographic or sectoral markets, as it entails modifying corporate strategy, product offerings, marketing tactics, and operational procedures to match local customer preferences, cultural norms, regulatory needs, and competitive environments. An organization's capacity to adjust and be flexible can significantly influence its success in entering new markets and maintaining long-term development and profitability. This is also critical for establishing an initial market presence because as a corporation expands into a new market, it encounters unfamiliar factors and problems that may vary significantly from those in its original market. These factors may encompass various customer habits, preferences, buying capacity, and anticipations, and the product or service that is successful in one market may not be well-received in another without modifications to cater to local preferences or requirements. This is where information and data on these behaviours and requirements are critical, and the strategy that is adopted or modified to this demand is critical, which could be as simple as just the language.

Adaptation is also a critical factor impacting the company's competitive stance. With markets constantly changing due to increasing trends, technology, and customer needs, it is critical for companies to effectively monitor these developments and respond promptly with adjustments that would help sustain or improve their competitiveness. Cultural adaptability is also essential for developing brand loyalty and client connection, and businesses that honour and embody local cultures in their operations, products, and marketing strategies can establish stronger relationships with customers. This might entail tailoring marketing efforts to incorporate local languages, beliefs, and customs or modifying product designs to align with local aesthetic preferences or practical needs. All the study participants mentioned the importance of adapting and changing their approaches and considered it part of the process. Considering that these companies have experience in successful entry into new markets, it is not surprising that they have shown critical adaptation. That said, while most talk about adapting to the tax and other illegal regulations, one critical adaptation, according to them, is how to market the product.

“Adapting our marketing messages and product offerings to align with each market's unique tastes and trends required continuous market research and customer feedback.”
(RP1)

The respondents also mention that the technologies help ensure that they can adapt and quickly modify strategies for different regions and enhance their presence, highlighting one of the advantages these companies have for being born digital. The personalized experiences these companies bring are considered a major change compared to traditional ones and highlight the overall capabilities.

“Born-digital companies can quickly adapt to market changes, provide personalized experiences, and access a global audience from the start.” (RP2)

Cultural adaptability is also critical, as per the experts, as without it aligning with local values and preferences, companies would face significant limitations, and the market would react negatively to their products. These could be simple, like, as mentioned

before, multiple languages based on region or different payment options that would address the differences in these countries. Adapting and changing the platforms to meet the customers' needs helps show the customers that the company cares; all the respondents agree, and their companies have shown these changes over the years.

“Cultural adaptation was necessary to align with local fashion trends and preferences. Logistics and shipping complexities required reliable partnerships to ensure timely deliveries. Providing multiple payment options addressed to different payment preferences worldwide.” (RP3)

4.2.4 Infrastructure and Digitalization Influencing Expansion

All the respondents highly commented on their digital infrastructure, which plays a critical role in globalization. Digital infrastructure is critical in providing seamless communication and collaboration across different geographies, making it easier for companies. The interviews with the six firms eloquently express the significance of having a strong digital infrastructure, highlighting its diverse role in guaranteeing company agility, competitiveness, and innovation. Companies such as RP1 and RP2 demonstrate the importance of digital infrastructure in expanding operations and quickly reaching foreign markets. RP1, for example, credits its capacity to customize its e-commerce platform and expand internationally to its digital-first base, emphasizing that such infrastructure offers a substantial advantage over the limitations of traditional retail.

“Its digital infrastructure enables rapid scalability and adaptability to cater to users across the globe.” (RP3)

The conversations also highlight the importance of operational efficiency, as companies see the benefits of digital frameworks in streamlining procedures, improving customer relations, and optimizing logistics. RP4 exemplifies this by providing a comprehensive account of how digitization has wholly transformed their customer service and product customization, and this highlights the crucial role that digital technologies play in improving operational workflows and ensuring client happiness. Moreover, digital

infrastructure provides flexibility and nimbleness that enhance the market's capacity to respond quickly and effectively. RP3's business strategy relies on fashion trends and consumer preferences, demonstrating the need to adapt quickly to market changes, and technology facilitates this capacity. Data-driven decision-making is becoming increasingly important, and organizations like RP2 use digital platforms to analyze data comprehensively, allowing them to gain detailed insight into the market and make strategic plans. These observations indicate that digital infrastructure is crucial in promoting well-informed decision-making and developing strategies matched with market conditions.

“Furthermore, our digital infrastructure has allowed us to optimize our operations, from manufacturing to customer service, resulting in increased efficiency and cost-effectiveness. Moreover, digital channels have provided us with a direct line of communication to our customers, enabling us to gather feedback, address concerns, and build strong relationships that drive brand loyalty and advocacy.” (RP6)

Digital media greatly enhances customer involvement and reach. The tale of RP5 highlights the revolutionary effect of digital infrastructure in overcoming geographical barriers and promoting global market participation. Furthermore, the discussion surrounding innovation from firms such as RP6 highlights the importance of digital infrastructure in enabling ongoing product development and staying updated with technological progress. Preserving relevance and a competitive advantage in continually changing industries is essential. The interviews emphasize that digital infrastructure is not just a practical requirement but also a strategic tool that promotes corporate resilience, flexibility, and expansion in the digital age. The stories provided by these diverse firms shed light on the numerous ways digital infrastructure supports their success and growth, demonstrating its essential significance across all aspects of their business.

Thus, the themes have been highlighted, and comments have been created. Based on this, we will now answer the research questions.

5. Discussion

Before proceeding, we look at the key research question that needs to be answered in this study:

- How does being born digital influence a company's internationalization strategy and success across various sectors and industries?
- What are the significant challenges and barriers born-digital companies face when internationalizing their digital value chain?
- What are the key factors influencing the internationalization of born-digital companies, and how do they differ from traditional companies' approaches to international expansion?

5.1 Analysis of Market Transformation Trends

The first question explores how being born digital helps the company with its integration strategy and success across different sectors and industries.

The insights from the survey and interviews present a perspective that born-digital companies have a significant advantage in internationalization, irrespective of the sector or industry. In the survey, for example, almost all the companies are keen on global expansion, while in the interviews, we saw that many of them had expanded into new markets successfully without any issues. Literature (Vadana et al., 2019) mentions the inherent ability of the born-digital companies to deploy tools and platforms that would transcend boundaries and help them target global markets. Most of the respondents within the survey and interviews highlight the same, with all agreeing that digital technology provides them with an edge and flexibility that traditional companies do not possess, which makes them ideal and capable of tackling problems as they arise, which is a critical skill required when it comes to internationalization.

Similarly, the literature highlights that the digital framework's advantage or capabilities when it comes to analyzing a large amount of data, identifying patterns, and improving its strategies based on the information are unique skills that traditional companies do

not possess, which makes it easier for these companies to internationalize (Hennart, 2014; Wentrup, 2016). In a survey, most respondents believe born-digital companies are more flexible, agile, and capable of making quick decisions. They also believe that born-digital companies have more advantages and can develop better strategies to enter new markets based on their experience using these tools and technology. In the interviews, we find more reasons for this thought process, with the respondents highlighting how they can use their digital infrastructure to improve communication along with the use of knowledge of digital tools. In their research, Vadana (2020) mentions that born-digital companies have knowledge of digital tools and are innovative, which is an inherent advantage as they can digitize several tools in every aspect of their operation. The highly digitalized value chain is said to help them position themselves better. From the responses in the interview, we see the respondents talk about collecting information about user preferences and using the behaviour of the local population to tailor their strategies according to the information. Now, in marketing entry into markets, it is clearly emphasized regarding the need to adapt to the cultural and regulatory requirements and the strategies being formulated while considering these, and the plethora of information and digital tools allow easier consideration of large amounts of information and creation unique strategy based on the requirements. The six companies that were part of the survey could be considered prime examples of the ability to be flexible and adapt and use their knowledge of digital tools to expand and fuel their strategy.

Thus, in short, we can say that being born digital does provide companies with increasing tools capable of capitalizing on the current digital transformation, connecting much easier with the customer without the restriction of boundaries and strategizing better due to the inherent flexibility or agility in the operation framework and capability of adapting and changing their strategies quickly as the situation demand. These skills make them highly competitive and capable of tackling internationalization, which used to have significant risks in the past, especially if there was no brand recognition or value. The global digital landscape allows companies to reach more people, use different techniques to increase or establish brand names and look at new markets with increasing opportunities. It might be essential to note here that traditional companies are slowly

catching up and adopting new technologies, but the innovation capabilities of born-digital companies further give them an edge.

5.2 Implications for Firm Strategy

The next question explores some of the challenges and barriers born-digital companies face in internationalization. Muriu (2021) highlighted significant limitations, including inadequate infrastructure, technology, financial resources, management transition, and lack of market information, all of which could challenge the internationalization approach of the firms. Despite this, in the response, we see that some respondents highlight that financial resources are an issue and they are constrained by it, unlike traditional companies. Still, most of them mention that there were no such challenges. When asked about the challenges in the interviews, it was found that the regulator and market challenges were considered more significant and critical than others. Each country has its own set of rules and market conditions that the companies need to follow. These could be linked to how the data is used or stored, how marketing is done, or any other regulation critical for the business's survival. Regulatory challenges, if not followed, could be a challenge. The interview respondents' data did not show any such incidents, highlighting that the companies follow the rule of law. They adapt to these regulations, and considering most of these companies are in OECD countries, their regulations might not be too different, which might be one of the reasons for quick adoption. They highlight the importance of following and adapting to the regulations as required.

Interestingly, market challenges are also critical, as per the response, and most respondents mentioned changing their marketing strategies, products, and services to meet the new market's requirements. Understanding these needs and requirements is quite challenging because there would be very little data on the market and behaviour if the technology is relatively new to know their preference. The only way to do this is to collect data and use social media and other digital platforms to gauge interest and views. Then, the data can be used to make the right decisions. These could be challenging and time-consuming and, hence, not always ideal. Thus, there is a certain blind spot due to the lack of data, and the respondents often take risks when it comes to these data, which

might also explain why most of the respondents have moved to countries with similar customer behaviour or culture.

Thus, we can answer that market and regulatory challenges are the most significant barriers that could hinder born-digital companies in their innovation pursuit, but due to their advantages, like flexibility, most companies can navigate them effectively.

5.3 Recommendations for Future Research

The third research question focuses on the factors that influence internationalization, how these companies differ from traditional companies, and their approaches.

In the literature, Vadana et al. (2019, 2021) mention that having a highly digitalized value chain helped improve dispersed operations, making it attractive for them to internationalize. Similarly, these companies have the knowledge and ability to leverage digital capabilities to undertake internationalization as they focus on integrating digital technologies' online and offline dimensions. Adaptability is also considered critical, and using new and innovative technologies helps provide cost-effective expansion, as explained by Bell and Loane (2010) and Brouthers et al. (2018). In surveys, the responses agree with this view that agility and flexibility of the digital value chain and infrastructure that enables rapid scalability are said to help in improving their strategies for decision-making, and this allows them to understand the market dynamics and customer preferences much more effectively and this would aid in successful expansion. In the interview, we gained a more in-depth understanding as the respondents stressed how digital channels allow for engaging with international customers, gathering feedback from them, and creating strong relationships, which allows them to create brand recognition before market entry in a way that traditional companies cannot. The innovation and growing push for globalization and transformation of the world as a global marketplace have also made internationalization more attractive. That said, technology, knowledge, and increased communication or reach with customers could be said to be the primary driving factors behind internationalization.

As mentioned by Neubert (2018), traditional companies do not have the required flexibility to bypass the barriers faster than born-digital companies can. Most of the traditional companies are said to follow the step-by-step approach like the Uppsala model (WITTKOP et al., 2013), but these challenges do not limit the born-digital companies and often capitalize on their reach and knowledge to internationalize. They are more strategic, as we can see from the survey and interviews, where they explore their situation and alter their products and services to meet the requirements. Considering that they often change products and services based on feedback, these companies are already known to integrate feedback, and it is part of their operations, while the same is not valid for traditional systems. Also, in the survey, interview, and literature, we find that in traditional companies, a more hierarchical structure limits communication, while in born-digital, the structure is flatter, allowing for faster communication. They use digital tools to collect and analyze information effectively, allowing them to make faster decisions, which is not something traditional companies usually do. While these companies recognize and are adopting these technologies, they are still behind in innovation, flexibility, and agility, which gives the born-digital companies the edge to gain more market share.

Thus, we can say that the agility and flexibility that the knowledge of digital tools provides, along with the growing global market space, are the driving forces behind globalization, and these are the same skills that differentiate them from traditional companies.

6. Conclusion

In a nutshell, this study has explored the diverse terrain of digitalization and its effects on internationalization strategies for those born-digital Companies. Carrying out an integrated literature analysis incorporating seminal works such as Rutashobya and Jaensson (2004), Morgan (2014), and Teece (2018), we examine how internationalization theories have matured; then we show how digital technologies have been and are being implemented in business strategies; further we discuss the interplay between them all. Our understanding is deepened and enriched by applying concepts and constructs such as the eclectic paradigm (Dunning 1988) and CK theory (Teece 2018). Thus, currently, we have distinguished three basic shifts in market transformation patterns, - there is a rise of platform-based models; data-centric decision-making is becoming more important; firms are challenged to improve

In addition, our empirical study has also revealed the reaction of digital native firms to these market dynamics. Having surveyed executive decision-makers in various businesses, we have observed the development of digital technology. It has helped to make the processes more effective, expand the market, and develop new sources of profit. Interestingly, it is mentioned that more and more firms are investing in technologies like Artificial Intelligence (AI), blockchain, and internet of things to develop new products or services with AI and other technology to acquire a competitive advantage globally. In the future, the study shows that more investigations are required to complete the knowledge of dynamic processes occurring in digitalization and internationalization. However, such issues as the unevenness of the digital impact for different industries and regions should be investigated, while the institutions' importance in influencing firms``) Moreover, the impact of digital platforms on international expansion should also be examined.

In summary, this research joins the international dialogue on digitalization and internationalization by providing theoretical knowledge, empirical evidence, and avenues for further inquiry. By identifying the strategic imperatives faced by born-digital

companies with the world becoming increasingly networked, our study intends to contribute to market practitioners, policy-makers, and academics as they tackle the challenges and opportunities of digitalization.

6.1 Limitations and Recommendations

The research focused on European companies and then expanded into other European countries or OECD countries with similar market structures, regulations, and controls. This means that the difficulty for entry would be minimal, especially within EU countries, as the rules are relaxed for member countries. Focusing on expansion outside the OECD and into developing countries might be more relevant and could help highlight the discrepancies and challenges that must be addressed. The cultural differences between the countries in Asia, South America, and Africa might also provide more interesting findings and add more value to the literature. That said, this study has been able to highlight the benefits of being born digital and how it has changed market entry and globalization, but adding these aspects and challenges as the distance grows more would be critical research for the future and to check the real capability and advantages of these companies.

6.1.1. Managerial Implications

Based on this research findings, several key recommendations emerge for managers seeking to navigate the complexities of digitalization and internationalization: Based on our research findings, several vital recommendations emerge for managers seeking to navigate the complexities of digitalization and internationalization:

Invest in Digital Capabilities: Business entities should make it a point to concentrate investments in digital technologies and infrastructure development to improve their competitiveness in global markets. This may include adopting cloud computing, big data analytics, and artificial intelligence, which will help lessen the operational burden, enable better decision-making, and expedite innovation.

Embrace Platform Business Models: It could be worth considering an exploratory study of the use of digital technologies in shaping digitally integrated platforms where customers, suppliers, and partners from all over the world interconnect. Benefiting from platform economics, which results in new sources of income, collective efforts, and a more significant scope of operations, is thrust to companies by platform-based business models.

Foster a Culture of Innovation: Businesses must establish themselves as a culture of innovation to survive and pursue success during the digital era. Managers should motivate innovation, find new ways, and share knowledge across the company to keep the creativity and iteration going.

Adopt a Customer-Centric Approach: Marketers today face an era of digital disruption, and one of the most essential aspects of this pursuit is understanding customers' needs and likes. The business should use data analytics and customer insights to acknowledge the customers by personalizing products. This forces the business to offer quality services, and the customers will be satisfied and retained.

Forge Strategic Partnerships: Outdoor collaboration with third parties external to our organization, for example, with vendors of technology, with industry associations, and with the government, can often be a promising source of additional resources and competence. By forming strategic alliances, firms can speed up their digital transformations, giving them better positioning in international markets and gaining a competitive advantage.

References

- Agarwal, S., & Ramaswami, S. N. (1992). Choice of Foreign Market Entry Mode: Impact of Ownership, Location and Internalization Factors. *Journal of International Business Studies*, 23(1). <https://doi.org/10.1057/palgrave.jibs.8490257>
- Aharoni, Y. (1966). The foreign investment decision process.
- Aleksandras Melnikovas. (2020). Towards an Explicit Research Methodology: Adapting Research Onion Model for Futures Studies. *Journal of Futures Studies*, 23 (December 2018).
- Andersen, P., Zamberi Ahmad, S., & Meng Chan, W. (2014). Revisiting the Theories of Internationalization and Foreign Market Entry Mode: A Critical Review. *International Journal of Business and Commerce*, 4(01).
- Anderson, B. S., Kreiser, P. M., Kuratko, D. F., Hornsby, J. S., & Eshima, Y. (2015). Reconceptualizing entrepreneurial orientation. *Strategic Management Journal*, 36(10). <https://doi.org/10.1002/smj.2298>
- Asmussen, C. G., Larsen, M. M., & Pedersen, T. (2016). Organizational adaptation in offshoring: The relative performance of home- and host-based learning strategies. *Organization Science*, 27(4). <https://doi.org/10.1287/ORSC.2016.1060>
- Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *Academy of Management Journal*, 43(5). <https://doi.org/10.2307/1556419>

- Axinn, C. N., & Matthyssens, P. (2002). Limits of internationalization theories in an unlimited world. In *International Marketing Review* (Vol. 19, Issue 5).
<https://doi.org/10.1108/02651330210445275>
- Ayal, I. (1981). International Product Life Cycle: A Reassessment and Product Policy Implications. *Journal of Marketing*, 45(4).
<https://doi.org/10.1177/002224298104500412>
- Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3), 329–366. <https://doi.org/10.2189/asqu.2005.50.3.329>
- Banalieva, E. R., & Dhanaraj, C. (2019). Internalization theory for the digital economy. *Journal of International Business Studies*, 50(8).
<https://doi.org/10.1057/s41267-019-00243-7>
- Baumol, W. J., Cyert, R. M., & March, J. G. (1964). A Behavioral Theory of the Firm. *Journal of Marketing Research*, 1(1). <https://doi.org/10.2307/3150326>
- Bayraktar, M., & Algan, N. (2019). The Importance Of SMEs On World Economies. *International Conference on Eurasian Economies 2019*.
<https://doi.org/10.36880/c11.02265>
- Bell, J., & Loane, S. (2010). “New-wave” global firms: Web 2.0 and SME internationalization. *Journal of Marketing Management*, 26(3–4).
<https://doi.org/10.1080/02672571003594648>
- Benito, G. R. G., Petersen, B., & Welch, L. S. (2019). The global value chain and internalization theory. In *Journal of International Business Studies* (Vol. 50, Issue 8). <https://doi.org/10.1057/s41267-019-00218-8>

- Bharadwaj, A., el Sawy, O. A., Pavlou, P. A., & Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. *MIS Quarterly: Management Information Systems*. <https://doi.org/10.25300/MISQ/2013/37:2.3>
- Blomstermo, A., Eriksson, K., Lindstrand, A., & Sharma, D. D. (2004). The perceived usefulness of network experiential knowledge in the internationalizing firm. *Journal of International Management*, 10(3).
<https://doi.org/10.1016/j.intman.2004.05.004>
- Blomstermo, A., Sharma, D. D., & Sallis, J. (2006). Choice of foreign market entry mode in service firms. *International Marketing Review*, 23(2).
<https://doi.org/10.1108/02651330610660092>
- Brouthers, K. D., Geisser, K. D., & Rothlauf, F. (2016). Explaining the internationalization of business firms. *Journal of International Business Studies*, 47(5).
<https://doi.org/10.1057/jibs.2015.20>
- Brouthers, K. D., Geisser, K. D., & Rothlauf, F. (2018). Explaining the Internationalization of iBusiness Firms. https://doi.org/10.1007/978-3-319-74228-1_7
- Buckley, P. J. (2006). Stephen Hymer: Three phases, one approach? *International Business Review*, 15(2 SPEC. ISS.).
<https://doi.org/10.1016/j.ibusrev.2005.03.008>
- Buckley, P. J. (2011a). International integration and coordination in the global factory. *Management International Review*, 51(2). <https://doi.org/10.1007/s11575-011-0075-2>
- Buckley, P. J. (2011b). The theory of international business pre-Hymer. *Journal of World Business*, 46(1). <https://doi.org/10.1016/j.jwb.2010.05.018>

- Buckley, P. J. (2016). The contribution of internalization theory to international business: New realities and unanswered questions. *Journal of World Business*, 51(1). <https://doi.org/10.1016/j.jwb.2015.08.012>
- Buckley, P. J., Doh, J. P., & Benischke, M. H. (2017). Towards a renaissance in international business research? Big questions, grand challenges, and the future of IB scholarship. In *Journal of International Business Studies* (Vol. 48, Issue 9). <https://doi.org/10.1057/s41267-017-0102-z>
- Buckley, P. J., & Hashai, N. (2005). Firm configuration and internationalization: A model. *International Business Review*, 14(6). <https://doi.org/10.1016/j.ibusrev.2005.09.003>
- Buckley, P. J., & Strange, R. (2011). The Governance of the Multinational Enterprise: Insights from Internalization Theory. *Journal of Management Studies*, 48(2). <https://doi.org/10.1111/j.1467-6486.2010.00920.x>
- Caldas, M. P. (2003). Research design: qualitative, quantitative, and mixed methods approaches. *Revista de Administração Contemporânea*. <https://doi.org/10.1590/s1415-65552003000100015>
- Canabal, A., & White, G. O. (2008). Entry mode research: Past and future. *International Business Review*, 17(3). <https://doi.org/10.1016/j.ibusrev.2008.01.003>
- Chen, L., Shaheer, N., Yi, J., & Li, S. (2019). The international penetration of ibusiness firms: Network effects, liabilities of outsidership and country clout. *Journal of International Business Studies*, 50(2). <https://doi.org/10.1057/s41267-018-0176-2>

- Chen, L. Y., & Mujtaba, B. (2007). The Choice of Entry Mode Strategies and Decisions for International Market Expansion. *Journal of American Academy of Business*, Cambridge, 10(2).
- Cheng, Y. M. (2006). Determinants of FDI mode choice: Acquisition, brownfield, and greenfield entry in foreign markets. *Canadian Journal of Administrative Sciences*, 23(3). <https://doi.org/10.1111/j.1936-4490.2006.tb00627.x>
- Chetty, S., & Eriksson, K. (2002). Mutual commitment and experiential knowledge in mature international business relationships. *International Business Review*, 11(3). [https://doi.org/10.1016/S0969-5931\(01\)00062-2](https://doi.org/10.1016/S0969-5931(01)00062-2)
- Chi, T. (1994). Trading in strategic resources: Necessary conditions, transaction cost problems, and choice of exchange structure. *Strategic Management Journal*, 15(4). <https://doi.org/10.1002/smj.4250150403>
- CHOO, S., & MAZZAROL, T. (2001). AN IMPACT ON PERFORMANCE OF FOREIGN MARKET ENTRY CHOICES BY SMALL AND MEDIUM-SIZED ENTERPRISES. *Journal of Enterprising Culture*, 09(03). <https://doi.org/10.1142/s021849580100016x>
- Claver, E., & Quer, D. (2005). Choice of market entry mode in China: the influence of firm-specific factors. *Journal of General Management*, 30(3). <https://doi.org/10.1177/030630700503000304>
- Coff, R., & Kryscynski, D. (2011). Drilling for micro-foundations of human capital-based competitive advantages. *Journal of Management*, 37(5). <https://doi.org/10.1177/0149206310397772>

- Colbert, A., Yee, N., & George, G. (2016). The digital workforce and the workplace of the future. In *Academy of Management Journal* (Vol. 59, Issue 3).
<https://doi.org/10.5465/amj.2016.4003>
- Collinson, S. C., & Narula, R. (2014). Asset recombination in international partnerships as a source of improved innovation capabilities in China. *Multinational Business Review*, 22(4). <https://doi.org/10.1108/MBR-09-2014-0046>
- Coviello, N., Kano, L., & Liesch, P. W. (2017). Adapting the Uppsala model to a modern world: Macro-context and microfoundations. *Journal of International Business Studies*, 48(9). <https://doi.org/10.1057/s41267-017-0120-x>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage Publications.
- Creswell, J. W., & Plano-Clark, V. L. (2011). *Choosing a mixed methods design. Designing and Conducting Mixed Method Research*.
- Cumberland, F. (2006). Theory Development within International Market Entry Mode - An Assessment. *The Marketing Review*, 6.
- Cyert, R. M., & March, J. G. (1963). *A behavioral theory of the firm*. Prentice-Hall.
- Czinkota, M. R., Grossman, D. A., Javalgi, R. (Raj) G., & Nugent, N. (2009). Foreign market entry mode of service firms: The case of U.S. MBA programs. *Journal of World Business*, 44(3). <https://doi.org/10.1016/j.jwb.2008.08.002>
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-Methods Research: A Discussion on its Types, Challenges, and Criticisms. *Journal of Practical Studies in Education*, 2(2). <https://doi.org/10.46809/jpse.v2i2.20>

- Dethine, B., Enjolras, M., & Monticolo, D. (2020). Digitalization and SMEs' export management: Impacts on resources and capabilities. *Technology Innovation Management Review*, 10(4). <https://doi.org/10.22215/TIMREVIEW/1344>
- Development of foreign economic activity of Ukrainian enterprises under conditions of economic globalization. (2020). *Social Economics*, 59. <https://doi.org/10.26565/2524-2547-2020-59-11>
- Dunning, J. H. (1995). Reappraising the Eclectic Paradigm in an Age of Alliance Capitalism. *Journal of International Business Studies*, 26(3). <https://doi.org/10.1057/palgrave.jibs.8490183>
- Dunning, J. H. (1998). Location and the Multinational Enterprise: A Neglected Factor? *Journal of International Business Studies*, 29(1). <https://doi.org/10.1057/palgrave.jibs.8490024>
- Dunning, J. H. (2000). The eclectic paradigm as an envelope for economic and business theories of MNE activity. *International Business Review*, 9(2). [https://doi.org/10.1016/S0969-5931\(99\)00035-9](https://doi.org/10.1016/S0969-5931(99)00035-9)
- Dunning, J. H. (2006). When I met Hymer: Some personal recollections. *International Business Review*, 15(2 SPEC. ISS.). <https://doi.org/10.1016/j.ibusrev.2005.04.004>
- Dunning, J. H., & Pitelis, C. N. (2010). The political economy of globalization: Revisiting Stephen Hymer 50 years on. *Transnational Corporations*, 19(3). <https://doi.org/10.18356/d2e4b40d-en>

Eisenmann, T. R., Parker, G., & van Alstyne, M. (2009). Opening platforms: How, when, and why? In *Platforms, Markets and Innovation*.

<https://doi.org/10.4337/9781849803311.00013>

Ekeledo, I., & Sivakumar, K. (1998). Foreign market entry mode choice of service firms: A contingency perspective. In *Journal of the Academy of Marketing Science*

(Vol. 26, Issue 4). <https://doi.org/10.1177/0092070398264002>

Ekeledo, I., & Sivakumar, K. (2004). International market entry mode strategies of manufacturing firms and service firms: A resource-based perspective.

International Marketing Review, 21(1).

<https://doi.org/10.1108/02651330410522943>

Elg, U., Ghauri, P. N., & Tarnovskaya, V. (2008). The role of networks and matching in market entry to emerging retail markets. *International Marketing Review*, 25(6).

<https://doi.org/10.1108/02651330810915583>

Ellis, P. D. (2011). Social ties and international entrepreneurship: Opportunities and constraints affecting firm internationalization. *Journal of International Business Studies*, 42(1).

<https://doi.org/10.1057/jibs.2010.20>

Eriksson, K., & Chetty, S. (2003). The effect of experience and absorptive capacity on foreign market knowledge. *International Business Review*, 12(6).

<https://doi.org/10.1016/j.ibusrev.2003.07.001>

European Commission. (2017). Attitudes towards the impact of digitization and automation on daily life. In European Commission.

Evans, P. C., & Gawer, A. (2016). *The Rise of the Platform Enterprise: A Global Survey*.

The Center for Global Enterprise, January.

- Fahy, J. (2002). A resource-based analysis of sustainable competitive advantage in a global environment. *International Business Review*, 11(1).
[https://doi.org/10.1016/S0969-5931\(01\)00047-6](https://doi.org/10.1016/S0969-5931(01)00047-6)
- Figueira-de-Lemos, F., Johanson, J., & Vahlne, J. E. (2011). Risk management in the internationalization process of the firm: A note on the Uppsala model. *Journal of World Business*, 46(2). <https://doi.org/10.1016/j.jwb.2010.05.008>
- Foscht, T., Swoboda, B., & Morschett, D. (2006). Electronic commerce-based internationalization of small, niche-oriented retailing companies: The case of Blue Tomato and the Snowboard industry. *International Journal of Retail and Distribution Management*, 34(7). <https://doi.org/10.1108/09590550610673626>
- Fossen, F. M., & Sorgner, A. (2021). Digitalization of work and entry into entrepreneurship. *Journal of Business Research*, 125.
<https://doi.org/10.1016/j.ibusres.2019.09.019>
- Freeman, S., Cray, D., & Sandwell, M. (2007). Networks and Australian professional services in newly emerging markets of Asia. *International Journal of Service Industry Management*, 18(2). <https://doi.org/10.1108/09564230710737808>
- Freeman, S., & Sandwell, M. (2008). Professional service firms entering emerging markets: The role of network relationships. *Journal of Services Marketing*, 22(3). <https://doi.org/10.1108/08876040810871165>
- Gabrielsson, M., & Gabrielsson, P. (2011). Internet-based sales channel strategies of born global firms. *International Business Review*, 20(1).
<https://doi.org/10.1016/j.ibusrev.2010.05.001>

- Galindo, M. Á., & Méndez-Picazo, M. T. (2013). Innovation, entrepreneurship, and economic growth. *Management Decision*, 51(3).
<https://doi.org/10.1108/00251741311309625>
- Gawer, A. (2009). Platforms, markets, and innovation. In *Platforms, Markets and Innovation*. <https://doi.org/10.4337/9781849803311>
- Gereffi, G., & Fernandez-Stark, K. (2011). *Global Value Chain Analysis: A Primer*. Center on Globalization, Governance & Competitiveness (CGGC).
- Ghandour, A. (2015). Ecommerce website value model for SMEs. *International Journal of Electronic Commerce Studies*. <https://doi.org/10.7903/ijecs.1403>
- Giones, F., & Brem, A. (2017). Digital Technology Entrepreneurship: A Definition and Research Agenda. *Technology Innovation Management Review*, 7(5).
<https://doi.org/10.22215/timreview1076>
- Glowik, M. (2020). 3. Market Entry Strategies. In *Market Entry Strategies*.
<https://doi.org/10.1515/9783110653113-003>
- Gopal, R. D., Ramesh, R., & Whinston, A. B. (2003). Microproducts in a digital economy: Trading small, gaining large. *International Journal of Electronic Commerce*, 8(2).
<https://doi.org/10.1080/10864415.2003.11044292>
- Gray, J., & Rumpe, B. (2015). Models for digitalization. In *Software and Systems Modeling* (Vol. 14, Issue 4). <https://doi.org/10.1007/s10270-015-0494-9>
- Gruber, M., MacMillan, I. C., & Thompson, J. D. (2012). From Minds to Markets: How Human Capital Endowments Shape Market Opportunity Identification of Technology Start-Ups. *Journal of Management*, 38(5).
<https://doi.org/10.1177/0149206310386228>

Halcomb, E., & Hickman, L. (2015). Mixed methods research. In Nursing standard (Royal College of Nursing (Great Britain) : 1987).

<https://doi.org/10.7748/ns.29.32.41.e8858>

Hannibal, M., & Knight, G. (2018). Additive manufacturing and the global factory: Disruptive technologies and the location of international business. *International Business Review*, 27(6). <https://doi.org/10.1016/j.ibusrev.2018.04.003>

Harrigan, P., Ramsey, E., & Ibbotson, P. (2008). e-CRM in SMEs: An exploratory study in Northern Ireland. *Marketing Intelligence and Planning*, 26(4).

<https://doi.org/10.1108/02634500810879296>

Harzing, A. W., Pudelko, M., & Sebastian Reiche, B. (2016). The Bridging Role of Expatriates and Inpatriates in Knowledge Transfer in Multinational Corporations. *Human Resource Management*, 55(4).

<https://doi.org/10.1002/hrm.21681>

Hashai, N. (2011). Sequencing the expansion of geographic scope and foreign operations by born global firms. *Journal of International Business Studies*, 42(8). <https://doi.org/10.1057/jibs.2011.31>

Hashai, N., Asmussen, C. G., Benito, G. R. G., & Petersen, B. (2010). Technological Knowledge Intensity and Entry Mode Diversity. *Management International Review*, 50(6). <https://doi.org/10.1007/s11575-010-0059-7>

Hennart, J. F. (2014). The Accidental Internationalists: A Theory of Born Globals. *Entrepreneurship: Theory and Practice*, 38(1).

<https://doi.org/10.1111/etap.12076>

- Hernández, V., & Nieto, M. J. (2016). Inward-outward connections and their impact on firm growth. *International Business Review*, 25(1).
<https://doi.org/10.1016/j.ibusrev.2015.05.009>
- Hervé, A. (2021). Internationalization and Digitalization of micro-, small and medium-sized enterprises [Doctorate Thesis]. Université de Lorraine.
- Hervé, A., Schmitt, C., & Baldegger, R. (2020). Internationalization and Digitalization: Applying digital technologies to the internationalization process of small and medium-sized enterprises. *Technology Innovation Management Review*, 10(7).
<https://doi.org/10.22215/timreview/1373>
- Hunt, S. D. (2014). Marketing theory: Foundations, controversy, strategy, and resource-advantage theory. In *Marketing Theory: Foundations, Controversy, Strategy, and Resource-advantage Theory*. <https://doi.org/10.4324/9781315702537>
- Hutchinson, K., Quinn, B., & Alexander, N. (2006). SME retailer internationalization: Case study evidence from British retailers. *International Marketing Review*, 23(1). <https://doi.org/10.1108/02651330610646287>
- International Labour Office. (2015). Small and medium-sized enterprises and decent and productive employment creation. In *International Labour Conference; Report IV*.
- Jacobides, M. G., Cennamo, C., & Gawer, A. (2018). Towards a theory of ecosystems. *Strategic Management Journal*, 39(8). <https://doi.org/10.1002/smj.2904>
- Jesuthasan, R. (2017). HR's new role: rethinking and enabling digital engagement. *Strategic HR Review*, 16(2). <https://doi.org/10.1108/shr-01-2017-0009>

- 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(9). <https://doi.org/10.1057/jibs.2009.24>
- Johanson, J., & Vahlne, J. E. (2011). Markets as networks: Implications for strategy-making. *Journal of the Academy of Marketing Science*, 39(4).
<https://doi.org/10.1007/s11747-010-0235-0>
- 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).
<https://doi.org/10.1057/palgrave.jibs.8490676>
- Johanson, J., & Wiedersheim-Paul, F. (1975). The internationalization of the firm. *Journal of Management Studies*, 12(3), 305–322.
- Johansson, J. K. (2005). *Global marketing: Foreign entry, local marketing, and global management (Fourth)*. McGraw-Hill/Irwin.
- Jurek, M. (2012). Internationalization Theories and Models: Austrian Firms on the Czech Market. *Acta Oeconomica Pragensia*, 20(6).
<https://doi.org/10.18267/j.aop.388>
- Katz, M., & Shapiro, C. (1986). Technological adoption in the presence of network externalities. *Journal of Political Economy*, 94(4), 822–841.
- Kaushik, V., & Walsh, C. A. (2019). Pragmatism as a research paradigm and its implications for Social Work research. *Social Sciences*.
<https://doi.org/10.3390/socsci8090255>

- Khatri, K. K. (2020). Research Paradigm: A Philosophy of Educational Research. *International Journal of English Literature and Social Sciences*, 5(5).
<https://doi.org/10.22161/ijels.55.15>
- Kiss, A. N., & Danis, W. M. (2008). Country institutional context, social networks, and new venture internationalization speed. *European Management Journal*, 26(6).
<https://doi.org/10.1016/j.emj.2008.09.001>
- Knight, G. A., & Liesch, P. W. (2016). Internationalization: From incremental to born global. *Journal of World Business*, 51(1).
<https://doi.org/10.1016/j.jwb.2015.08.011>
- Kobrin, S. J. (2017). Bricks and Mortar in a Borderless World: Globalization, the Backlash, and the Multinational Enterprise. *Global Strategy Journal*, 7(2).
<https://doi.org/10.1002/gsj.1158>
- Kobrin, S. J., Buckley, P. J., & Casson, M. (1977). The Future of the Multinational Enterprise. *Journal of Marketing*, 41(4). <https://doi.org/10.2307/1250254>
- Kogut, B., & Zander, U. (2009). Knowledge of the firm. Combinative capabilities and the replication of technology. In *Knowledge in Organisations*.
<https://doi.org/10.3280/so2008-002005>
- Kothari, C. (2004). Research methodology: methods and techniques. In *New Age International*. <https://doi.org/http://196.29.172.66:8080/jspui/bit-stream/123456789/2574/1/Research%20Methodology.pdf>
- Kraus, S., Palmer, C., Kailer, N., Kallinger, F. L., & Spitzer, J. (2019). Digital entrepreneurship: A research agenda on new business models for the twenty-

- first century. In *International Journal of Entrepreneurial Behaviour and Research* (Vol. 25, Issue 2). <https://doi.org/10.1108/IJEBR-06-2018-0425>
- Kriz, A., & Welch, C. (2018). Innovation and internationalization processes of firms with new-to-the-world technologies. *Journal of International Business Studies*, 49(4). <https://doi.org/10.1057/s41267-018-0147-7>
- Kumar, R. (2017). *Research Methodology. A step-by-step guide*. Sage Publications.
- Laanti, R., Gabrielsson, M., & Gabrielsson, P. (2007). The globalization strategies of business-to-business born global firms in the wireless technology industry. *Industrial Marketing Management*, 36(8). <https://doi.org/10.1016/j.indmarman.2006.10.003>
- Langlois, R. N. (2002). Modularity in technology and organization. *Journal of Economic Behavior and Organization*, 49(1). [https://doi.org/10.1016/S0167-2681\(02\)00056-2](https://doi.org/10.1016/S0167-2681(02)00056-2)
- Lankes, H. P. (2002). Market access for developing countries. *Finance and Development*, 39(3).
- Li, P. P. (2007). Toward an integrated theory of multinational evolution: The evidence of Chinese multinational enterprises as latecomers. *Journal of International Management*, 13(3). <https://doi.org/10.1016/j.intman.2007.05.004>
- Li, S., Tallman, S. B., & Ferreira, M. P. (2005). Developing the eclectic paradigm as a model of global strategy: An application to the impact of the Sep. 11 terrorist attacks on MNE performance levels. *Journal of International Management*, 11(4). <https://doi.org/10.1016/j.intman.2005.09.006>

- Li, W. (2018). Reinventing Capitalism in the Age of Big Data. *SCRIPT-Ed*, 15(1).
<https://doi.org/10.2966/scrip.150118.162>
- Mahoney, J. T., & Kor, Y. Y. (2015). Advancing the human capital perspective on value creation by joining capabilities and governance approaches. *Academy of Management Perspectives*, 29(3). <https://doi.org/10.5465/amp.2014.0151>
- Malhotra, N. K., Agarwal, J., & Ulgado, F. M. (2003). Internationalization and Entry Modes: A Multitheoretical Framework and Research Propositions. In *Journal of International Marketing* (Vol. 11, Issue 4).
<https://doi.org/10.1509/jimk.11.4.1.20144>
- Manyika, J., Lund, S., Bughin, J., Woetzel, J., Stamenov, K., & Dhringra, D. (2016). *Digital Globalization : The New Era of Global Flows*. McKinsey Global Institute, March.
- Mathews, S., Bianchi, C., Perks, K. J., Healy, M., & Wickramasekera, R. (2016). Internet marketing capabilities and international market growth. *International Business Review*, 25(4). <https://doi.org/10.1016/j.ibusrev.2015.10.007>
- Matlay, H., Ruzzier, M., Hisrich, R. D., & Antoncic, B. (2006). SME internationalization research: Past, present, and future. *Journal of Small Business and Enterprise Development*, 13(4). <https://doi.org/10.1108/14626000610705705>
- Mauro, T. (2015). Adopting Microservices at Netflix: Lessons for Architectural Design. In *Nginx Blog*.
- McKim, C. A. (2017). The Value of Mixed Methods Research: A Mixed Methods Study. *Journal of Mixed Methods Research*.
<https://doi.org/10.1177/1558689815607096>

- Melin, L. (1992). Internationalization as a strategy process. *Strategic Management Journal*, 13(2 S). <https://doi.org/10.1002/smj.4250130908>
- Moen, Ø., Gavlen, M., & Endresen, I. (2004). Internationalization of small, computer software firms: Entry forms and market selection. *European Journal of Marketing*, 38(9/10).
- Monaghan, S., Tippmann, E., & Coviello, N. (2020). Born digitals: Thoughts on their internationalization and a research agenda. In *Journal of International Business Studies* (Vol. 51, Issue 1). <https://doi.org/10.1057/s41267-019-00290-0>
- Morgan, D. L. (2014). Pragmatism as a Paradigm for Social Research. *Qualitative Inquiry*. <https://doi.org/10.1177/1077800413513733>
- Müller, J. M. (2019). Business model innovation in small- and medium-sized enterprises: Strategies for industry 4.0 providers and users. *Journal of Manufacturing Technology Management*, 30(8). <https://doi.org/10.1108/JMTM-01-2018-0008>
- Muriu, E. W. (2021). The Impact of Digitalization on Internationalization of High-Tech Firms [Master Thesis]. Lulea University of Technology.
- Musteen, M., Francis, J., & Datta, D. K. (2010). The influence of international networks on internationalization speed and performance: A study of Czech SMEs. *Journal of World Business*, 45(3). <https://doi.org/10.1016/j.jwb.2009.12.003>
- Nakos, G., & Brouthers, K. D. (2002). Entry Mode Choice of SMEs in Central and Eastern Europe. *Entrepreneurship Theory and Practice*, 27(1). <https://doi.org/10.1111/1540-8520.271003>

Nambisan, S. (2017). Digital Entrepreneurship: Toward a Digital Technology Perspective of Entrepreneurship. *Entrepreneurship: Theory and Practice*, 41(6).

<https://doi.org/10.1111/etap.12254>

Narula, R. (2001). Choosing between internal and non-internal R&D activities: Some technological and economic factors. *Technology Analysis and Strategic Management*, 13(3).

<https://doi.org/10.1080/09537320120088183>

Neagu, C. (2016). The importance and role of small and medium-sized businesses.

Theoretical and Applied Economics, XXIII(3).

Neubert, M. (2018). The Impact of Digitalization on the Speed of Internationalization of Lean Global Startups. *Technology Innovation Management Review*, 8(5).

<https://doi.org/10.22215/timreview/1158>

Niemand, T., Rigtering, J. P. C., Kallmünzer, A., Kraus, S., & Maalaoui, A. (2021).

Digitalization in the financial industry: A contingency approach of entrepreneurial orientation and strategic vision on digitalization. *European Management Journal*, 39(3).

<https://doi.org/10.1016/j.emj.2020.04.008>

North, K., Aramburu, N., Lorenzo, O., & Rego, A. Z. (2019). Digital maturity and growth of SMEs: a survey of firms in the Basque country (Spain). *Ifo*, June.

Novikov, A. M., & Novikov, D. A. (2013). Research methodology: From philosophy of science to research design. In *Research Methodology: From Philosophy of Science to Research Design*.

OECD. (2017). Enhancing the Contributions of SMEs in a Global and Digitalised Economy. Meeting of the OECD Council at Ministerial Level, 1.

O'Farrell, P. N., Wood, P. A., & Zheng, J. (1998). Regional influences on foreign market development by business service companies: Elements of a strategic context explanation. *Regional Studies*, 32(1).

<https://doi.org/10.1080/00343409850123602>

Ojala, A., Evers, N., & Rialp, A. (2018). Extending the international new venture phenomenon to digital platform providers: A longitudinal case study. *Journal of World Business*, 53(5). <https://doi.org/10.1016/j.jwb.2018.05.001>

Parida, V., Sjödin, D., & Reim, W. (2019). Reviewing literature on digitalization, business model innovation, and sustainable industry: Past achievements and future promises. In *Sustainability (Switzerland)* (Vol. 11, Issue 2).

<https://doi.org/10.3390/su11020391>

Parker, G., & van Alstyne, M. (2018). Innovation, openness, and platform control. *Management Science*, 64(7). <https://doi.org/10.1287/mnsc.2017.2757>

Parviainen, P., Tihinen, M., Kääriäinen, J., & Teppola, S. (2017). Tackling the digitalization challenge: How to benefit from digitalization in practice. *International Journal of Information Systems and Project Management*, 5(1).

<https://doi.org/10.12821/ijispm050104>

Paul, J., Parthasarathy, S., & Gupta, P. (2017). Exporting challenges of SMEs: A review and future research agenda. In *Journal of World Business* (Vol. 52, Issue 3).

<https://doi.org/10.1016/j.jwb.2017.01.003>

Pham, S. (2018, January 4). Uber's big Chinese rival Didi, is pumping money into Brazil.

CNN. <https://money.cnn.com/2018/01/04/technology/didi-99-acquisition-uber-brazil/index.html>

- Pitelis, C. (2006). Stephen Herbert Hymer and/on the (theory of the) MNE and international business. In *International Business Review* (Vol. 15, Issue 2 SPEC. ISS.). <https://doi.org/10.1016/j.ibusrev.2005.11.002>
- Porter, M. E., & Kramer, M. R. (2011). The Big Idea: Creating Shared Value. *Harvard Business Review*, 89(1–2), 62–77.
- Rasmussen, J. (1983). Skills, Rules, and Knowledge; Signals, Signs, and Symbols, and Other Distinctions in Human Performance Models. *IEEE Transactions on Systems, Man and Cybernetics*, SMC-13(3).
<https://doi.org/10.1109/TSMC.1983.6313160>
- Reed, R., & DeFillippi, R. J. (1990). Causal Ambiguity, Barriers to Imitation, and Sustainable Competitive Advantage. *Academy of Management Review*, 15(1).
<https://doi.org/10.5465/amr.1990.4308277>
- Reiner, G., Demeter, K., Poiger, M., & Jenei, I. (2008). The internationalization process in companies located at the borders of emerging and developed countries. *International Journal of Operations and Production Management*, 28(10).
<https://doi.org/10.1108/01443570810903096>
- Ritter, T., & Pedersen, C. L. (2020). Digitization capability and the digitalization of business models in business-to-business firms: Past, present, and future. In *Industrial Marketing Management* (Vol. 86). <https://doi.org/10.1016/j.indmar-man.2019.11.019>
- Rowthorn, R. (2006). Stephen Hymer: An intellectual memoir. *International Business Review*, 15(2 SPEC. ISS.). <https://doi.org/10.1016/j.ibusrev.2005.03.006>

- Rüßmann, M., Lorenz, M., Gerbert, P., Waldner, M., Justus, J., Engel, P., & Harnisch, M. (2015). Industry 4.0 The Future of Productivity and Growth in Manufacturing Industries. Boston Consulting Group, 9(1).
- Rutashobya, L., & Jaensson, J. E. (2004). Small firms' internationalization for development in Tanzania: Exploring the network phenomenon. *International Journal of Social Economics*, 31(1–2).
<https://doi.org/10.1108/03068290410515484>
- Ryan, G. (2018). Introduction to positivism, interpretivism, and critical theory. In *Nurse Researcher* (Vol. 25, Issue 4). <https://doi.org/10.7748/nr.2018.e1466>
- Salmi, A. (2000). Entry into turbulent business networks - The case of a Western company on the Estonian market. *European Journal of Marketing*, 34(11/12).
<https://doi.org/10.1108/03090560010348632>
- Sambamurthy, V., Bharadwaj, A., & Grover, V. (2003). Shaping agility through digital options: Reconceptualizing the role of information technology in contemporary firms. *MIS Quarterly: Management Information Systems*, 27(2).
<https://doi.org/10.2307/30036530>
- Samiee, S., & Chabowski, B. R. (2012). Knowledge structure in international marketing: A multi-method bibliometric analysis. In *Journal of the Academy of Marketing Science* (Vol. 40, Issue 2). <https://doi.org/10.1007/s11747-011-0296-8>
- Santangelo, G. D., & Meyer, K. E. (2011). Extending the internationalization process model: Increases and decreases of MNE commitment in emerging economies. *Journal of International Business Studies*, 42(7).
<https://doi.org/10.1057/jibs.2011.25>

- Savastano, M., Amendola, C., & D'Ascenzo, F. (2018). How digital transformation is reshaping the manufacturing industry value chain: The new digital manufacturing ecosystem applied to a case study from the food industry. In *Lecture Notes in Information Systems and Organisation* (Vol. 24).
https://doi.org/10.1007/978-3-319-62636-9_9
- Schellenberg, M., Harker, M. J., & Jafari, A. (2018). International market entry mode—a systematic literature review. *Journal of Strategic Marketing*, 26(7).
<https://doi.org/10.1080/0965254X.2017.1339114>
- Schmid, M. A., Price, L. G., & McCallum, S. Y. (2010). Going Global: a Look At Corporate Citizenship. *Journal of Business, Society & Government*, 2(1).
- Sharma, D. D., & Blomstermo, A. (2003). The internationalization process of Born Globals: A network view. *International Business Review*, 12(6).
<https://doi.org/10.1016/j.ibusrev.2003.05.002>
- Sharma, V. M., & Erramilli, M. K. (2004). Resource-Based Explanation of Entry Mode Choice. *Journal of Marketing Theory and Practice*, 12(1).
<https://doi.org/10.1080/10696679.2004.11658509>
- Shen, Z., Puig, F., & Paul, J. (2017). Foreign Market Entry Mode Research: A Review and Research Agenda. *International Trade Journal*, 31(5).
<https://doi.org/10.1080/08853908.2017.1361368>
- Sinkovics, N., Sinkovics, R. R., & Jean, R. J. B. (2013). The internet as an alternative path to internationalization? *International Marketing Review*, 30(2).
<https://doi.org/10.1108/02651331311314556>

- Stavnsager Rasmussen, E., & Tanev, S. (2015). The Emergence of the Lean Global Startup as a New Type of Firm. *Technology Innovation Management Review*, 5(11). <https://doi.org/10.22215/timreview941>
- Stoian, C., & Filippaios, F. (2008). Dunning's eclectic paradigm: A holistic, yet context specific framework for analyzing the determinants of outward FDI. Evidence from international Greek investments. *International Business Review*, 17(3). <https://doi.org/10.1016/j.ibusrev.2007.12.005>
- Strange, R., & Humphrey, J. (2019). What lies between market and hierarchy? Insights from internalization theory and global value chain theory. *Journal of International Business Studies*, 50(8). <https://doi.org/10.1057/s41267-018-0186-0>
- Strange, R., & Zucchella, A. (2017). Industry 4.0, global value chains, and international business. *Multinational Business Review*, 25(3). <https://doi.org/10.1108/MBR-05-2017-0028>
- Suarez, F. F. (2005). Network effects revisited: The role of strong ties in technology selection. *Academy of Management Journal*, 48(4). <https://doi.org/10.5465/AMJ.2005.17843947>
- Suarez, F. F., & Kirtley, J. (2012). Dethroning an Established Platform Some Key elements of Platform theory. *MIT Sloan Management Review*, 53(4).
- Sun, M., & Tse, E. (2009). The resource-based view of competitive advantage in two-sided markets. *Journal of Management Studies*, 46(1). <https://doi.org/10.1111/j.1467-6486.2008.00796.x>

- Tahir, R., & Larimo, J. (2004). Understanding the ownership structure choices of Finnish firms in Asian countries. *European Business Review*, 16(5).
<https://doi.org/10.1108/09555340410556585>
- Teece, D. J. (2006). Reflections on the Hymer thesis and the multinational enterprise. *International Business Review*, 15(2 SPEC. ISS.).
<https://doi.org/10.1016/j.ibusrev.2005.11.003>
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1). <https://doi.org/10.1016/j.lrp.2017.06.007>
- Tsang, E. W. K. (2016). The Philosophy of Management Research. In *The Philosophy of Management Research*. Routledge. <https://doi.org/10.4324/9781315463216>
- Vadana, I. I., Kuivalainen, O., Torkkeli, L., & Saarenketo, S. (2021). The role of digitalization on the internationalization strategy of born-digital companies. *Sustainability (Switzerland)*, 13(24). <https://doi.org/10.3390/su132414002>
- Vadana, I. I., Torkkeli, L., Kuivalainen, O., & Saarenketo, S. (2020). Digitalization of companies in international entrepreneurship and marketing. *International Marketing Review*, 37(3). <https://doi.org/10.1108/IMR-04-2018-0129>
- Vadana, I.-I. (2020). INTERNATIONALIZATION OF BORN-DIGITAL COMPANIES [Doctorate Thesis]. LUT University.
- Vadana, I.-I., Torkkeli, L., Kuivalainen, O., & Saarenketo, S. (2019). The Internationalization of Born-Digital Companies. https://doi.org/10.1007/978-3-030-03931-8_10
- Vernon, R. (1966). International investment and international trade in the product cycle. *Quarterly Journal of Economics*, 80(2). <https://doi.org/10.2307/1880689>

- Watson, G. F., Weaven, S., Perkins, H., Sardana, D., & Palmatier, R. W. (2018). International Market Entry Strategies: Relational, Digital, and Hybrid Approaches. *Journal of Marketing*, 26(1). <https://doi.org/10.1509/jim.17.0034>
- Wautelet, T. (2017). The impact of digitalization on international companies: a case study of LEGO [Master]. European University for Economics and Management.
- Welch, C., Nummela, N., & Liesch, P. (2016). The Internationalization Process Model Revisited: An Agenda for Future Research. In *Management International Review* (Vol. 56, Issue 6). <https://doi.org/10.1007/s11575-016-0302-y>
- Welch, C., & Paavilainen-Mäntymäki, E. (2014). Putting Process (Back) In: Research on the Internationalization Process of the Firm. *International Journal of Management Reviews*, 16(1). <https://doi.org/10.1111/ijmr.12006>
- Wentrup, R. (2016). The online-offline balance: internationalization for Swedish online service providers. *Journal of International Entrepreneurship*, 14(4). <https://doi.org/10.1007/s10843-016-0171-2>
- Williams, C., & Martinez, C. A. (2012). Government effectiveness, the global financial crisis, and multinational enterprise internationalization. *Journal of International Marketing*, 20(3). <https://doi.org/10.1509/jim.12.0078>
- Wilson, R. T., & Baack, D. W. (2012). Attracting foreign direct investment: Applying Dunning's location advantages framework to FDI advertising. In *Journal of International Marketing* (Vol. 20, Issue 2). <https://doi.org/10.1509/jim.11.0023>
- Witten, I. H., Frank, E., Hall, M. A., & Pal, C. J. (2016). Data Mining: Practical Machine Learning Tools and Techniques. In *Data Mining: Practical Machine Learning Tools and Techniques*. <https://doi.org/10.1016/c2009-0-19715-5>

- WITTKOP, A., ZULAUF, K., & WAGNER, R. (2013). How Digitalization Changes the Internationalization of Entrepreneurial Firms: Theoretical Considerations and Empirical Evidence. *Management Dynamics in the Knowledge Economy*, 6(2), 193–207. <https://doi.org/10.25019/MDKE/6.1.01>
- Yamin, M., & Sinkovics, R. R. (2006). Online internationalization, psychic distance reduction, and the virtuality trap. *International Business Review*, 15(4). <https://doi.org/10.1016/j.ibusrev.2006.03.002>
- Zeibote, Z., Volkova, T., & Todorov, K. (2019). The impact of globalization on regional development and competitiveness: cases of selected regions. *Insights into Regional Development*, 1(1). [https://doi.org/10.9770/ird.2019.1.1\(3\)](https://doi.org/10.9770/ird.2019.1.1(3))
- Zineldin, M. (2002). Developing and managing a romantic business relationship: life cycle and strategies. *Managerial Auditing Journal*, 17(9). <https://doi.org/10.1108/02686900210447542>
- Zineldin, M. (2007). International business relationship and entry modes: A case of Swedish automotive industry Scania and Volvo in Mexico. *Cross Cultural Management: An International Journal*, 14(4). <https://doi.org/10.1108/13527600710830377>