Gordon Institute
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Emerging market digital firms: identifying and exploiting international opportunities

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Abstract

In emerging markets, local technology firms (referred to as EM digital INVs) are increasingly driving business ecosystem development and inclusive growth. Many of such firms are internationalizing to other emerging markets early in their development, thereby creating competitive advantages across borders. However, a lack of empirical studies of such firms has meant that there is limited understanding of their internationalization process.

This study explores the initial stages of EM digital INVs internationalization, specifically investigating how such firms identify and exploit opportunities in other emerging markets. The study took an exploratory approach, using qualitative methods to interview 12 founders and internationalization managers of EM digital INVs from countries across sub-Saharan Africa. The study led to the development of the EM digital INVs internationalization model, which illuminated the process of identifying opportunities, overcoming internationalization barriers, accumulating resources and determining entry mode.

The study contributes to the literature by classifying a new type of firm, EM digital INVs. Furthermore, the study addresses the lack of research conducted on emerging market firms, specifically those in the technology sector.

Keywords

International Entrepreneurship, Digital Firms, Emerging Markets, Internationalization, sub-Saharan Africa

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Philosophy (International Business) at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Jakob Henz

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Chapter 1 – Introduction to the Research Problem

1.1 Introduction

This chapter introduces the background to the study of opportunity identification and exploitation of emerging market digital international new ventures in sub-Saharan Africa. The background is followed by the identification of the research problem and a summary of the gaps in previous literature, which highlight how this research will contribute both to academia and the practical business understanding of this phenomenon.

1.2 Background to the Research Problem

Since the turn of the 21st century, globalization has led to the acceleration of accessibility of technology, which has unlocked untold opportunities in emerging markets (Kolodko, 2002). Previously unconnected individuals, communities, and countries have, for the first time, been able to connect with the global economy on a significant scale (Baldwin, 2018). The most influential of these enabling technologies has been the widespread access to the internet facilitated by mobile-based systems. In 2005, only two percent of sub-Saharan Africans had access to the internet; yet by 2018, over 24 percent did (UN Data, 2020). Increased access to technology and the global market has also provided a window for entrepreneurs to serve previously unknown and untapped markets. Both local and international firms have rushed to exploit these emerging market opportunities, in the process, developing innovative businesses that are fuelling economic development and inclusive growth.

Although emerging markets are today more globally connected, each faces a unique set of challenges that inhibit efficient market forces that help them to leverage their comparative advantages (Mair & Marti, 2009). These barriers are described as resource scarcity and institutional voids, defined as a lack of regulatory institutions and market intermediaries that facilitate exchanges between buyers and sellers in the market (Khanna & Palepu, 2010). Although seen as barriers for most businesses, institutional voids have also provided a fertile ground for some firms to tap into opportunities to fill these gaps (Khanna & Palepu, 2010).

Many of such firms are using technology solutions to build businesses that become market intermediaries, thereby filling institutional voids (Liu, 2011). A growing number of these firms are international new ventures that focus on products and services in the technology sector (referred to as EM digital INVs from this point on). These firms are a type of technology start-up that from the early stages of launching, develop competitive advantages from operating in multiple countries (Oviatt & McDougall, 1994). The formation of such EM digital INVs is a recent phenomenon in emerging markets; however, these firms share links to the technology ecosystem in Silicon Valley and other technology hubs across the globe (Pollio, 2020).

More comprehensive access to mobile platforms and the internet has opened up the opportunity for EM digital INVs to offer new products and services to previously underserved market segments in emerging markets. For example, SafeBoda, a motorcycle ride-hailing mobile app founded in Uganda and now operating across multiple African markets, has created a platform connecting drivers and ride hailers. As this platform has evolved, diversification has led to the rapid development of additional features such as financial products and education programs for drivers (VentureBurn, 2019). Previously, most of these drivers would have been unbanked due to “brick and mortar” banks' inability to provide affordable products for this low-income market segment (VentureBurn, 2019). However, firms like SafeBoda are creating the opportunity to provide financial services to such individuals, thereby driving financial inclusion.

Such firms are part of an emerging technology ecosystem that is growing across sub-Saharan Africa. This technology ecosystem is the world's fastest-growing region for venture capital investment (the predominant funding source for such ventures), increasing from USD277mn in 2015 to $2bn in 2019, a more than sevenfold increase (Partech, 2020). This growth highlights the perceived potential of such technology firms in the region, many of whom are expanding regionally and globally (Partech, 2019). Furthermore, this growth in funding is not limited to early-stage firms. In 2020, Paystack, a Nigerian Fintech, was acquired for $200mn by Stripe, a Silicon Valley-based firm that is investing in the long-term potential of the continent (TechCrunch, 2020).

In contrast to the growing relevance for EM digital INVs across African markets, international business (IB) literature has yet to see a distinct definition for such firms. This research study therefore coins the term EM digital INVs. Such firms share traits with previously studied firms such as INVs, digital entrepreneurs, and lean global start-ups. However, EM digital INVs have their own distinct characteristics due to their home markets' resource scarcity and institutional voids. Such firms build digital products and services that specifically address market gaps in developing countries' business ecosystems. EM digital INVs often internationalize early in their development, seeking similar markets to fill comparable gaps as in their home markets. The unique context and drivers of such firms differentiate them from previously studied organizations in the IB literature.

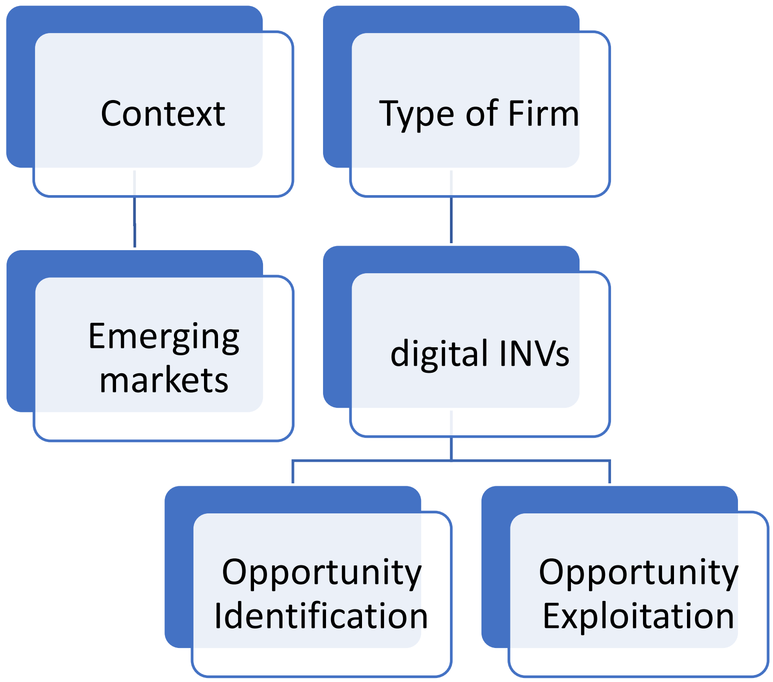
The growing importance of EM digital INVs in markets across sub-Saharan Africa is evident based on the sector's growth. As such, there is a need to better understand how such firms operate, specifically how they conceptualize internationalization (Kiss et al., 2012).

1.3 Research Problem

By their nature, INVs are firms that internationalize early in their development (Oviatt & McDougall, 2005). As EM digital INVs share this trait with INVs, the early internationalization of these firms is a fundamental factor of their success. Gruber (2002) describes the two initial stages of the internationalization process as identifying opportunities and determining how to exploit them. The literature on the broad classification of INVs has found that identifying opportunities is a key challenge for founders and internationalization managers of firms that internationalize early in their development (Angelsberger et al., 2017). Once an international opportunity is identified, firms may choose to exploit that opportunity, which is driven by the fundamental question of how to enter a market and what resources a firm requires to successfully execute the entry (Schellenberg et al., 2017). Furthermore, as EM digital INVs internationalize to emerging markets, the context of these markets poses significant barriers, such as regulatory hurdles, and limited access to capital and talent (Khanna & Palepu, 2010). As such, the study of opportunity identification and exploitation deals with the wider problem identified in the literature, which is overcoming internationalization barriers and accumulating firm resources (Gruber, 2002).

As EM digital INVs have not been classified in past literature, studying the early stages of the internationalization process will shed light on the characteristics of such firms and how they develop competitive advantages in multiple markets. In this thesis, the research problem consists of defining pertinent factors and finding common ground in how INVs identify and exploit opportunities as they internationalize to other emerging markets. Furthermore, this study addresses the problem identified in past literature on the general lack of research conducted on INVs originating in emerging market contexts (Buccieri et al., 2020)

1.3.1 Gaps in the Literature



Previous literature has identified gaps that have led to the need to classify EM digital INVs.
The recent growth and importance of INVs for emerging market economies have been well documented in the literature (Kiss et al., 2012). Yet, most of the recent International Entrepreneurship (IE) literature has focused on INVs originating in developed markets (Felzensztein, 2016). Rahman et al. (2017) argue that emerging markets' context is unique, and findings concerning the firms operating in such conditions must be understood in relation to their particular environmental contexts. This study will contribute to the literature of INVs originating in emerging markets, thereby addressing the gap identified by numerous recent studies (Cavusgil & Knight, 2015; Paul et al., 2017; Buccieri et al., 2020).

Within the study of INVs globally, there has been a lack of understanding of the process of international opportunity identification (Angelsberger et al., 2017). INVs fundamentally operate and acquire resources differently from traditional firms (Schüssler et al., 2016). Angelsberger et al. (2017) argue that this would potentially lead firms to identify opportunities in alternate ways, a subset of opportunity identification literature not yet fully explored. Emerging market INVs are a further subset of INVs, the study of which will not only contribute to firms in the contexts of emerging markets but also shed light on how INVs differ based on the business environment of their home markets (Cavusgil & Knight, 2015). This study aims to address this gap in the literature.

Once international opportunities have been identified, firms may choose to exploit these opportunities. This process involves choosing a market entry mode and accumulating and applying the resources required to successfully execute the internationalization (Gruber, 2002). Although the research in entry modes has been extensive, Schellenberg et al. (2018) argue that the predominant focus has been on multinational corporations (MNCs), whereas smaller firms, such as small and medium enterprises (SMEs) and INVs, have been featured in fewer studies. Furthermore, they argue that for entry mode studies, scholars have generalized to include both types of firms in their conclusions. This neglects to account for the wide range of variations that have been found between SMEs and MNCs firms, including financial resources, ownership structure, managerial style and partnership preferences (Brouthers & Nakos, 2004; and Fernández & Nieto, 2006). As such, a deeper understanding of how non-MNCs determine entry mode would fill a crucial gap in the literature, potentially leading to practical benefits to such firms who typically lack the resources to fund large research studies themselves.

A second gap in the entry mode literature has been identified by Schellenberg et al. (2018), who find that studies have neglected to focus on the decision-making process of entry mode. Two exceptions to this have been Buckley et al. (2007) and Chen (2008), however these studies came to conflicting conclusions which highlights the lack of understanding of decision-making processes in entry mode literature. Hennart & Slangen (2015) argue that identifying the processes that managers use to make entry mode decisions would support the ability of researchers to provide practical recommendations for managers to more effectively execute on international expansion. Thirdly, Ripollés & Blesa (2017) identified a gap in the literature, namely that there has been no research conducted that helps INVs determine which entry mode to choose.

Finally, entry mode has not been studied in depth between emerging markets, specifically firms internationalizing within the African continent (Lamotte & Colovic, 2015). This is noteworthy as the dynamics of the continent are unique in that there are a wide range of countries (mostly with small markets) with vastly different cultures, thereby encapsulating a unique environment globally.

1.3.2. Practical Gap

Despite the rapid growth of firms in sub-Saharan Africa, limited research has been conducted on firms and the ecosystem as a whole (Koskinen, Bonina, & Eaton, 2019). As EM digital INVs are gaining importance in the context of these emerging market business ecosystems, the study of such firms has significant value for academics, entrepreneurs, managers and governments.

On the practical side this has meant that entrepreneurs operating in these markets have had limited access to resources that guide business development in local contexts. The research will help entrepreneurs understand how such firms develop competitive advantages across borders, helping shape better strategy from the inception of the firm. For internationalization managers, the research will uncover best practices and anecdotal experiences that can guide future internationalization. Finally, emerging market governments can use the research to understand challenges EM digital INVs face, thereby providing insight into how to create policies that foster the development of their technology ecosystems (Kiss et al., 2012).

1.4. Research Aim and Questions

The aim of this research is to understand how EM digital INVs identify and exploit opportunities in foreign markets. Specifically, this study investigates digital INVs from emerging markets, focusing on those originating in sub-Saharan Africa. In addition to international opportunity identification and exploitation, two key factors will be explored that influence these processes. Firstly, barriers to internationalization for EM digital INVs in emerging markets will be probed. This research direction seeks to gain a deeper understanding of the challenges that firms face in the context of emerging market business environments. Secondly, the resource-based view (RBV) will be applied to recognise the resources firms develop in order to successfully identify and execute internationalization. Specifically, by investigating the internal workings of the firm, the research will uncover what founders and expansion managers perceive to be the most important elements to execute internationalization.

This research thesis aims to understand:

1. How entrepreneurs identify opportunities in foreign markets and specifically determine into which markets to internationalize.
2. What internationalization barriers do EM digital INVs face when internationalizing.

3. What resources are required for EM digital INVs to exploit international opportunities.
4. How entrepreneurs determine which entry mode to use when internationalizing.

1.5. Scope of Research

The scope of this research study is limited to investigating opportunity identification and exploitation of EM digital INVs in sub-Saharan Africa. These firms share a wide range of similarities, such as funding structure, technology capabilities, and business environment. The study of the region as a whole will lead to rich insights into the processes such firms utilize to build competitive advantages during internationalization. Additionally, the study of this region will provide understanding into the success of various strategies in different markets that have many of the same market dynamics, potentially leading to insights being drawn for the transferability of strategies for EM digital INVs in emerging markets globally.

1.6. Research Contribution

In addition to the practical implications, this research study will contribute to the existing literature in a number of ways. As EM digital INVs are international from very early stages of their development, the process of internationalization is a key factor in such firms creating competitive advantages (Kiss et al., 2012). This study therefore aims to contribute to the INVs literature by providing insight into how such firms identify international opportunities.

Following opportunity identification, the exploiting of opportunities is the second fundamental factor in the success of EM digital INVs. The study will contribute to the literature by investigating how such firms exploit international opportunities, specifically looking at market entry decisions.

Thirdly, the study of INVs in emerging markets is in a nascent stage. As a result, little research has been conducted on the challenges that EM digital INVs face while starting and operating in such business environments. This study will contribute to the literature on the barriers firms face in emerging markets (Khanna and Palepu, 2010).

Finally, this research will contribute to the RBV literature, specifically investigating resources that EM digital INVs firms develop to internationalize in emerging markets. As no research has been conducted on such firms, this study will contribute to this gap in the literature.

1.7. Conclusion

This chapter has laid out the foundations for this research paper, presenting a research problem and identifying a number of gaps in the current literature. By highlighting the growing importance of EM digital INVs in emerging markets, a clear need has been found to better understand such firms. The research problem clearly defines the focus of this study which is to investigate the initial decision-making process for internationalization, specifically identifying and exploiting opportunities.

The research is structured in the following order. Chapter Two describes the research context as the study looks specifically at firms operating in emerging markets. Chapter Three delineates the previous literature on the themes and theories applied to the study, thereby providing a background to the current understanding of the research problem. Chapter Four introduces the research questions that have been developed to address the research aim. Chapter Five provides details of the methodology used to collect data and analyse results for the exploratory approach chosen for this qualitative study. Chapter Six presents the findings from the interviews conducted with founders and expansion managers of EM digital INVs. Chapter Seven applies the findings of the study to past literature, identifying similarities and differences in order to shed light on the firms investigated in this study. Finally, Chapter Eight concludes the research and discusses limitations and suggestions for future study.

Chapter 2 - Research Context

2.1. Introduction

A key underlying element of this research study is the context in which firms are operating. Fundamentally, INVs are not typically seen as originating in emerging markets, and are therefore understudied in this context (Ngoasong, 2018). However, this contradiction is precisely what this study is looking to investigate. This chapter sets the scene for the environment in which EM digital INVs operate when doing business in emerging markets, specifically sub-Saharan Africa.

2.2. Emerging Market Context

Globalization has opened the door for businesses to seek opportunities anywhere globally, leading to the rapid internationalization of firms over the last decades. An increasingly important subset of the global economy has been emerging markets. In 2019, 78% of global growth occurred in these regions (Ashmore, 2019). Currently, Africa accounts for 17% of the world's population but only 3% of its GDP (WEF, 2020). However, since 2000, sub-Saharan Africa has averaged 5% growth annually, well above the average of the developed world (WEF, 2020). This growth has garnered the attention of firms internationalizing from developed economies, as well as those from emerging markets outside the region. However, these firms have had mixed success on the continent, many expanding across the region and subsequently shutting down operations or leaving entirely (FT, 2013).

The mixed success of firms has been driven by various factors such as competition, cultural differences and regulatory hurdles. Ultimately, firms in emerging markets operate in unique environments that pose challenges for doing business; lack of institutions, such as an independent judiciary, shape how firms interact. An example of this is how such firms require stronger trust in partners due to the inability to resolve issues efficiently in court (Khanna & Palepu, 2010). Additionally, lack of infrastructure shapes how firms can provide goods and services, increasing time and cost to reach customers (Fiedler et al., 2016). Lack of local know-how and human capital adds challenges to setting up local subsidiaries, further exasperated by complexities of hiring foreign talent due to regulatory hurdles (Liou et al., 2017). These challenges all add to the cost of doing business, driving firms to adapt to local contexts to create a competitive advantage in the market.

2.3. Resource Scarcity

The importance of context for firms operating in the technology and innovation space has been well documented in the literature (Autio et al., 2014). Until recently, African markets have remained a nascent environment for small digital enterprises (WTO, 2013). Among the challenges to operating in the emerging market context is the scarcity of resources to develop technology firms (Ngoasong, 2018). This scarcity is described as a small consumer market for digital products, which is driven by low average purchasing power in the emerging market context, also called bottom-of-the-pyramid (Linna, 2013). Secondly, resource scarcity includes a lack of human and financial capital for firms to accumulate resources to build businesses (Bradley et al., 2012).

However, shifting dynamics, specifically access to technology, leads to new opportunities for digital businesses (Gathege & Moraa, 2013). Welter and Smallbone (2011) argue that there is a literature gap for studying resource-scarce environments and how context influences explicitly how digital firms within them operate. This gap was further explored by Lusch and Nambisan (2015), who argue that these influences can be the trigger for an entrepreneurial venture, and thereby they enable digital entrepreneurship. This study will further investigate this gap in the literature by exploring what resources firms develop to overcome resource scarcity posed by internationalization barriers.

2.4. Institutional Voids in Emerging Markets

Khanna and Palepu (2010) developed the framework of institutional voids to help firms better understand the context of firms operating in emerging markets. They define institutional voids as a lack of intermediaries, which results in information asymmetry, thereby increasing transaction costs between buyers and sellers within the economy. Institutional voids lead to market failures such as lack of market information, regulatory uncertainty and inefficient judiciary (Doh et al., 2017). These voids inhibit firms as they lead to higher costs to exchange goods and services. As countries develop, the institutional voids are filled by intermediaries that facilitate more efficient market activities. These intermediaries are often firms that identify an opportunity and exploit it, thereby providing a product or service to other market players. Many EM digital INVs act as market intermediaries, thereby creating opportunities out of gaps in the market institutions.

Market intermediaries, such as credibility enhancers, information analysers and advisers, aggregators and distributors, transaction facilitators, regulators and adjudicators, create an environment that allows for more efficient exchanges between buyers and sellers (Khanna & Palepu, 2010). An example of a market intermediary is a transaction facilitator such as MasterCard, which facilitates transactions between customers, merchants, and their respective banks. This intermediary allows buyers and sellers to do business, even if they have never met each other and are based on opposite sides of the globe.

To help firms understand how to address institutional voids, Khanna & Palepu (2010) developed the five contexts framework that helps firms identify institutional voids. This framework helps entrepreneurs build a map of the context in which they operate and recognize where gaps can be opportunity spaces. The framework identifies potential opportunities for filling voids in the political and social system, product market, labour market and capital market.

Institutional voids lead to cost for firms, Mair et al. (2007), argue that firms can create value by building the missing market intermediaries. In emerging markets, firms can become intermediaries where there previously were none. For example, M-Pesa in Kenya became a transaction facilitator for customers, most of whom are unbanked (Osongo & Schot, 2017). Khanna & Palepu (2010) argue that institutional void opportunities can be identified by mapping the institutional landscape and pinpointing where there are frictions between buyers and sellers.

Emerging markets, sub-Saharan Africa specifically, share many of the same institutional voids. This suggests that opportunities for firms filling such voids can extend outside home markets and to other markets with similar conditions. For firms, this presents an opportunity to internationalize, leveraging their competitive advantage of operating in challenging business environments.

2.5. Conclusion

This chapter set the scene for how firms operate in sub-Saharan Africa, the region investigated in this study. This region poses a significant opportunity for firms, but also comes with substantial challenges. However, some firms can overcome these challenges and fill institutional voids, thereby developing competitive advantages that can extend to other emerging markets globally. The next chapter will explore the research on the kinds of firms investigated in this study and introduce previous literature on the research topic.

Chapter 3 - Literature Review

3.1. Introduction

This chapter presents the past literature on the themes set out in the research problem. Firstly, the past literature on firms similar to EM digital INVs is described, including international entrepreneurial firms, INVs and born globals. Secondly, the literature on opportunity identification is outlined, thereby giving a background to the research aim. Thirdly, the past literature on the RBV is explored. Finally, the chapter closes with a description of past literature on opportunity exploitation and market entry, delving into the literature specific to INVs.

3.2. International Entrepreneurship

International entrepreneurship (IE) is defined as creating and expanding new venture firms across international borders (Kiss et al., 2012). Such firms deal with a complex set of questions regarding market entry, product development, technology implementation and financial allocation (Li, 2013). International entrepreneurial firms are divergent from other organizations that conduct international business as they have limited resources at their disposal, and success internationally determines the firm’s survival as a whole. Although IE's study has been gaining depth in recent decades, there has been a lack of research into such firms in emerging and transitional market contexts (Bruton et al., 2008). This study will focus specifically on the gap in IE literature in the context of countries in sub-Saharan Africa (Kujala & Törnroos, 2018).

3.2.1. INVs, Digital Entrepreneurship and EM Digital INVs

As discussed in the background to the research problem, this study coins a new term for a particular category of firm identified by the researcher. The name for firms investigated in this study is EM digital INVs. Although such firms exhibit characteristics of several other classifications of firms identified in the IB and IE literature, the author explores a particular phenomenon that has yet to be studied in the literature. The following section will describe previous literature on firms' classification similar to EM digital INVs and compare these definitions to EM digital INVs.

Previous authors have classified INVs, which are firms that from early in development derive competitive advantage from expanding outside their home markets, in the process developing unique characteristics due to this early international orientation (McDougall & Oviatt, 1994). O'Gorman and Evers (2011) found that INVs firms often use network relationships when internationalizing. This research expanded on the network model of firm internationalization developed by Johanson and Mattsson (1988) that builds on the resource-based view and the resource dependency theory. Ojala et al. (2018) have since extended this research for INVs implementing a digital platform business model to examine how firms exploit a layered modular architecture to gain access to resources during the internationalization process. They argue that INV cannot own all the resources to explore international opportunities, and therefore, networks are the tool that helps them acquire resources held by other firms. These network relationships help INVs fill resource gaps and draw insights into potential markets and opportunities. The study of INVs has led to a wide range of firms being investigated, including family SME's, start-ups, digital platform businesses, developed country firms. Lamotte and Colovic (2015) identify emerging market INVs as a gap in the research of INVs as a whole.

Similarly, another of the classifications of such international-oriented firms has been born globals. Past definitions of INVs and born globals have blurred, with many firms falling into both categories when defined by different authors (Bjørnåli & Aspelund, 2007). Furthermore, Madsen (2013) argues that authors' distinction between INVs and born globals has often been arbitrary. However, more recent literature has aimed to create more distinct differences between them. Peiris et al. (2012) classified true born globals as firms that become global within three years of inception and selling over 25% of product volume to more than four foreign counties. Although some EM digital INVs fall into this category, many would not, thereby ruling many potential firms out of this study.

Another classification of firms similar to EM digital INVs are digital entrepreneurial firms, many of which also display an international outlook from their inception (Ojala et al., 2018). The theoretical lens of organizational capabilities, precisely the resource-based view, has been the foundation of numerous studies of digital firms (Cahen & Borini, 2020). Unlike large companies, these firms have been found to have less tangible assets and more intangible resources such as skills and know-how (Kazlauskaitė et al., 2015). Based on these resources, such small firms can outcompete their larger rivals as they can quickly develop new capabilities and adapt to new environments (Achtenhagen et al., 2013). Cahen and Borini (2020) argue that digital firms fall into the subset of IE research; however, the IE field has mostly investigated new ventures through "physical" entry modes such as exports and foreign direct investment (FDI). Instead, digital firms display strategies characterized by "lean internationalization," which are asset-light and utilize digital tools (Cahen & Borini, 2020). Furthermore, Rasmussen and Tanev (2015) argue that such firms are unique from born globals as they utilize innovative technology to create a new niche. Additionally, Brouthers et al. (2016) suggest that digital based INVs internationalization differs from traditional pathway models due to the nature of technology enablers.

Although EM digital INVs may fall into classifications of INVs, born globals and digital entrepreneurial firms, the researchers determined that such firms warrant a category of their own. Given that context is a critical factor for how firms develop business models and internationalize, the firms operating in the challenging business environment of emerging markets (discussed in Chapter Two) need to be understood within their context (Autio et al., 2014). The resource scarcity and institutional voids addressed in Chapter Two suggest that technology firms have particular challenges that need to be overcome to identify and exploit international opportunities successfully. Secondly, EM digital INVs almost exclusively internationalize to other emerging markets. This is often due to such firms filling a specific gap found solely in emerging markets. However, this tendency suggests that particular variables may be at play that warrants further investigation. Finally, in all of the current classifications mentioned above, gaps in the literature have been found for such firms originating in emerging markets (Lamotte & Colovic, 2015; Cahen & Borini, 2020). These gaps have meant that there has been a limited foundation to study how different firms from these regions operate.

3.3. Entrepreneurial Process

Entrepreneurship is seen as a process that involves identifying opportunities and accumulating the resources required to extract economic value from these opportunities (Shane & Venkataraman, 2000). The process is an iterative approach that can be broken into stages, typically between two and five (Mueller & Thomas, 2001:53).

There is little debate about opportunity identification being a critical first step in entrepreneurship. Baron and Ward (2004) identifies two additional stages, resource accumulation and execution. Rwigema & Venter (2004:28) suggest five stages in the process, identifying opportunities, refining the potential of identified options, developing a business plan, accumulating resources, developing a team and executing the enterprise's growth. However, this study will specifically focus on the first two stages outlined by Gruber’s (2002) three-stage process: the pre-founding stage (opportunity identification) and the founding stage (resource accumulation and market entry). Although these stages pertain to entrepreneurship in general, Scheweizer et al. (2010)

argue that internationalization is an entrepreneurial process. Therefore, this study adopted the entrepreneurial process as a framework to understand the process of identifying and exploiting international opportunities.

3.4. Identifying Opportunities

A fundamental factor in entrepreneurship is the ability to recognize opportunities. This seems self-evident given that opportunity recognition pre-empts opportunity exploitation, part of the process of entrepreneurial venture creation. This study has gained deeper interest by academics in recent decades (Busenitz et al., 2014). These studies have aimed to understand what factors determine how, when and why entrepreneurs identify opportunities. The research has led to a wide range of identified and studied factors, including entrepreneurial networks, cognition, environmental factors, and prior knowledge (Angelsberger et al., 2017, Ardichvili et al., 2003; George et al., 2014; Shane et al., 2003).

The definition of entrepreneurial opportunity has been inconsistent over time, and thus it has been challenging to unify findings undertaken in different studies (Hansen et al., 2011). Eckhardt and Shane (2003) described opportunities as novel initiatives that require entrepreneurs to make assumptions about the future based on unknown dynamics, thereby developing beliefs about such prospects' value. Mainela et al. (2014) argue that ultimately there are two different types of entrepreneurial opportunity, innovation opportunity (Schumpeterian opportunity) and arbitrage opportunity (Kirznerian opportunity).

Arbitrage opportunities are defined as the exploitation of market disequilibrium, which results from a misallocation of resources by other players in the market. The resulting opportunity can be exploited by those who have better access to already available information within the market, allowing entrepreneurs to purchase, restructure and resell resources (Shane & Venkataraman, 2000). This kind of opportunity is less about creating novel products and instead involves restructuring current inputs that fill an unmet need in the market. (Mainela et al., 2014)

Innovation opportunities are defined by the changing market landscape of social, regulatory, demographic and technology, where new dynamics offer opportunities for the demand of novel products. The resulting disequilibrium creates an entrepreneurial opportunity for actors to use the current market demands to combine existing resources into a new form. Exploiting the opportunity typically leads to temporary monopoly power in the market before imitators catch on and replicate the innovation, thereby again leading to an equilibrium in the market. Schumpeter identified five types of opportunities: new organizational structures, new markets, new products or services, new production methods, and new raw materials (Hagedoorn, 1996).

Within the study of entrepreneurial opportunity are two theories that aim to fundamentally understand the nature of opportunity itself. These theories are opportunity discovery and opportunity creation, the former being driven by exogenous shifts in existing industries, whereas the latter giving onus to individuals to create new products and services (Angelsberger et al., 2017). There has been some debate about the varying views of opportunity creation and opportunity discovery. Chiasson and Saunders (2005) argue that these two approaches reinforce each other and are most often found as a mix within entrepreneurial firms. Alavrez and Barney (2010), on the other hand, argue that opportunity creation and discovery are vastly different realities and do not cross over within firms. However, more recent research has been brought forward by Edelman and Yli-Renko (2010) and supported by Venkataraman et al. (2012), showing empirically that entrepreneurial ventures both discover and create opportunity. However, this study will focus on the opportunity discovery literature as it investigates how firms identify new markets for existing (albeit tailored) products and services.

3.4.1. International Opportunity Identification

As the global economy has integrated rapidly due to advances in communication and information technology, the study of opportunity recognition in the international sphere has begun to play a more significant role in the entrepreneurship literature. Compared to domestic opportunity recognition, the literature has found that international opportunity identification requires a specific international understanding and skills that differ from identifying domestic opportunities (Karra et al., 2008; Zahra et al., 2005).

Ellis (2011) argues that international opportunity identification decisions are driven by firms having to navigate uncertainty rooted in cultural, political, economic and institutional differences. However, these uncertainties can be seen as the driver for exploiting an international opportunity and are determined by the knowledge within a firm (Hohenthal et al., 2003). This research built on previous work by McDougall et al. (1994, p. 479), which suggests that international opportunities are created by leveraging entrepreneurs' earlier experiences through their networks, knowledge, and backgrounds. This was developed further in the internationalization process model, which emphasized networks as the driving factor for successful internationalization (Johanson & Vahlne 2009).

Of studies conducted on international opportunity recognition, the vast majority have been qualitative studies (Angelsberger et al., 2017). Kontinen and Ojala (2011) found that of eight family-run SMEs, the predominant channels for opportunity identification were through formal and new networks often developed through tradeshows for international firms. They found that such firms are less likely to "actively" embark on campaigns to discover new opportunities and instead find opportunities through "alertness". This approach is undertaken because of the typically smaller management teams whose limited human resources inhibit largescale initiatives outside direct business operations.

Piantoni et al. (2012) compared the opportunity identification of Italian firms internationalizing to close markets (EU) versus geographically and culturally distant China. They found that firms that internationalize to geographically distant markets recognize opportunities regardless of previous experience and implement a systematic strategy, and networking with previously weaker ties. On the other hand, firms internationalizing closer to home and with less prior experience are more likely to discover opportunity accidentally, utilize passive networking and stronger previous ties.

When looking at SMEs in the high-tech sectors Crick and Spence (2005) found two predominant strategies: planned opportunity-seeking strategy involving active searching and unexpected opportunity identification due to serendipitous encounters. Similar to high tech ventures were findings for born globals; Vasilchenko and Morrish (2011) found that networks play a significant role in internationalization opportunity identification. Their results show that such firms use personal contacts of employees within the firms while simultaneously developing new social networks, often through trade shows and business competitions (Kontinen & Ojala, 2011). Mort and Weerawardena (2006) find that for born globals' who have limited resources, systematic search (market research and market visits) may not be possible, in which case networks provide firms with access to qualitative information of the dynamics within potential international markets.

INVs fall into the category of entrepreneurial firms; however little research has been done into this subset of firms, which has provided limited understanding of how such firms specifically identify international opportunities. Due to such firms’ structure, and the nature of being international at a very early stage of development, INVs build very specific capabilities. Autio et al. (2000) found that INVs build capabilities of rapid knowledge development within the firm, which allows for a better understanding of which international markets hold the most potential.

However, a number of studies have looked at how entrepreneurs' individual attributes determine the kind of opportunity identification. Dana et al. (2009) argue that there are entrepreneurs that react to environmental factors, deemed "reactive", and there are entrepreneurs that take an opportunity searching approach, considered "opportunity seeking". Chandra and Leenders (2012) argue once identified, opportunity evolves through a process of travelling to markets, understanding the context and leveraging networks to pursue potential opportunities. However, opportunities are not static as the environment, including competition, regulation and potential partners, are always shifting, which means that timing is essential when identifying opportunity and execution requires speed of action (Nordman & Melén 2008).

3.5. Exploiting Opportunities

Shane & Venkataraman (2000) argue that opportunity recognition is followed by exploiting the opportunity. Due to a lack of clarity within the literature since then, Kuckertz et al. (2017) narrowed the definition of opportunity exploitation to "developing a product or service based on a perceived entrepreneurial opportunity, acquiring appropriate human resources, gathering financial resources, and setting up the organization" (p. 92). Casson & Wadeson (2007) argue that exploitation has "discovery costs" that are sunk in the process of finding a new opportunity. Once an opportunity has been identified, exploitation involves harnessing a combination of resources to effectively address the potential opportunity (Sirmon et al., 2011). This new combination of resources either successfully addresses the gap identified or fails to result in a product the consumer is willing to buy.

3.5.1 Resource-Based View

Part of the second stage of the entrepreneurial process, the founding stage, involves accumulating resources to execute a go-to-market strategy successfully (Gruber, 2002). Adopting the resource-based view, firms acquire and exploit valuable resources to gain a competitive advantage against other firms in the market (Barney, 2001). These resources are divided into two categories, tangible and intangible assets. Tangible assets are considered physical assets such as land, buildings, machinery, capital etc., whereas intangible assets are processes, brand image, knowledge and leadership (Wernerfeld, 1984). Barney (1991) extended this theory to categorize whether a resource provides a firm with a competitive advantage, namely that a resource must be valuable, rare, imperfectly imitable and non-substitutable.

The RBV is built on two fundamental assumptions: resources are immobile and heterogeneous between firms. The first assumption, resource heterogeneity, is based on the reality that markets do not operate under perfect competition; therefore, resource bundles and capabilities underlying production are unique to individual firms. The second assumption of the RBV is that resources are immobile. Therefore firms cannot easily replicate competitors' resources and strategies, thereby creating the underlying incentive for entrepreneurs to develop new products (Grant, 1991). Resource immobility is particularly applicable to intangible resources such as brand image, knowledge and intellectual property.

As the study of INV has gained prominence in IB literature, the research has focused on looking at intangible resources. Studies have found that firms often lack the advantage of large amounts of capital and therefore tend to build competitive advantages through intangible assets such as knowledge and business processes (Peiris et al., 2012). Peng (2001) argued that INVs develop particular knowledge of global opportunities and leverage internal resources to exploit them.

Since the introduction of the RBV in IE scholarship, there has been a wide range of resources studies. Bloodgood et al. (1996) studied the influence of top management exposure to international experiences. Similarly, Coviello and Cox (2006) and Loane and Bell (2006) looked at network resources and their effect on firms to internationalize. Dhanaraj and Beamish (2003) looked at factors of technological intensity and firm size. Additionally, entrepreneurs' market knowledge was studied as a driver for successful internationalization (Lamb & Liesch 2002).

Autio et al. (2000) argue that rapid learning and knowledge accumulation is a crucial capability to exploit international opportunities. Furthermore, Muzychenko (2008) emphasizes the importance of cross-cultural competencies to exploit opportunities across a number of markets that vary in history and culture. Spence and Crick (2005) argue that entrepreneurs approach exploitation in several very different ways, ranging from planned strategy to unforeseen opportunities that materialize by chance. Therefore, there is a potential to further study opportunity exploitation by investigating how technology firms in emerging economies precisely succeed at exploiting opportunities.

The kind of resources that firms accumulate determines the options firms have in choosing market entry (Shen et al., 2017). The following section will discuss the literature on market entry and outline the variables that firms consider when making market entry decisions.

3.6. Market Entry Mode

For firms that decide to internationalize, a fundamental component is the entry mode chosen to compete in foreign markets. Entry modes fall into two categories, organic (non-equity entry modes) and inorganic (equity entry modes) (Gabrielsson et al., 2008). Organic entry mode is considered international presence either through exporting or contractual agreements such as licensing R&D contracts and alliances. Conversely, inorganic entry is either equity joint ventures or wholly-owned subsidiaries such as greenfield investments and acquisitions. Typically organic entry modes are seen to cost less, whereas inorganic modes usually cost more and are more time-consuming (Sharma & Erramilli, 2004).

The variables that determine entry mode (for both organic and inorganic entry) can broadly be separated into four categories: country (home and host), market, investment and firm (Shen et al., 2017). The table below lists variables investigated by past authors.

Variable	Past literature investigating specific variables
Host and Home Country Variables	Host country-specific variables: geographic distance (Boeh & Beamish, 2012), political and economic stability (Chan & Makino (2007), institutional environment (Cui & Jiang, 2012), regulatory restrictions (Dermirbag et al., 2010), government intervention, law enforcement (Chari & Chang, 2009), cultural distance (Arora & Fosfuri, 2000), and language (Dermirbag et. al, 2010). Home country variables: regulatory restrictions, risk orientation, power distance and economic conditions (Shen et al., 2017).
Market Variables	Market-specific variables fall into categories of market attractiveness, entry barriers and industry assets specificity (Chen & Hennart, 2002) Market attractiveness: industry growth potential (Li et al., 2010), demand and market size (Klein and Swoboda, 2008), and labour costs (Somlev and Hoshino, 2005). Entry barriers: distribution, access to technology and advertising costs (Chen & Hennart, 2002). Industry assets: technology and marketing intensity in the host country (Dermirbag et al. 2010; Shieh and Wu, 2012).

Investment/ Business-level Variables	Investment determinants: transferability of technology, marketing, and know-how (Shen et al., 2017), size of investment (Shieh & Wu, 2012), and motivation for investments, which include natural resources, strategic assets, exploration and following clients (Dunning et al., 2007).
Firm-level Variables	Firm-level variables fall into categories of firm experience, assets, capabilities, networks, ownership structure and leadership qualities (Shen et al., 2017). Capabilities: innovation, market linking, know-how and transference capabilities (Shen et al., 2017). Leadership characteristics: education, personal background and experience in international contexts (Musteen et al., (2009). Networks: networks of entrepreneurs and firm level networks (Maekelburger et al., 2012; Shen et al., 2017).

3.6.1. RBV Theory and Entry Mode

Adopting the RBV, firms typically utilize their organization's resources and leverage them to set up operations abroad, rather than accumulating new ones (Erramilli et al., 2002). This then means that firms' success in internationalizing depends on their ability to efficiently transfer resources from one country to another (Sharma & Erramilli, 2004). As a result, the most effective entry mode can be defined as a vehicle that can efficiently bring a firm's resources and, therefore, competitive advantage from a home country to a host country.

Two factors drive the transferability of resources. Firstly, the imperfect imitability of resources makes it challenging for potential partner firms to adopt the competitive advantage (Teece 1998). Furthermore, Madhok (1997) argues that these resources become deeply intertwined within an organization's processes and structure and are therefore specific to a firm. Secondly, firms may be inhibited from transferring their resources to a partner due to the inability of a firm in the new country to absorb and utilize its resources (Cohen & Levinthal, 1990). This is because resources are complex and involve a combination of human capital, organizational structure and leadership, which is not easy to acquire or transfer. The RBV highlights the trade-offs firms make when entering host countries organically or inorganically.

For example, firms that enter a market via indirect exports, which entails producing the product in the home market and selling it via another home market firm with a presence in the host market. The RBV would suggest that this is a reasonable choice if the probability is low that the firm can develop a production and marketing competitive advantage by producing and selling in the host country (Sharma & Erramilli, 2004). On the other hand, a firm may set up a wholly-owned subsidiary if it can develop a production and marketing competitive advantage but cannot transfer its resources to a potential partner in the country (Sharma & Erramilli, 2004).

3.6.2. INVs Entry Mode

A fundamental feature of INVs is that they internationalize from the early stages of the firms' development (Oviatt & McDougall, 1994). Such firms face difficult challenges to execute international expansion, often working with limited resources and short timelines to show positive results. Chen (2008), argues that a critical determiner of success or failure is the entry mode that firms use to internationalize, thereby decreasing liability of foreignness in their new markets. Wood et al. (2011) support this finding that entry mode can help a firm's legitimacy, thereby opening doors to new customers and potential partnerships.

As discussed previously, a key constraint for INVs is their lack of tangible resources, which is often a driver of internationalization for other types of firms (Ripolle et al., 2012). INVs differ further from firms such as MNCs due to typical characteristics such as limited market legitimacy, technology-based products, high touch customer service and network effects (Ripollés & Blesa, 2017). Therefore, Gleason and Wiggenhorn, (2007) argue that the choice of entry mode is better understood as the ability to harness current intangible resources and develop new ones. Weerawardena et al. (2007) argue that INVs developing the right intangible resources such as the processes and human capital to expand foreign market understanding offers strategic advantages.

For INVs, entry mode is a critical decision as it involves a balance of dedicating a set of resources to several markets that each have their risks, uncertainty and profit potential (Ripolle et al., 2012). Early studies of entry mode for INVs assumed that INVs would likely choose relatively low resource commitments for entry mode, reducing the risk of unknown markets (Burgel & Murray, 2000; Coviello & Munro, 1997). However, Aspelund et al. (2007) have shown that INVs can implement high resource commitment entry modes to expand successfully. However, (Ripolle et al., 2012) argue that this approach is still nascent and the prevailing assumption that firms implement low levels of resource commitment remains the status quo among research.

3.7. Conclusion

This chapter outlines the past literature on the themes relating to the research aim discussed in Chapter Two. Firstly, an introduction to the IE literature, specifically INVs, provided context for the type of firm being investigated. Following this, the literature review identified two stages of the entrepreneurial process, which will be the focus of this study. The chapter then delved into the first stage of the entrepreneurial process, looking at past work on identifying opportunities and international opportunities. Following this, the second stage of the entrepreneurial process was reviewed, first the RBV and then market entry. The literature on market entry identified two routes that firms take when internationalizing, organic and inorganic entry; these options are driven by a wide range of variables that tie to resources firms can accumulate. Ultimately, the literature review highlights the gap in research on EM digital INVs, thereby providing the potential for this study to fill the gap. The following chapter will outline the research questions developed to address the gaps identified in the literature review.

Chapter 4 - Research Questions

4.1. Introduction

This chapter outlines the research questions investigated in this study. The research questions have been developed by reviewing the literature and the gaps identified in Chapter Three. Specifically, these questions aim to explore the processes EM digital INVs implement to identify opportunities and the strategies and resources utilized to exploit the identified opportunities. Additionally, these questions seek to understand such firms in their specific context of emerging markets and how this context shapes the identification and exploitation of opportunities.

Research aim: investigate how EM digital INVs businesses identify and exploit international opportunities across emerging markets.

4.2. Summary of the Identification Sub-questions

The sub-questions on identification address the first part of the research aim, which sought to understand how EM digital INVs identify foreign market opportunities. The first question addresses international opportunity directly and seeks to uncover how firms compare opportunities in different markets. The second question also ties into identification as the emerging market context is particularly challenging for internationalization, particularly for INVs (Autio et al., 2014). As this context is unique and understudied, the barriers were seen as a critical factor in understanding how firms weigh up the choice of which market to enter, thereby providing essential insight into the decision making process from identification to exploitation.

> Sub-question 1: How do entrepreneurs identify opportunities in foreign markets and determine into which markets to internationalize.
>
> Sub-question 2: What internationalization barriers do EM digital INVs face when internationalizing.

4.3. Summary of the Exploitation Sub-questions

The following sub-questions address the second part of the research aim, to understand how firms exploit opportunities identified in foreign markets. The first sub-question investigates the factors that determine what entry mode firms utilize. These entry modes are driven by an extensive range of factors but tie into sub-question two as barriers are a crucial consideration for entry mode. The final sub-question investigates the resources firms require to effectively succeed in their market entry and thereby exploit opportunities in foreign markets. This question aims to understand the factors that lead to success in EM digital INVs internationalization.

> Sub-question 3: What resources are required for EM digital INVs to exploit international opportunities
>
> Sub-question 4: How do entrepreneurs determine which entry mode to use when internationalizing?

Chapter 5 – Research Methodology

5.1. Introduction

This chapter describes the methodology used to investigate questions posed in Chapter Four. Due to the gap in previous research of EM digital INVs in sub-Saharan Africa, a qualitative exploratory approach was used to study the research questions. The qualitative data was gathered through semi-structured interviews conducted with founders of EM digital INVs and international expansion managers. Additionally, quality controls and ethical considerations are discussed in this chapter, followed by limitations to the study.

5.2. Research Design

The research design was an exploratory study that used an interpretivist philosophy and inductive approach. The research was conducted through a mono-method, cross-sectional, qualitative interview process. The mono-method was used as this provided the most effective strategy to gain an initial understanding of EM digital INVs, a classification of firms that has not been investigated explicitly in past literature.

5.2.1. Purpose of Research Design

The gap of EM digital INVs being studied in sub-Saharan Africa led the researcher to conclude that the research problem made an initial foray into an area of study that had yet to be investigated. The purpose of the research had, therefore, an exploratory objective. Zikmund (2000) argues that exploratory research is appropriate in such cases where there has been little previous research. Thus, this study used an exploratory research method to guide the researcher to break ground in a new research area within an established field (Saunders & Lewis, 2012). Exploratory methods provided a tool for the researcher to investigate initial problems and gain further understanding of the complexities of a new area of research. (Saunders & Lewis, 2012). This approach facilitated the development of new theories that could be verified and tested in future studies using deductive methods.

Due to this research area's nascent developmental stage, there was an opportunity to provide new insights into the field. The subjective nature of exploratory research supported this study to "provide elaborate interpretations of phenomena" (Zikmund et al., 2013, P132), thereby building a framework to understand the various actors and dynamics at work. Such an approach allowed the researcher to investigate the complexities of respondents' personal experiences and their environments, and also see the opportunities through their own unique lens. The diverse sample of firms that fall under the umbrella of EM digital INVs suggests that actors within firms have varying and subjective understandings of the business environment in which they operate.

5.2.2. Research Philosophy

This study adopted an interpretivist approach, thereby making the assumption that respondents' experiences are subjective, and therefore experience objective reality differently (Meyers et al. 2004). The researcher took an interpretivist approach, thereby observing the respondents' experiences of the subject matter studied.

5.2.3. Research Approach

The inductive approach implemented in this study limited prior assumptions and aimed to develop theory in the area of investigation (Patton, 2002). Creswell et al. (2007) define this research as working "bottom-up, using the participants' views to build broader themes and generate a theory interconnecting the themes" (p. 26). This study followed such an inductive approach that limited reference to previous literature while the data was being analysed, thereby allowing themes to be led by responses from participants rather than past literature. This approach was utilized because the unique context of the region studied may have led to responses that were differing from past literature, therefore this approach aimed to reduce confirmation bias.

5.2.4. Research Strategy

In this case, the research question's exploratory nature lent itself to utilize a mono-method approach of a qualitative research method. The in-person, semi-structured, long interview was used to investigate how the population being studied understood the topic being explored (McCracken, 1988). Such an approach is most effectively applied to studying an area where the researcher is unsure of how the respondent will answer questions. (Saunders & Lewis, 2012). This approach allows the researcher the flexibility to delve into the nuances of the interviewee's subjective experiences. This research design will allow for a flexible system whereby the researcher can adapt and evolve the study as the research progresses (Saunders & Lewis, 2012).

5.3. Research Methods

5.3.1. Population

The population of the study was composed of founders and internationalization managers of EM digital INVs. The criteria for EM digital INVs adopted Oviatt and McDougall (1994: 470) definition of INV firms, that from early in their development, build competitive advantages from doing business in multiple countries. Oviatt & McDougall (1997) further defined the timeframe of firm creation to internationalization being within 6 years of each other.

To further focus the study, a number of other criteria were determined. Firstly, firms investigated will have been founded in a country in sub-Saharan Africa. Secondly, firms studied were businesses that are post launch and had customers. Secondly, the firms investigated were digital firms, selling products and services with a high degree of technological intensity and following characteristics such as “lean internationalization” (Cahen & Borini, 2020). Thirdly, firms had embarked on a form of internationalization, with the minimum being pilots conducted in countries outside of the home market. Lastly, the firms internationalization destinations were to other markets in sub-Saharan Africa. The purpose of this was to study firms that are building technological products specifically for the contexts of emerging markets.

5.3.2. Unit of Analysis

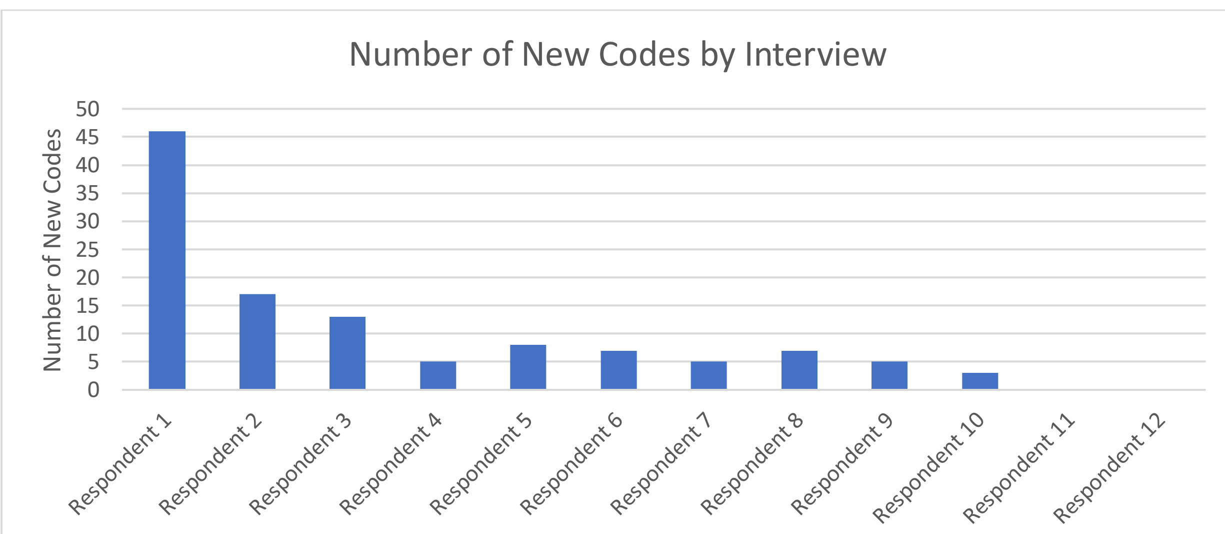
The unit of analysis was the firm.

5.3.3. Sampling Method and Size

The region investigated in this study was comprised of 54 distinct countries across sub-Saharan Africa. As the study was exploratory, only a small segment of these countries could be investigated. To attempt to represent the region as a whole, firms from various geographic regions were selected for the study. These regions were defined as West, East and Southern Africa, and a balance of firms from each region were included in the study. These regions were selected because they represent a balance of different historical, economic and cultural dynamics from across the continent. This approach was appropriate as it increased the feasibility of the researcher finding enough firms to investigate. As EM digital INVs are niche firms, focusing on one country would pose significant challenges with finding sufficient firms to interview.

Due to the nature of this exploratory qualitative study, a selective non-probability sampling was used (Patton, 2002). The sample was identified via three channels. Firstly, the researcher's informal network was leveraged to identify subjects in the population. This judgmental sampling technique determined subjects to include in the sample based on the researcher's first-hand experience with the topic being investigated. Secondly, the sample was identified through secondary sources such as the online platforms: Disrupt Africa, Digest Africa, LinkedIn and VentureBurn. These platforms helped the researcher determine and contact currently operating EM digital INVs and the individuals who work there. The third channel, snowball sampling, was implemented once the research process had begun (Saunders & Lewis, 2012). Snowball sampling provided additional access to contacts working for EM digital INVs identified by experts interviewed through channels one and two.

The study's sample size was not predetermined but instead was restricted to when saturation of the data was reached (Saunders & Lewis, 2012). The method to determine saturation was for the researcher to observe new codes created with each interview; once no new codes were found, a final interview was conducted to confirm saturation (Campbell et al., 2006). In this case, saturation was reached in eleven interviews, following which an additional interview was used to confirm saturation.



5.3.4. Measurement Instrument

An effective tool for exploratory research is the long interview, which can provide the most in-depth understanding of how a population understands the subjective topic being investigated (McCracken, 1988). The long interview was conducted with founders and expansion managers of EM digital INVs across sub-Saharan Africa. The long interview was designed to facilitate open dialogue, and questions were used to guide the interview and cover a range of themes (Zikmund et al., 2013).

Research question one focused on how EM digital INVs identify international opportunities. Literature related to the relevant interview questions that helped answer the research question was sourced from Zahra et al. (2005), Angelsberger et al. (2017), Mort and Weerawardena (2006).
A review of these sources resulted in these interview questions:

1. Can you describe how you identify market intermediary business opportunities in the international market?
2. How do you determine which markets to internationalize into?

Research question two focused on what barriers exist for EM digital INVs to internationalize. Literature related to the relevant interview questions that helped answer the research question was sourced from the context chapter and included Khanna and Palepu (2010), Cui and Jiang (2012), Dermirbag et al. (2010), Boeh and Beamish (2012).
A review of these sources resulted in these interview questions:

1. What barriers do you face when identifying and executing international expansion?
2. How do you overcome these barriers in your markets?
3. What lessons have you learnt from these experiences?

Research question three focused on what resources are most important for EM digital INVs to internationalize. Literature related to the relevant interview questions that helped answer the research question was sourced from Autio et al. (2014); Gruber, (2002); Barney (2001).
A review of these sources resulted in these interview questions:

1. Can you describe the process of going from opportunity identification to exploitation?

2. What resources have you had to develop to effectively exploit opportunities in international markets?
3. What resources are you lacking that make you less effective at this execution, why don't you have those resources?

Research question four focused on what entry modes EM digital INVs utilize to exploit other emerging market opportunities. Literature related to the relevant interview questions that helped answer the research question was sourced from Sharma & Erramilli (2004), Ripolle et al. (2012), Aspelund et al. (2007).
A review of these sources resulted in these interview questions:

1. How do you determine what entry mode you?
2. What is the process for you to identify potential partners in new markets?
3. What challenges do you face when engaging in partnerships in foreign markets?

5.3.5. Data Collection Process

Semi-structured interview questions were developed based on the aforementioned research questions. Interviews were kept between 30 minutes and one hour. Interview subjects were identified through the three channels described above. Identified subjects were invited to participate in the study via a standard email. This email explained the purpose of the research and outlined the process through which the research would be conducted. Those that agreed to participate were required to sign a consent form before the interview was initiated. Before each interview, the researcher gathered sufficient information on the interviewee and their organization, enabling a more productive interview to take place. The interviews took place face to face (in person or over video call), using a semi-structured set of interview questions. With the interviewee's permission, the conversation was recorded for future reference by the researcher.

5.3.6. Analysis Approach

The data analysis approach provided a systematic procedure to determine patterns across different respondent interviews. The researcher began analysing the interviews after the third interview was completed. This approach allowed the researcher to adapt the interview questions and specific elaborations for the next participants. Merriam and Tisdell (2016) suggest this strategy to provide deeper insights into the research questions as the researcher's understanding evolves throughout the process.

The analysis consisted of the researcher transcribing the interviews and loading the raw text into ATLAS.ti, a qualitative analysis software. Following an approach recommended by Bloomberg and Volpe (2008), the researcher immersed themselves in the data, thereby understanding the direct responses to questions and the underlying meanings of respondents. Following the six-phase approach recommended by Braun and Clarke (2006), initial codes were used to identify notable features of the data systematically. Next, trends were identified and data sorted into specific themes. After this, codes were reviewed and crosschecked to determine whether they were consistent across other coded extracts and the entire dataset. Following this, themes were defined and named. Identifying themes posed challenges for the researcher as the large quantity of data collected was challenging to distil. However, a systematic approach and the ATLAS.ti networking tool enabled the researcher to use category groups to develop common themes throughout the entire dataset.

The data analysis used metrics such as word usage, context and frequency of similar responses. To supplement the thematic analysis, frequency analysis was utilized. This allowed for keywords and themes to be recorded by the number of times they were used by respondents, providing a proxy for the importance of each mentioned theme. Finally, a report was produced which includes notable extracts from interviews and discusses the identified themes.

5.3.7. Quality and Validity Criteria

The quality of a research study is dependent on the reliability and validity of the data and analysis (Saunders & Lewis, 2012; Zikmund et al., 2013). The reliability of a study is dependent on the dependability, confirmability and consistency of the data and analysis. As qualitative research is subjective and interviews are not replicable, determining reliability is not a simple process. However, a number of biases can negatively affect the research, namely interviewer bias, interpreter bias, and response bias (Zikmund et al., 2013).

To mitigate against potential bias, several conditions were adhered to throughout the data collection and analysis. Firstly, the researcher recognized that they have bias and attempted to identify and reduce their influences during the research process. As part of this, interviews were conducted in a standardized format with similar questions guiding the conversation. These questions followed a semi-structured interview guide, which has been included in this paper, thereby providing an avenue for confirmability by future researchers. The interviewer avoided leading questions with limited prompting, thereby decreasing interviewer bias risk. To reduce interpreter bias, the researcher adopted a strategy suggested by Bloomberg and Volpe (2012), which entailed member checks, in which participants are asked about how the researcher has interpreted a response during the data collection.

5.4. Limitations of the Research Design and Methods.

Exploratory research by nature has significant limitations as data is subjective and therefore not conducive to generalizations (Bloomberg & Volpe, 2012). The subjectivity of the respondents is also further masked by the subjectivity of the researcher who analyses the data (Saunders & Lewis, 2012).

Firstly, the definition of EM digital INVs has been coined for the first time in this research. Therefore, its application in this study will be a limitation on the sample investigated. Additionally, this qualitative study's sample size was small, as only a limited number of individuals from across markets in sub-Saharan Africa were interviewed. As this region constitutes a vastly diverse set of countries, each with its unique social and economic conditions, the small sample may lead to geographic bias.

5.5. Ethical Considerations

To guarantee that the study adhered to ethical standards, the researcher applied for and was granted ethical clearance from the institution's Ethics Committee. During the data collection process, respondents were informed of the process and were required to sign a consent form (see Appendix), which outlined the conditions of the research. These conditions ensured the respondents' anonymity throughout the study; therefore, the names appearing in this paper are pseudonyms. This confidentiality ensures respondents' honest participation and safeguards confidential information (Bloomberg & Volpe, 2012).

Chapter 6 - Results

6.1. Introduction

This chapter presents the essential results and themes identified through interviews with 12 founders or expansion managers of EM digital INVs operating across sub-Saharan Africa and interviewed for the research study. The chapter is segmented according to the research questions posed in Chapter Four. The quantitative analysis identified themes based on how firms identify internationalization opportunities, overcome barriers, determine entry mode, and accumulate critical resources to execute internationalization successfully.

6.2. Description of Participants and Context

Table 1 Description of Participants

Company Pseudonym	Industry	Description	Company Age	City, Country
Care Assist	Healthcare	Provides a suite of tech solutions for healthcare stakeholders	5	Lagos, Nigeria
InstaNews	Media	Provides business media coverage across Africa	1	Cape Town, South Africa
Paynow	Fintech	Allows users to send money across borders affordably	7	Cape Town, South Africa
RetailAssist	Fintech	Helps retailers accept payments and offers microloans	5	Johannesburg, South Africa
Remitme	Fintech	Helps people and businesses make payments across borders	3	Dar es Salaam, Tanzania
Demonow	Social Service	Connects people to crisis platform	12	Nairobi, Kenya
BShub	Informal Retail	Informal sectors platform for gig workers	2	Lagos, Nigeria
GetPaid	Fintech	Helps businesses make payments across borders	3	Lusaka, Zambia
DevBuild	Technology	Builds APIs for developers across Africa	10	Nairobi, Kenya
RetailPay	Retail	Helps retailers accept payments	9	Durban, South Africa
HConnect	Recruitment	Connects global talent to start-up sector across Africa	2	Accra, Ghana

MobileTools	Fintech	Provides an API for developers to build mobile USSD products	3	Nairobi, Kenya

Businesses were given alternate names to protect respondents' identities, thereby ensuring anonymity. Respondents were selected from a wide range of industries and regions across the continent, with a relatively even split between Eastern, Western, and Southern Africa. However, all the firms interviewed work for or are involved with EM digital INVs that have or are in the process of internationalizing, therefore contributing to a sample that could allow for standardized qualitative analysis.

In all, 13 interviews were conducted. However, one interview was removed from the sample due to the participant not working for or having experience in EM digital INVs, thereby providing little insight into the research questions. Several firms did not fully meet the criteria of successful internationalization. However, despite this, the responses provide insight into the research questions, particularly barriers and challenges that EM digital INVs face. One of the firms (RetailPay) had gone through the process of identification and building partnerships before Covid-19 travel restrictions and uncertainty led to a halt of the internationalization effort. Another firm, Remitme, had recently pivoted and was internationalizing using a new product after the failed internationalization of a previous product. RetailAssist had attempted expansion in recent years, however after several failed pilots had retreated to focus on the depth within the home market. These firms were kept in the sample as the learnings provided critical insights into challenges firms face when identifying and executing opportunities across emerging markets.

Although initially planned as in-person interviews, travel restrictions resulting from the Covid-19 pandemic led to 11 interviews being conducted online (via Zoom or Google Hangout) and one being conducted in person (social distancing observed). The respondents were either the founder/CEO of their respective firms or were managers of international expansion teams, driving strategy and execution. The participants were based in a wide range of countries across sub-Saharan Africa: three based in West Africa, four in East Africa and five in Southern Africa. Each participant was given a summary of the research topic, research questions and informed consent before the scheduled interview. The interviewer conducted substantial research on each participant before the interview, thereby understanding their background and achievements, leading to more focused questions. The interviewer drove the conversation using the interview guide, but was flexible in delving deeper into specific topics relating to the research questions that came up in the interviews.

6.3. Results: Research Question 1

How do entrepreneurs identify opportunities in foreign markets and specifically determine into which markets to internationalize

This research question aimed to understand how EM digital INVs identify opportunities for internationalization. The results show that the initial decision to internationalize was driven by two push factors that led firms to internationalize and often early in their journey. These push factors were rooted in the funding model of the firms interviewed and countries' market size in the region in which these firms operate. The funding model can be described as venture capital-backed, while the market size can be characterized as subscale due to the nature of technology firms and the small markets that exist for such firms in sub-Saharan Africa. Once firms had decided to internationalize, several different strategies were implemented, driven by pull factors in the potential international markets. These strategies ranged from developing a comparative framework to looking at geographic proximity, to tapping into networks (personal and investor), customers and partners.

Table 2 Opportunity Identification Thematic Analysis

Topic (Code)	Category	Theme	Quote
Subscale markets	Push factors	Context of emerging markets	There’s definitely pressure to expand, because the realization that many of our domestic markets are small - RetailAssist
Venture Capital	Push Factors	Internationalization drivers	There's an interesting thing at play where there are more investors in Africa that expect you to be in multiple markets, for you to be perceived as being successful or on a trajectory of being successful. And I think that also links back to market size – HConnect
Framework for expansion	Opportunity identification	Lean internationalization	So, we look at the market size, we look at the population of the country... and we understand the personas of those customers - Paynow
Framework for expansion	Opportunity identification	Context of emerging market	There're a whole lot of other factors to take into account like governance risk, technological infrastructure, and market penetration – RetailPay

Geographic proximity	Opportunity identification	Context of emerging market	We often assume that as an African company you need to expand across the continent, the reality is as much as that can be true, the biggest criteria I would use to decide where to expand next is do you have a similar market – RetailAssist
Networks for lack of information	Identifying opportunities	Networks	In so many cases you look for stats on countries and you have four different sources that give you eight different stats so even for some of these things the best way to find some of this data is to ask around in the market and figure out from people and triangulate from there - RetailAssist
Investor networks	Identifying opportunities	Networks	We're looking at the Middle East but again it's because our investors are from the region and are able to connect us to the right people there – Care Assist
Travel to market	Identifying opportunities	Context of emerging market	Sometimes we just get started to get on a plane and go and experience that in country - Paynow

6.3.1. Push Factors (Motivators)

Push factors were described as the motivators that drive firms to consider international opportunities. Respondents discussed two elements, that their home markets were subscale and that venture capital funding pushed them to seek higher growth elsewhere.

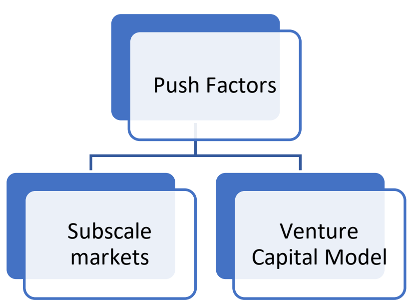


Figure 1 Overview of Results for RQ1 - Push Factors

6.3.1.1. Markets Subscale

In six cases, participants mentioned the role of small markets in their reasoning for internationalizing. In every case, the firms interviewed were technology firms that are asset-light but require scale for profitability. The fragmented and small size of markets across the African continent, precisely due to low technology penetration, further narrowed the market for the firms participating in this study.

> “These markets are subscale... as a result of the fact that they're subscale, a lot of these companies end up needing to look towards expansion much earlier in the journey" InstaNews

> "You don't just build for one market you build for a bigger market, so if I'm building something in Kenya, I'm not just building for Kenya, but then typically building it for East Africa with goals of expanding to other African countries." - Demonow

As with most technology firms, scale is seen as an important condition to reach profitability. As a result, the subscale nature of markets in which respondents operate was a key driver to seek opportunities abroad.

6.3.1.2. Venture Capital Funding

Of the firms interviewed, 10 out of 12 had been funded through a venture capital model. Several participants discussed how the push drivers of early internationalization were driven by their businesses' venture capital funding model. Venture capital firms often operate on the premise of a few firms in the portfolio seeing exponential growth, whereas most firms fail. Due to this, there is a push to achieve exponential growth, and due to the small size of local markets, this exponential growth requires rapid internationalization.

> "I think early-stage companies have a lot of pressure very early on to prove that they can be multi-market... because they want to chase the kind of funding that expects the kind of multi-market growth, they'd have to go there" - HConnect

> "From a fundraising perspective, people really like to talk about the pan-African narrative, and the top line numbers as it relates to like the African market as a whole and not just anyone given individual country... you're invariably pitching yourself to be a multi-market company. In which case you're typically expanding or looking to expand earlier" - InstaNews

In three of the cases, the participants discussed that firms expand earlier due to the pressure from funders to internationalize quickly.

> "Even the smallest and earliest of companies are forced to be multimarket, pretty early on in order to at least show that they have the potential of being significant" - HConnect

However, in one of the cases, the participant noted that their firm had not gone down the venture capital route, precisely because of the growth pressures that such funding would inevitably come with. This firm chose to be self-funded as it would decrease the external influence on the firm's internal decision-making, including the need to expand internationally.

> "So we are a self-funded organization, we have not won and raised significant capital in the market. So we really governed by our own ways of work, we don't have to conform to the requirements of a shareholder... a lot of tech start-ups actually have the reverse. They're like: Let's go and raise capital, let's expand aggressively. And we'll leverage up everybody else's money... We took the reverse approach, we said: slow and steady burn" Paynow

6.3.2. Pull Factors

Pull factors were strategies that drive firms to identify opportunities in potential host countries. These factors ranged included a ranked framework (systematic search), geographic proximity, networks and customers. Firms tended to use a combination of these avenues, thereby acquiring as much information about potential destinations before proceeding to act on internationalization.

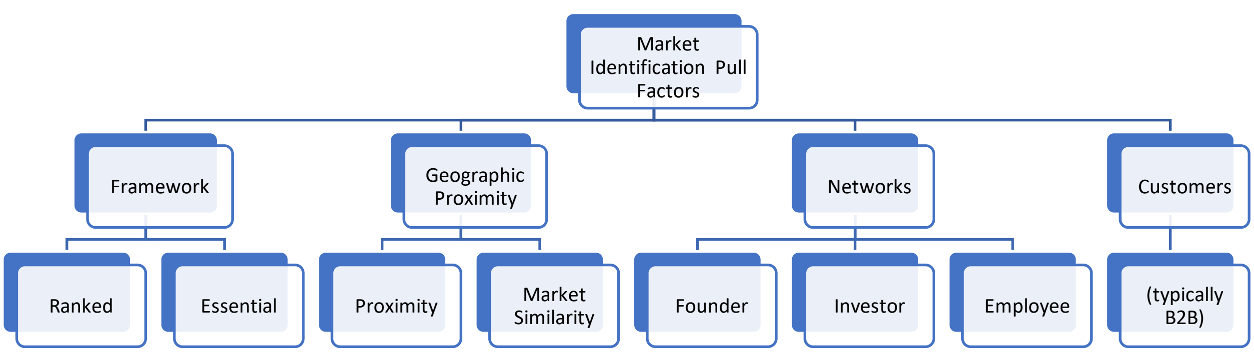


Figure 2 Overview of Results for RQ 2

6.3.2.1. Framework to Rank Markets

For the majority of participants, the initial driver of internationalization was the push factors discussed above. However, once the decision had been made, pull factors were described as determining which markets to identify as opportunities.

"It starts with fairly quantitative research on markets that are interesting and have somewhat of an environment that is similar to ours" - RetailAssist

Due to this type of expansion (necessity, not opportunistic), a particular set of expansion strategies emerged. Among the ways to identify expansion destinations was the development of a framework that ranked opportunity within countries. Six firms identified a framework that consisted of quantitative and qualitative indicators used to rank countries against each other. These indicators were compiled via desktop research and qualitative interviews, cumulatively resulting in an understanding of demographics, industry, regulations etc. These factors were then ranked in importance and amalgamated, thereby indicating which markets hold the most potential for internationalization.

> "You had quantitative and qualitative factors that one could use to basically rank different African countries based on their viability or suitability for our business, so we created that framework and ran all the African countries through that framework" - RetailAssist

One respondent discussed how they were given a budget after an investment round and tasked with determining which countries to expand into.

> "The framework was optimizing for getting the most value out of those million dollars" - MobileTools

However, one respondent noted that the framework was not the ultimate determiner of market potential and that some markets, even though not ranked highly, were vital for their business.

> "Some markets just ended up coming across as absolutely necessary to expand to, even though on a purely quantitatively or qualitative factors through the framework that wasn't apparent… a market like Ethiopia, if you run it through that framework it might not score very highly but if you look at it objectively, this is like a country with the second or third biggest population on the continent" - MobileTools

6.3.2.2. Geographic Proximity

Ten respondents discussed geographic proximity as a factor for opportunity identification. Of these comments, there were two conflicting opinions between respondents. One group of respondents looked for opportunities within proximity of the home market, usually to limit liability of foreignness, challenges with culture and logistics. However, another group focused on looking for markets with similar attributes to the home market.

> "The East African focus came pretty naturally because, as you know, Remitme is based in Tanzania" - Remitme

> "So typically, the thinking is usually scaling regionally first, and then scaling (continentally)" - Demonow

However, three respondents specifically emphasized the need to look at markets similar in market attributes regardless of the home market's proximity.

> "I think companies look at neighbouring countries for expansion but I think that’s not always the right choice... Kenya and Rwanda are completely opposite, Rwanda is a heavily pro-government state where everything has to go through the government to move, whereas Kenya is a lot more capitalistic... And just to give you an example, the closest thing to the healthcare space in Nigeria is actually Indonesia" - Care Assist

6.3.2.3. Networks (Personal, Founder and VC)

The market pull opportunities were also identified through personal and investor networks. In six of the cases, such networks were typically mentioned in the context of vetting information from the quantitative frameworks initially built to rank different markets' potential. This challenge is particular to the African continent as there is a lack of market analysing services, which would be a standard approach to vet potential markets, partners and competitors in more developed markets.

> "It goes through people, the main thing we found here is to speak to people in the ecosystem who know and can provide you with an opinion because there’s no data... You triangulate information based on that rather than looking at the database" - RetailAssist

For three respondents, opportunities were identified or vetted through investor networks. This was particularly the case when investors had other investments in the region and therefore had access to information and networks to vet information or potential partners.

> "A lot of slightly later stage companies would have investors on their cap table, who have backed companies across the continent, and therefore, are able to quickly plug that organization into other markets" - HConnect

6.3.2.4. Customers

In two cases, opportunity identification was driven by piggybacking existing customers in the home market to identify potential opportunities in markets where these customers already have an international presence. This allowed firms to gain market information and build local networks through a trusted intermediary.

> “I would definitely say that on one side our expansion framework has been driven by the kind of client demand, push-pull, so what we essentially did was based on the demand that we got from our clients… we looked at expanding to certain markets, and in a way, I would say that that is a safe way to expand because it means that from the get-go you already have a foundation or client pipeline” DevBuild

6.3.2.5. Travel to Market

For six of the firms, part of the market identification process involved travelling to markets to identify opportunities. The emphasis of this strategy by respondents lies in doing business across Africa. The most significant factors were the lack of reliable information on the market and partners.

> "In pre-covid, we would visit the market to do some more detailed assessment, get a sense for what’s the regulatory environment that we could work with, what are other players in the market doing, as well as a customer validation, do research on the ground, speak to actual businesses, get a sense for the product-market fit" - RetailAssist

> "You need to physically go to the market to get primary data to make decisions around how you’re going to get into those markets, you need to physically go there" MobileTools

Three of the respondents emphasized the lack of information being a driver to visit the market to determine whether the market was as attractive as the quantitative indicators showed. The reasoning for this was the lack of reliable market data across the continent, specifically that different reliable sources would show vastly different figures for indicators such as market size and ease of doing business.

> "The market is never really what you expect it to be, it's always a whole lot different, one of the reasons for that is that what you get through research isn't necessarily the pulse of the markets" Care Assist Roman

Two of the participants discussed the challenge of this element of opportunity identification during this year when travel restrictions due to Covid-19 have limited the ability to do primary research in the market.

> "We've been quite disrupted by like the rest of the world by this particular year as lot of those types of discussions and possibilities have had to be put on hold, because, of the restrictions on travel" – RetailPay

Table 3 Pull Factors Frequency Table

Codes	Frequency
Framework for expansion	13
Network to overcome lack of information	12
Primary research	10
Geographic proximity	9
Local context not factored	7
Investor network identifying opportunities	4

6.3.3. Summary of Results for Research Question 1

Research question 1 shows that firms are driven to internationalize via two push factors, market size and investor expectations. On the pull side, participants utilized several different strategies to determine which markets hold the most potential for penetration. Firstly, firms used a framework that ranked different countries based on a wide variety of indicators. Further pull factors included geographic proximity, market similarity, networks, customers and partners. Finally, the framework and market research was supported by travel to markets to understand the dynamics where information is not readily accessible via other channels.

6.4. Results: Research Question 2

What internationalization barriers do EM digital INVs face when internationalizing.

This research question aimed to understand the critical barriers that technology-based INVs face when internationalizing. As discussed in Chapter Three these firms predominantly saw other emerging markets, specifically in sub-Saharan Africa, as their potential expansion destinations. As a result, the barriers firms face provide insight into the unique context of the region's business environment. Respondents identified seven key barriers they faced when internationalizing; financial, cultural, regulatory, internal structure, human capital, market infrastructure, and lack of information.

Table 4 Barriers to Internationalization Thematic Analysis

Topic (Code)	Category	Theme	Quote
Financial Barriers	Barriers to internationalization	Financial Capital	It was very capital intensive, because we needed to build up distribution - GetPaid
Regulatory barriers	Barriers to internationalization	Context of emerging market	Every country has its own regulatory hurdles – Remitme
Regulatory barriers	Barriers to internationalization	Regulation	As an entrepreneurial kind of Start-up business, to work with regulators at the pace that a regulator goes at... it's a challenge - GetPaid
Fragmented regulation	Barriers to internationalization	Context of emerging market	Markets are very fragmented from a demographic point of view, from a regulatory point of view - HConnect
Culture barriers	Barriers to internationalization	Context of emerging market	It's very difficult to market to community that you don't come from, because it's often cultural and language barriers - Paynow
Language barriers	Barriers to internationalization	Geography	You know the thing that makes sense is you going to your neighbour as opposed to going somewhere on the other side of the continent, like Angola, I don't speak Portuguese, language is similar - DevBuild

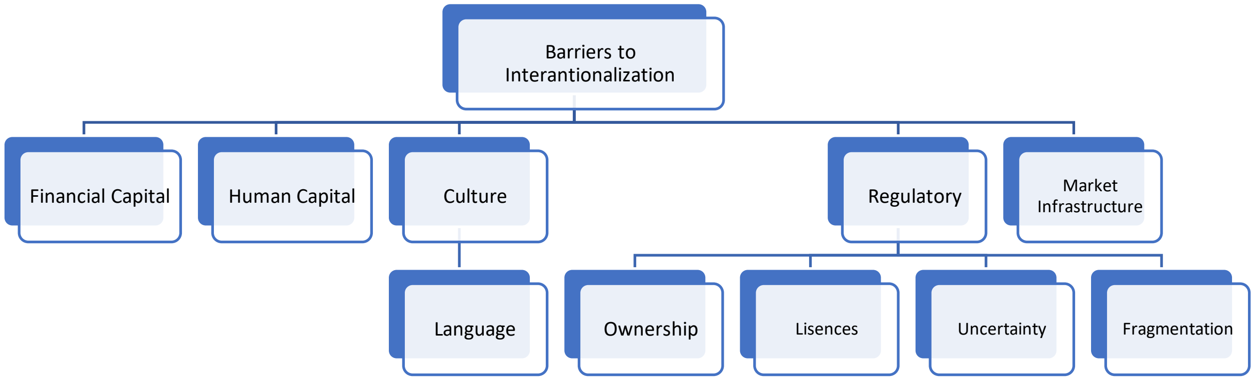


Figure 3 Overview of Results for RQ2

6.4.1. Financial Capital Barriers

One of the prerequisites of expansion is financial capital to build teams and products in new markets. As discussed in Chapter One, venture capital funding is increasing across the continent; however, it is still in its infancy as a share of the global venture capital market. Eleven of the twelve firms interviewed had received funding via the venture capital route, thereby showing a tendency for such firms to seek capital to drive growth initiatives, including internationalization. As a result, financial capital was seen as a critical constraint by firms that relied on this kind of investment, in this case ten of twelve firms. A number of respondents discussed the challenges involved with raising capital.

> "The hard constraint that we had, which was our budget" MobileTools

> "The next threshold, in terms of funding that is needed in order to actually power that scaling plan" Demonow

However, once firms have sufficient funding, three respondents noted the barriers posed by investors themselves to achieve their desired internationalization targets. Once funded, firms faced pressure to expand internationally, thereby leaving firms stretched for resources and pressured to show results. This represented a rift between entrepreneurs and funders who may not understand the firm's internal workings and were more driven by headline numbers, such as the number of countries the firm operates in, to determine success.

> "And it’s something people and investors need to be aware of because I know there are a lot of expectations especially for a lot of the fundraising opportunities that happen. It’s like you know you’ve raised x amount of money go forth and expand. There’re all these expectations that once you expand, those returns are going to be quick fast" DevBuild

> "From a fundraising perspective, people really like to talk about the pan-African narrative, and the top line, you know, numbers as it relates to like the African market as a whole and not just any one given individual country" InstaNews

6.4.2. Regulatory Barriers

The most common barrier raised by respondents to internationalization was regulation in host markets. The regulatory barriers fall into several categories. Firstly, the cost and challenges associated with acquiring licences, this was most common for firms in the financial services industry. The second barrier discussed was the regulation of local ownership for subsidiaries. The third barrier was the fragmented regulatory environment across countries. The last regulatory barrier was the uncertainty of regulation.

Firms discussed the challenges of regulation in making business for foreign firms difficult, thereby giving host country firms an advantage. This challenge was emphasized due to the complexity of entering multiple markets at once, as discussed in the subscale sections of findings. The pressure to internationalize to numerous markets due to venture capital funding led to regulatory challenges due to the fragmented regulatory environment across the continent.

> "We were dealing with so many regulatory and administrative and operational environments that are very different from our home markets" MobileTools

> "First of all, you're scared of the regulator. You're scared that the regulator is going to give you a cease and desist letter, or they're going to change up the model or change up something that is going to mess up your or your business model or completely dig into your profit… it's a jungle out there" Demonow

6.4.2.1. Licencing Regulation

Licensing issues were raised by four participants, all of which operated in the financial services industry. Each of these firms highlighted the challenges of obtaining a licence to operate as a key barrier for internationalization. These licences can often be exorbitantly expensive and time-consuming to acquire. Furthermore, as many of these firms are building novel products, some countries did not have the necessary regulation to grant licences for specific products, thereby causing delays in operationalizing.

> "If we're doing payments obviously you need payments licenses from the national bank and regulation" DevBuild

> "Because the regulator tends to be conservative so they say if I don't have a license I can't do it" RetailAssist

6.4.2.2. Ownership Regulation

Some firms used partnerships and acquisitions to overcome the licensing challenges; however, even regulation surrounding this route posed barriers. Many countries have regulations that required local ownership of firms or a certain percentage of local shareholders. In three cases, respondents highlighted these issues as posing significant barriers to their internationalization initiatives.

> "Setting up the local entity and company and get it setting up your board structures, those are just things that are difficult to do" GetPaid

> "For example a country like Ethiopia if you're doing joint venture, it would cost you $150,000 of initial capital investment, and that's with a local partner" DevBuild

6.4.2.3. Fragmented Regulation

Six of the participants discussed the challenges faced when expanding to multiple markets. As there are limited regional agreements for regulation on the continent, firms face multiple different regulatory environments simultaneously. This posed issues as each country had its own requirements, leading to firms needing to develop deep legal compliance capabilities across many markets.

> "Now, one of the things that's been really important to consider is just how differently each country operates in terms of the regulatory environment. So not only is there no

streamlined framework, even within certain regions, where is very different requirements in terms of what different applications mean" Remitme

"Challenge is twofold, firstly the regulatory environment is fragmented, second of all depending on what you need there might just not be a regulatory environment at all" RetailAssist

6.4.2.4. Uncertainty of Regulation

The next regulatory barrier raised by respondents was the uncertainty of regulation. This uncertainty was raised by five participants that discussed how large investments were often at risk due to the sudden changes of regulation across markets on the continent.

"I think basically regulation policy... becoming politicized it means that the government and national regulators can change very quickly and what the rules look like" DevBuild

In 3 cases, firms discussed the need to work with regulators to mitigate the risks associated with regulatory uncertainty. In some cases, this even involved helping shaping regulation to pre-empt potential regulatory barriers in the future.

"I do also think that depending on the product or service again, like, there are like, regulatory sandboxes, and unique opportunities to work with the regulator." InstaNews

"That ability to almost try and understand the regulator and listen, but also be wanting to actively implement change and drive that change forward are probably the most important" GetPaid

One respondent discussed the need for a contingency plan in the event of regulations changing and needing to be ready for such a case.

"As any Start-up in Africa, you've kind of got to be ready for dramatic regulatory changes...you always need to need a backup plan... it's important that they keep a close connection to regulators. And I guess, you know, the Ministries as to what their current thinking is, what they're under pressure to do. And, in many ways, also be able to help shape what those policies could look like. So even though they might not interface with the regulators directly" - HConnect

Table 5 Barriers to Internationalization Frequency Table

Codes	Frequency
Regulatory environment challenges	14
Financial constraints	11
Human capital	11
Culture challenges	6
Language Barrier	3
Partnership challenges	2

6.4.3. Culture and Language Barriers

Six of the participants discussed culture and language as a barrier to internationalization. The reality across the continent is that counties are incredibly diverse in terms of culture and language, not only between countries but also within countries. As a result expanding firms faced a wide range of barriers on the cultural and language front. These respondents emphasized that cultural understanding is vital when internationalizing across the continent and other emerging markets.

> "I think the markets that we didn't get right, our cultural understanding of those markets was maybe not as good as others." GetPaid

In three cases, the business and social culture posed barriers and unforeseen challenges. One respondent spoke of specific expectations that partners demanded to seal a partnership.

> "In a small country, everyone is big and important, so there's some interesting psychology there in how people engage" MobileTools

In one case, a participant discussed the challenge of their distribution model not being culturally appropriate in one of their potential markets, leading them to face a fundamental challenge to reach customers in that market.

> "There are some cultural influences that they don't trust an agent" Paynow

In five cases, respondents discussed language as a barrier to internationalization. This challenge spanned from customer communication and education to dealing with regulators.

> "There was a language barrier that was an issue for some of the markets" MobileTools

One of the respondents discussed how language was a barrier to understanding and communicating with regulators in different countries.

> "Meeting a regulator, it's never easy. When you meeting a regulator that speaks French or Portuguese, in different countries, that makes it even harder" GetPaid

6.4.4. Human Capital Barriers

Eight of the participants discussed the importance of human capital for internationalization. This emphasis is driven by the specialized skills required to build technology products and to internationalize in a relatively unconnected region of the world.

> "Being able to find a very good talent, and be the right talent. So the right skill set is a huge issue for us." RetailPay

The barrier to this resource is the scarcity of such skills across the continent due to a lack of education, brain drain, and a lack of developed industries that upskill workers to perform specialized internationalization tasks. A testament to this is that most of the respondents were either working for a tech firm for the first time or internationalizing the first time in their careers.

6.4.5. Lack of Market Infrastructure Barriers

Three respondents discussed the lack of market infrastructure as a barrier to internationalize successfully. In two cases, the firms that discussed this barrier were based in South Africa, a country with a relatively more developed business ecosystem and more vital institutions. For such firms, the challenge came in adapting to less-developed business environments in other countries. One of the firms discussed a mitigation strategy for this barrier, which was to have multiple partners in the host country that could be activated in the event of a partner’s infrastructure failing due to power outages or other circumstances.

> "We may have an integration in the DRC with one aggregator, but we'll have that exact same offering with another aggregators, we've always got a failsafe over in the event that one aggregator is down or not." Paynow

In one case, the lack of reliable market infrastructure led to the firm not providing certain services in the market as this would lead to a risk of customer relationships if infrastructure failed, and the firm was blamed for this.

> "One of those examples would be being able to do Municipal and Bill settlements, and that's a product that we offer. But if a municipal network goes offline, and we don't get notified, there's nothing we can really do to rectify that experience for the consumer." RetailPay

Three of the participants discussed lack of market information as a barrier to internationalization. As discussed in question one, this lack of information inhibits firms to effectively make the best possible decisions, thereby increasing risk and uncertainty in the internationalization drive. As there are limited market research firms and public sector research institutions on the continent, firms must find innovative ways to gather and analyse data on countries and their specific industries.

"Public information about various countries. It's not necessarily easy to come by" Demonow

6.4.5. Summary of Results for Research Question 2

Findings for research question two can be tied back to the context in which EM digital INVs operate on the continent. The constraints which firms face are unique in two ways. Firstly, as markets are subscale, firms look to expand to many markets at once, thereby adding to the complexity of the internationalization, such as dealing with fragmented regulatory environments and lack of market information. Secondly, the lack of deep financial markets in the region highlights the challenges firms have to raise capital.

However, these barriers may also pose opportunities for firms. As firms need to develop capabilities to operate in these challenging business environments, they are better adapted to deal with the challenges, thereby potentially creating comparative advantages to firms whose home market is outside the region. The following sections will describe how firms overcome the barriers discussed above, firstly in strategy for entry mode and secondly in the kind of resources that are developed to succeed in this environment.

6.5. Results: Research Question 3

What are the resources required for EM digital INVs to identify and exploit opportunities in foreign markets?

This research question aimed to understand what resources firms develop to identify and exploit opportunities across borders. EM digital INVs in emerging markets, specifically Africa, operate in a unique context with conditions that drive firms to structure and execute expansion in novel ways. To effectively identify opportunities, overcome barriers and execute entry, firms developed a unique set of resources that facilitated successful internationalization. As technology firms are asset-light and therefore have few tangible resources, the responses to this question predominantly centred around intangible resources. Due to such firms' nature, very few resources were noted across all respondents. This resulted from the fact that firms relied heavily on the innovativeness of their technology and expansion teams to overcome challenges across disciplines and various markets. The resources highlighted included financial capital, human capital, and knowledge.

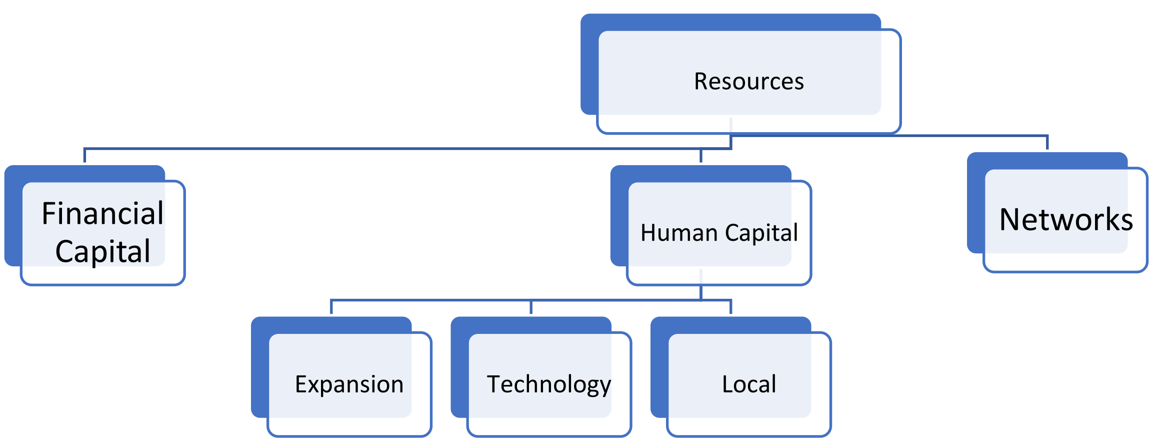


Figure 4 Overview of Results for RQ 3

6.5.1. Financial Capital

The key tangible resource highlighted by respondents was financial capital. In most cases, this capital was acquired through venture capital funding; however, some firms also used organic growth to fund their expansion drives. As discussed in Research Question 1, venture capital investment played a significant role as a driver for internationalizing EM digital INVs in the studied geography. As a result of this driver, in nine cases, respondents identified financial capital as a critical resource for executing international expansion.

> "If I wasn't able to have that capital that these partners provide, I wouldn't be able to launch my business" - DevBuild

In one case, the participant discussed that the more financial capital they had, the more ambitious the market entry could be.

> "If you're going into a big market you're probably going to need a bigger investment to make it work, so it becomes a financial question, and you need to have some sort of clarity on your ROI because the bigger the bet taking place, the bigger of a risk or potential reward you can get" – RetailAssist

Table 6 Results Resources Thematic Analysis

Topic (Code)	Category	Theme	Quote
Financial resources	Resources for internationalization	Financial Capital	There're requisite sort of financial resources that are needed for market expansion" - InstaNews
Human capital resources	Resources for internationalization	Strategy	I think the biggest constraint you can have as head of strategy when I'm trying to map out how to enter a market is exactly that, talent and capital - Care Assist
Expansion team	Resources for internationalization	Culture	They sort of play a bridging role between the headquarters organization and the remote or local office because they're the ones in the country and they're the ones understanding what's really going on - MobileTools
Technical team	Resources for internationalization	Context of emerging market	So our type of business requires quite a lot of specialized digital skills, which are quite difficult generally speaking to find within South Africa - RetailPay
Local team	Resources for internationalization	Context of emerging market	It's going to be quite important for you to also be composed of people who are from those regions that you want to expand to - Demonow

Local culture	Resources for internationalization	Context of emerging market	It's going to be quite important for you to also be composed of people who are from those regions that you want to expand to - Demonow

6.5.2. Human Capital

The second most common resource discussed by participants was human capital. This human capital came in different forms, expansion, tech, and local. These three forms of human capital featured due to the nature of the firms studied, as technology-based firms, technology specialized human capital was highly valued. Secondly, the type of the individuals and topic learned lent itself to focus on the team that was executing expansion. In ten cases, the participants had specialized teams specifically responsible for internationalization, thereby emphasizing the need for human capital in the expansion equation. Finally, the local human capital element was discussed, which predominantly featured due to the need to understand local markets where the home country team may be at a disadvantage due to language, network and cultural barriers. Three respondents emphasized the quality of human capital was more important than the quantity.

> "Biggest thing was people, you just need people, you don't need many people you can do it with a few people as long as they are smart and dedicated" - MobileTools

> "Talent piece shouldn't be understated, as it can be like a huge, huge positive or negative. Depending on if you can or cannot find the right talent in terms of resources for expansion" - InstaNews

6.5.2.1. Expansion Team

Four of the cases specifically discussed the attributes of expansion teams as a core resource for successful internationalization. This typically led to descriptions of a group of generalists (working across teams such as technology, legal and marketing) that are able to operate in conditions of high ambiguity and lack of information.

> "I think the single biggest thing is a can-do attitude to want to get it done. Because I think that a lot of the things, you're trying to do… that people might not have done them before." – GetPaid

> "One thing that really stands out is the bias against action, we just took action despite many unknown unknows, we were comfortable with figuring things out as we were going, which I think many companies just don't have the stomach or the appetite for that type of risk" - MobileTools

Two of the respondents discussed the importance of the expansion team in shaping the culture of teams or subsidiaries in foreign markets.

> "One of the toughest things to be able to, you know, transplant is culture. And so it sounds to me, like some of the more successful examples I've seen are when the expansion team actually originates from the founding team, or a member who has been involved in the organization force very early days" HConnect

6.5.2.2. Tech Team

The tech team was mentioned the most within human capital, primarily due to the importance of technology specialists for firms that sell products and services based on technology. This technology talent resource was vital due to the limited technology talent pool across the continent, specifically software developers.

> "I would say one of the key foundations is our team of engineers" Remitme

> "Our product teams have inhouse technical capacity so if there's anything that's technically required for the markets they'll pitch in" - DevBuild

One of the participants noted that a better technology team needed to hire less operational staff, thereby driving down initial expansion costs.

> "And because we are a tech platform, we required very little operational staff in the beginning. So we were able to go from country to country to country with a call centre of 12 people" Paynow

One respondent discussed how tech resources could be developed within the community through several avenues, including hackathons. Specifically, this firm incentivized developers to build on top of their infrastructure, thereby fostering the development of talent for their potential tech talent pool.

> "In terms of developer relations: hackathons. Africa's Talking have a lot of open-source material and documentation because we want to be able to empower and upskill. Ideally, it would be great if they built solutions to go on top of our infrastructure but really promoting engineering excellence within our communities" DevBuild

Finally, in one case, a respondent discussed the need for the technology team to understand the local market as the technology is determined by the context in which consumers live.

> "I think it's really important for the technology team to really spend time in that new market, and have as many local technology partners as possible to understand how things are built there, I think very often you find that, you know, some kind of process flow in one market really doesn't work or translate into another" HConnect Fu

6.5.2.3. Local Team

Three respondents discussed the need to hire local resources. The reasoning for this ranged from liability of foreignness, language, cultural understanding and local networks.

> "You need to be able to sort of know and have that pre-existing network that helps you connect to others right in the healthcare space and I think that's why we prefer to hire locally so that we have that network within our reach" Care Assist

> "It's very difficult to market to community that you don't come from, because it's often cultural and language barriers. So, for example, if we want to expand into Somalia, I will go and find one of my team, who will go and find some of the Somali community members, and the community leaders, they will recommend two or three people who would be great to get good influence within the market, within that community" - Paynow

Finally, one of the respondents discussed the challenges of finding the best talent in a market where there might be a limited supply of the right kind of specialized skills. They highlighted their network as a resource to effectively acquire the right talent for successful internationalization.

"Network, I would say that's really the biggest way for me to tackle this, to rely on my network to find the best talent" - Care Assist

6.5.3. Networks

Participants emphasized that networks were used to overcome internationalization barriers such as regulatory hurdles and lack of information. Ten participants discussed the importance of networks to identify international opportunities and exploit them. Participants discussed how networks were essential in sub-Saharan Africa's challenging business environment due to a lack of reliable judiciary institutions, which meant that business relationships relied more on trust.

6.5.3.1. Networks to Overcome Lack of Info

Six participants highlighted that networks were used to gain access to market information. These firms discussed the absence of typical market institutions in emerging markets that provide such information in more developed ecosystems. Instead, networks of trusted contacts provided access to on-the-ground information.

"It goes through people, the main thing we found here is to speak to people in the ecosystem who know and can provide you with an opinion because there's no data" RetailAssist

Along with lack of access to market information, information on potential partners or customers was equally challenging. Three participants discussed how networks were used to vet potential partners.

"And the best thing sometimes is third party verification where somebody else who doesn't know them necessarily knowing you, but they can just give you an unvarnished view of that company or that person" DevBuild

One participant discussed how they implemented a strategy to tap into a network in host countries by hiring local people. They argued that this gave immediate access to the local network of their industry within the country, thereby allowing them to gain access to information and resources otherwise challenging to acquire for a foreign firm.

"You need to be able to sort of know and have that pre-existing network that helps you connect to others, in the healthcare space especially, and I think that's why we prefer to hire locally so that we have that network within our reach" Care Assist

6.5.3.2. Networks to Overcome Regulatory Challenges

Along with access to information, one participant noted that networks provided avenues to overcome regulatory challenges in markets that are not known to have the most stable regulations. This participant alluded to practices that would not have been feasible in more developed markets but were common in the region they operate in.

"The fragmented regulatory environment that exists across the continent… we've done it well in Zambia. But we are, you know, we have very strong Zambian connections"

6.5.3.3. Events Foster Network Development

Finally, one participant discussed acquiring network resources through specific events and programs. These events brought together people in the technology ecosystem from across the region, providing a fertile venue to make connections that would help firms access resources in the future.

"The technology community is a little bit more integrated… a lot of them share very similar investors, a lot of them might have gone through very similar programs. A lot of the community might also have, you know, seen each other pretty regularly at different conferences"

6.5.4. Summary of Results for Research Question 3

The results for research question 3 uncovered four key themes that tie back to previous questions. Firstly as discussed in Research Question 1, firms identified financial capital as the key tangible resources. Due to firms' structure as technology venture-backed firms, a large pool of capital was required to begin internationalization, especially to multiple markets, which was the norm for firms studied. Secondly, as firms did not have access to large pools of capital, human capital efficiency was highlighted as vital for successful internationalization. Therefore, the expansion and technology teams had to be highly efficient and able to problem solve well beyond the size of their teams. This led to highly specialized teams forming that built resources designed explicitly for internationalization to other emerging markets. Within these teams, specific knowledge resources were developed, including capabilities to overcome regulatory and compliance challenges. Ultimately, resources that firms developed were shaped by the barriers to internationalization and affect the entry modes firms decide to utilize to enter a new market.

6.6. Results: Research Question 4

How do entrepreneurs determine which entry mode to use when internationalizing?

The research question aimed to understand how firms approach executing an internationalization once markets are identified as potential markets. For EM digital INVs, the process involves a wide range of activities, including adapting technology, building partnerships, and working with regulators. Ultimately, firms decide which entry mode is most suited to their business objectives. Many of these strategies are driven by the barriers firms face (discussed in research question 2) and the resources they have at their disposal when internationalizing. The research explores how such firms conceptualize different entry modes and execute expansion drives.

Market entry is determined by a wide range of factors, including market potential, host market conditions, financial resources and human capital. Entry mode is a trade-off between the commitment of resources and the potential for reward. The market entry options can be broken into organic and inorganic categories. Organic entry modes refer to non-equity entry modes such as exports and partnerships, whereas inorganic entry refers to equity entry through acquisitions. The nature of technology firms means that organic entry often involves developing partnerships as many firms, such as in the financial services industry, need to tap into a backend infrastructure. Inorganic entry mode was relatively uncommon due to the limited number of EM digital INVs in the region with the financial resources to purchase other firms.

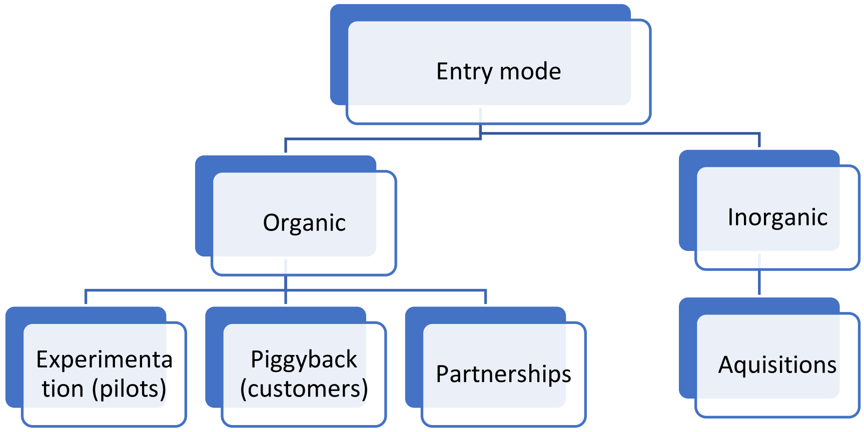


Figure 5 Overview Results for RQ4

6.6.1. Organic Entry Modes

Organic entry modes are routes firms take to entry markets that do not require equity investments, such as exporting, franchising and licensing. The organic market entry route is seen as a strategy that requires more resources and commitment while providing the most potential for reward. Of firms participating in the study, three organic entry strategies were identified: following partners or customers (piggyback), local partnerships and experiments (pilot). Of these entry modes a number of firms implemented a combination or sometimes utilized different modes depending on the dynamics within the market they were entering.

Table 7 Results Entry Mode Thematic Analysis

Topic (Code)	Category	Theme	Quote
Experimentation as entry mode	Entry mode	Strategy	We treated expansion countries as experiments and we did not hesitate to shut down countries that we thought were not working - MobileTools
Partnerships as entry mode	Entry mode	Strategy	Do you have the funding and the support system, and the on the ground partnerships, to be able to actually enter that market - Demonow
Entry mode not linear	Entry mode	Expansion Team Features	Even markets that are right next to each other, a lot of the time you can hire one person on a part time basis to sort of like plug the gaps that you can't plug because you're not in the country and then the rest of the gaps can

			be plugged by the technology or the operational team in the headquarters so it's actually pretty efficient that way - MobileTools
Framework for expansion	Entry mode	Strategy	That's basically how we look at expansion, the two-way thing. Market research on one side and client driven on the other - DevBuild
Experimentation as entry mode	Entry mode	Expansion Team Features	You need technical capabilities, you need commercial capabilities you need legal capabilities you need go-to-market capabilities, marketing and branding. You're taking a thin slice of all the capabilities of your company and applying them to a new market - RetailAssist

6.6.1.1. Experimentation (Pilots)

The unique context of subscale markets across the continent led four firms to take the pilot (incremental) approach to market entry, going the organic route but utilizing a small-scale experiment to see whether they could achieve product-market fit.

> "We've identified our market, that's step one, step two is that we actually draft up a strategy with hypothesis, so for example in Kenya we want to enter with product X, lets hire 1-3 people to actually run with this strategy within that market and set a clear timeline of milestones we want them to hit, usually 6-12 months and then in these 6-12 months let's all sit down and evaluate whether this is a market that makes sense" Alex

> "We always pilot, come into the market with a very small customer base and then learn from them, get as much insights as we can, get as much knowledge as we can, to see what we need to tweak about the product and only when we've reached a critical scale of customers we usually find between 3 and 500 that is when we decide to officially launch the business" RetailAssist

In one case, a recipient described the low-cost potential of such pilots in African markets where small teams can run short-term pilots to test products in markets before determining to commit more resources to the entry.

> "Spin up significant operations in Uganda and Tanzania with like, $20,000 over three months. You know, you can very rarely do that in other markets, also from a cost base perspective" HConnect

One of the participants discussed that firms from certain countries tend to adopt this strategy directly from inception due to their home markets' small size. These firms use their home market as a pilot to build an initial product before expanding to other markets using a similar approach.

> "You would see another type of company who have very intentionally set up in much smaller markets to sort of test and prototype what they're building. Typical examples of these markets are Rwanda, Ghana, to a certain extent, you see, Tanzania and Uganda in there as well, with Kenya, obviously, as the larger market next door" HConnect

6.6.1.2. Piggyback (Customers)

The second organic entry mode identified by respondents was following partners and customers (Piggyback). These respondents discussed this entry strategy as a way to limit initial risks with expanding as there is already one or multiple streams of revenue to use to fuel the development of a local team and other overheads.

> "Based on the demand that we got from our clients, that’s kind of how we looked at expanding to certain markets and in a way I would say that that is a safe way to expand because it means that from the get-go, you already have a foundation or client pipeline" DevBuild

This respondent also mentioned that such an approach was implemented by their customers as well, so when they expanded to a new country, more of their home country customers would follow.

One respondent discussed how this customer-driven approach also facilitated further investment as it gave investors’ confidence in the potential of expanding to a specific market.

"Having one client that has a presence in other markets that you can tag along with in other markets along the road to build that narrative and that story to future investors (that) we're already in 3 countries, we need capital to achieve XYZ in those markets" Care Assist

6.6.1.3. Partnerships

Partnerships emerged as a key theme in entering markets; seven participants discussed partners' role in their expansion strategies. Firstly, firms operating in the technology space often rely on other firms' services to offer their products. This means that such firms are often working with multiple partners to launch their products in markets. As a result, when considering entry modes, potential partnerships are key considerations for such firms. Across the continent specifically, respondents highlighted the potential for partnerships to mitigate expansion costs. The more common reasons highlighted for partnering by respondents were the requirements of licenses and the cost to acquire them. Through partnerships, firms were able to decrease such costs and speed up the time taken to operationalize a market.

"The two main drivers cost and capabilities. So, the cost of actually obtaining and maintaining that license going forward, if it's extremely high, a prohibitive level, then we would consider a partnership. And then also the capabilities provided. So, does getting this license actually grant us all of the capabilities that we would need to operate independently? Or would we still be relying on partners for certain factors of our operations?" Remitme

"We kind of are very much trying to play to our strengths around product provision and then partner for regulation and those type of things." GetPaid

One participant discussed the opportunity to leverage partnerships to enter multiple countries. This involved finding a partner that already operates in multiple countries to integrate the technology into, thereby opening the opportunity to enter several markets faster and cheaper

"And you do one integration that essentially opens you up to multiple markets, and multiple power partners." - Paynow

One participant discussed how internationalization might come as an opportunistic moment either through an event or partner in the home market.

> "These companies, you typically will see them in a home market for, you know, three, even four years, and they only would look outside if there's, you know, an opportunity, an opportunistic, kind of event or partner that's come in" HConnect

However, partnerships came with a host of challenges, including cultural, vetting and legal. One participant discussed the differences in the business protocol that made partnerships in certain countries more expensive and time-consuming than in others. The noted that it was in smaller markets where these challenges were more pronounced, suggesting that a lack of competition led to relaxed business practices.

"It ended up being a lot more challenging than we thought due to again like the environmental factors the attitudes of partners who we wanted to partner with" MobileTools

6.6.2. Inorganic Entry Modes

Four of twelve participants discussed implementing inorganic (equity) entry mode options, either by merging or acquiring firms in the host market, they were looking to enter. However, as firms participating in this study are EM digital INVs, they typically did not have the financial capital to acquire in host markets. Acquisitions are generally capital-intensive entry modes that require a strong commitment to the host market, a strategy that most firms participating were actively avoiding. As discussed previously, entry mode was driven in part by barriers firms face when internationalizing. For inorganic entry modes, barriers that affected choices were most commonly regulatory, human capital and technology.

In several cases, acquisitions were utilized as entry modes. A number of these firms did so with similar intentions as the partnership organic entry mode strategy, thereby acquiring required licencing in the host country that would be expensive and time-consuming to get directly. Therefore, acquisitions seemed to be an extension of this strategy, thereby reducing long-term operating costs associated with fees from a partnership agreement.

However, in all cases, these firms utilized other entry modes for other markets, thereby displaying that acquisitions were not the only mode used and that a case-by-case strategy was adopted.

> "Here the trick is you need to look at it market by market, the more challenging a path organic growth is, the more attractive inorganic growth is and the other way around. If it’s going to take me three years to build the team, do the technical integration and launch,

> then I'm probably more inclined to look at inorganic growth and partnerships and those kinds of things to accelerate time to market" RetailAssist

> "You're going into a market you're acquiring a company, you're acquiring a company for three reasons, revenue, tech or talent. And the truth is in the best of all worlds, you have all three, in an ok world you have two, and in a we really want to expand here you just get one" Care Assist

In one case, a respondent observed that such entry modes were on the rise due to more capital entering the technology market across the continent, thereby driving smaller firms to acquire earlier.

> "My gut tells me that we're going to see more acquisitions of this kind. And again, it's a function of markets (being) subscale, people are raising at pretty high valuations right now." InstaNews

6.6.3. Failed Expansion Lessons

In two cases, participants developed understandings from failed attempts to internationalize. These failures were driven by several factors, including lack of funding, lack of product-market fit, and time perception. In both cases, the attempts were conducted through a short-term pilot that aimed to understand the market dynamics and potential expansion initially. Such pilots typically involved low levels of investment and commitment of resources. In each of these cases, the firms ended the pilots and refocused on the home market or other expansion targets.

"The other big thing we learnt is that as you scale and grow you want to keep your product and core customer value proposition very similar, otherwise you start building different companies for different markets and then you lose all the economies of scale that a market expansion would bring to you… Those were some of the big learning that we had from some of the pilots that we ran."

In this particular case, the learnings meant that the market entry was no longer viable, and these firms pulled back to focus on the home market.

6.6.4. Summary of Results for Research Question 4

Research question four shows that EM digital INVs utilize a wide variety of entry modes when internationalizing. These modes are determined by a range of factors that tie back to host countries' business opportunities, the barriers to internationalizing, and the resources and capabilities of firms to exploit these opportunities.

These factors range from financial capital to overcoming regulatory hurdles such as licencing fees. Ultimately, three types of organic entry modes were highlighted by respondents, experimentation (pilots), piggybacking and partnerships in the host country. Although identified in limited cases, inorganic modes were also discussed by respondents, namely acquisitions of local firms to facilitate entry. Although barriers (discussed in research question 2) were a significant determinant to entry mode choice, internal resources firms also played a significant role in executing internationalization effectively.

6.7. Conclusion

This chapter summarizes the findings that respondents discussed to the research questions posed in Chapter Three. The finds show that firms were driven to expand based on two push factors, the subscale markets they were founded in and the venture-backed model they used to raise capital.

Once internationalization was determined, several methods were used to identify target markets, including quantitative and qualitative frameworks, geography, networks, partners and customers. Many barriers were identified that firms face when expanding across sub-Saharan Africa and other emerging markets. The findings suggest that the barriers fell into seven key categories that firms highlighted; financial, cultural, regulatory, internal and lack of talent, information and market infrastructure. These barriers were crucial factors that affected how firms chose to enter identified markets. Question Three investigated the resources that firms require to internationalize effectively. The three most cited resources were financial capital, human capital, and networks. Finally, entry modes were investigated, which were driven by firms overcoming barriers and the ability to acquire resources. Of the entry modes, firms discussed, respondents highlighted two categories, organic and inorganic. Organic entry modes were split into three main modes: experimentation (pilot), piggybacking and partnerships. Inorganic entry modes were less commonly utilized but typically came in the form of acquisitions that helped overcome regulatory, talent and technology challenges.

Ultimately, the firms interviewed faced many of the same challenges in their markets, driven by the challenging business environment across the continent. Although these challenges caused significant hurdles for firms, their ability to overcome them facilitated their competitive advantage and provided business opportunities.

The following chapter will discuss the results in relation to past literature.

Chapter 7 - Discussion

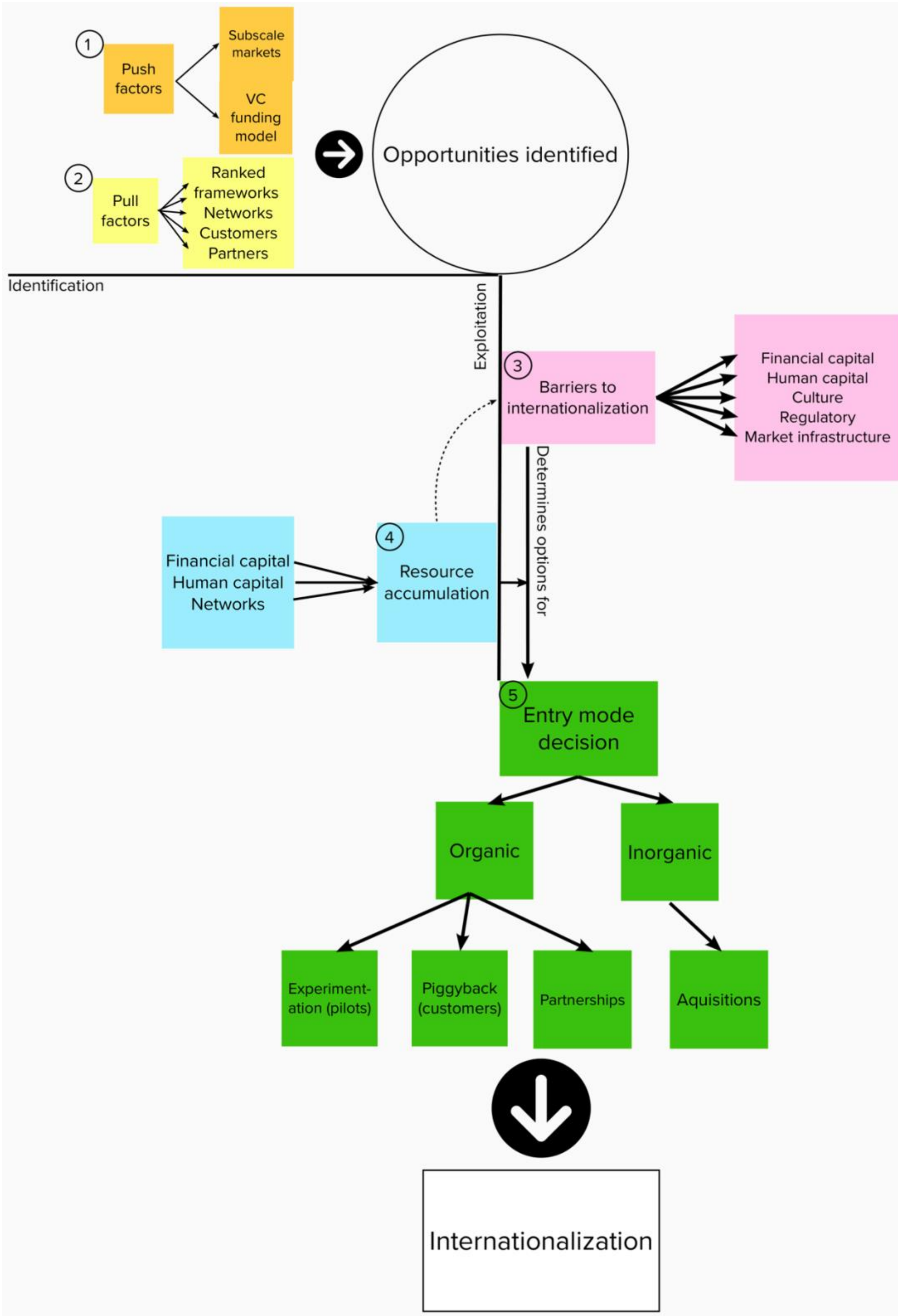
7.1. Introduction

This chapter contains a discussion of the research results outlined in Chapter Six. The chapter includes a five-stage model based on the research questions' results. Following this, the chapter is divided into sections highlighting each research question, comparing results from this study to previous literature. Thereby, the chapter builds on previous literature to make the first foray into the empirical study of EM digital INVs in the context of sub-Saharan Africa.

7.2. Development of EM Digital INVs Internationalization Model

Based on the results, empirical findings led to the development of a model that explains how EM digital INVs in the context of sub-Saharan Africa identify and exploit international opportunities. This model was developed based on the analysis of results, driven by the interview questions' findings. As such, the model is limited to what the researcher was able to ask respondents. Therefore, there is an opportunity to extend this model and understand the broader factors that influence opportunity identification and exploitation for the firms studied.

Figure 6 EM Digital INVs Internationalization Model



The model is split into five stages. Stage One describes factors that drive firms to decide to internationalize, called "push factors". The push factors were twofold, firstly markets across the region (sub-Saharan Africa) were seen as subscale for the EM digital INVs studied, this meant that firms naturally tended to internationalize early. This supports findings of technology start-ups internationalizing fast and early (Cavusgil & Knight, 2015). Secondly, the predominant VC funding model of EM digital INVs studied led to pressure to reach rapid growth, thereby driving firms to expand and often to expand to several markets simultaneously (another factor of subscale markets on the continent).

Stage Two of the model describes “pull factors” of opportunity identification. These factors determined what markets were identified as holding opportunities. The pull factors included systematic searches (through ranked frameworks), networks, customers and partners. Pull factors led to specific countries being identified as potential destinations for internationalization.

Stage Three of the EM digital INVs internationalization model dealt with barriers to entering a new market. These barriers lay the groundwork to understand the contextual challenges of the business environment in which the EM digital INVs were operating. The most common variables raised by respondents were financial capital, human capital, culture, regulation and market infrastructure. These barriers ranged from country to country and posed particular challenges for firms internationalizing across the continent. The fragmented regulatory frameworks of countries in the region added further complexity to firms that embarked on multi-country expansion campaigns.

According to the entrepreneurial process applied to this research, market entry must be preceded by the accumulation of resources (Gruber, 2002). Stage Four of the model identifies key resources highlighted by firms: financial capital, human capital and networks. The accumulation of necessary resources either from external sources or from reallocation within the firm enabled the execution of new market entry. The ability to accumulate resources drove the type of entry firms could pursue.

Stage Five of the model was entry mode decisions, which determine the roadmap firms needed to develop to execute internationalization. The barriers firms face in specific countries and the accumulation of resources was a fundamental factor for the entry mode decision. Firms highlighted four main entry modes, split into organic and inorganic entry sub-categories. Organic entry included experimentation (in the form of pilots), piggybacking current customers, and forming local partnerships. Inorganic entry was less common but consisted of acquisitions. Entry mode for a particular firm was not fixed across all markets, as different strategies were adopted based on the context of each individual target market. Lastly a number of the entry modes could be used together, again depending on the context.

Ultimately this model has been developed to understand EM digital INVs in a particular context. The results identify unique conditions within the region that determine how firms behave, whether through internationalization barriers or limited access to resources. The empirical findings illuminate a type of firm that has previously seen little research in the literature, specifically in the context of sub-Saharan Africa. As this industry and such firms are gaining importance as intermediaries in their markets, there is a lack of understanding of how they operate and succeed.

The following sections will break the model into segments, delving into the previous literature on the international entrepreneurial process and INVs and discussing similarities and contrasts with results from this study.

7.3. Discussion: Research Question 1

How do entrepreneurs identify opportunities in foreign markets and specifically determine into which markets to internationalize.

The research question sought to understand what drives EM digital INVs to internationalize and how they identify opportunities in foreign markets. Extensive research has been conducted into entrepreneurial opportunity identification and international opportunity identification (Angelsberger et al., 2017). However, the researcher did not find studies investigating how EM digital INVs in sub-Saharan Africa identified such opportunities. This research will expand the current literature to make the first foray into the study of these firms specifically. The discussion will investigate themes uncovered in the results and compare them to past literature on international opportunity identification.

7.3.1. Push Factors (or Motivators)

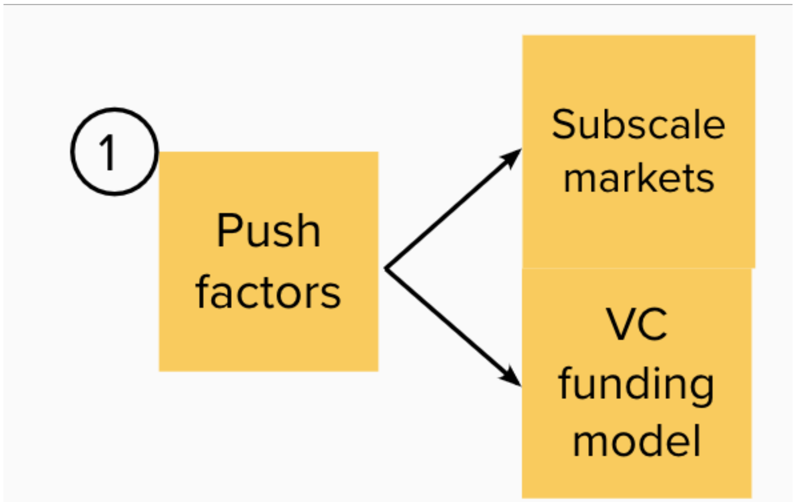


Figure 7 Discussion for RQ 1 - Push Factors

7.3.1.1. Subscale

One of the critical reasons firms provided for internationalization was the relatively small markets in sub-Saharan Africa. Markets are small for EM digital INVs because of low technology penetration and low disposable income, thereby decreasing the kinds of products firms can provide to customers (Ngoasong, 2018). Respondents discussed how their market's small size drove them to think about international opportunities early in their development. This finding supports Deng (2004), who argues that emerging market firms often internationalize early due to their home markets' small size. This dynamic, coupled with the opportunity to grow rapidly through a venture-backed model (discussed below), drove firms' internationalization relatively early. Several respondents also noted that similar markets in the region are also subscale, therefore firms often internationalize to multiple markets at once. This supports findings by (Luostarinen & Gabrielsson, 2006) that suggests that fast-growing and internationalizing technology start-ups have a high probability of coming from smaller markets.

7.3.1.2. Venture capital

Eleven out of twelve firms interviewed were funded through venture capital. Respondents highlighted that access to capital provided them with the resources to expand domestic operations and internationalize. Prior research of venture capital-backed firms has suggested that they grow faster, patent more and have higher productivity than firms not backed by such capital (Croce et al., 2013). Venture capital provides additional benefits such as access to networks and continued business support from investors (Bottazzi & Da Rin, 2002). Several participants discussed the benefits of venture capital funding, such as access to international networks, to find additional funding sources.

Venture capital firms take on a significant risk investing in firms without a proven track record and in their early stages of development (Korteweg & Nagel, 2013). As a result, VC-invested firms are expected to grow rapidly to make the investment pay off (Ruhnka et al., 1992). Firms that fail to achieve this but continue to survive are deemed "living dead" as they do not reach the multiples of returns expected from venture-backed investments. Ruhnka et al. (1992) argue that one condition for such firms is that their markets were too small. In this study, firms supported the findings that venture capital firms drive internationalization as there is pressure to grow quickly.

The venture capital model and pressure to internationalize early raises questions about the long-term viability and sustainability of EM digital INVs in emerging markets, particularly those studied in this research. The push factor driving early internationalization may give firms short-term resources but inhibit them from focusing on building viable products in their home markets. One respondent discussed this form of capital as a potential inhibitor for long-term success, as firms may concentrate on hitting metrics to raise more capital rather than business fundamentals that will lead to long-term sustainable growth. This observation leads to an opportunity to explore this phenomenon further in emerging markets, specifically sub-Saharan Africa.

7.3.2. Pull Factors

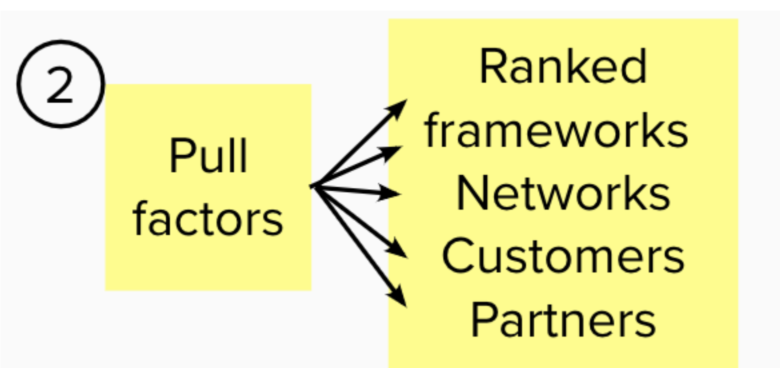


Figure 8 Discussion for RQ 1 - Pull Factors

The push factors discussed above, set EM digital INVs in sub-Saharan Africa apart from other firms. Not only are firms driven to find international opportunities due to their funding model, but they are driven to seek such opportunities in multiple markets at an early stage in their development. There have been no empirical studies conducted on international opportunity identification for such firms, garnering the opportunity to extend the current research. Therefore, the discussion will focus on themes uncovered in the analysis of results and draw parallels to other types of firms and similar firms in different contexts.

The most common strategy EM digital INVs took was utilizing systematic searches through an expansion framework. Dana and Wright (2009) argue that some firms take a "reactive approach" to opportunity identification, whereas others take an "opportunity seeking" approach. Therefore, EM digital INVs tended to take an opportunity seeking approach. The firms researched develop frameworks that were similar to each other, consisting of qualitative and quantitative research, and ranking a potential country destination on variables such as macroeconomic indicators, market potential, competition and regulatory challenges. These systematic strategies were reinforced through visits to potential markets for qualitative research and building initial networks.

This differs from Mort and Weerawardena (2006) findings that suggest comparable firms, born globals, often have limited resources that inhibit the ability to do market research and visits to markets. Two key variables stand out that may explain the opportunity-seeking approach for EM digital INVs in this study. Firstly, firms in this study had almost all raised venture capital funding, often specifically for expansion objectives, suggesting that there was a budget that could be spent on a systematic search. Secondly, markets in sub-Saharan Africa are cheaper (in terms of labour and other research costs), suggesting that firms may perform systematic searches with fewer resources in this emerging market context. These findings were supported by Fan and Phan (2007) that argue that INVs (and born globals) are not a distinct group of firms that behave completely similarly but instead are influenced by factors such as the size of the home market, geography, economic forces and culture.

When determining what markets to include in a systematic search for potential markets, respondents discussed two factors, geographic distance and market similarity. Geographic distance was highlighted as having lower associated costs, natural similarities in culture and potential trading ties. Market similarity included variables such as demographics, culture, politics, and industry dynamics. Kraus et al. (2015) found that perception of risk increased for internationalization destinations that had further distance in geography, culture, economy and political system. This was similar to firms investigated in this study, as only two internationalized outside sub-Saharan Africa. And of those two, both were expanding to the Middle East, also relatively close in proximity.

In a comparative study of firms internationalizing close to home markets and distant markets, Piantoni et al. (2012) found that firms were more likely to use a systematic approach for distant markets. Although geographic distance comparisons of internationalization targets were not studied in this research, a similarity could be drawn here because countries in sub-Saharan Africa were described as relatively different from each other in terms of regulation and culture. As a result, EM digital INVs in the region studied may have taken an approach similar to those surveyed by Piantoni et al. (2012) by adopting a systematic approach to analyse markets different in regulation, culture and language.

McDougall (1994, p. 479) argued that INVs identify international opportunities through founders' backgrounds and networks. Half of the respondents interviewed discussed networks as key avenues to identify international opportunities. Specifically, founder and expansion manager networks were tapped into to gather information on opportunities and other factors such as vetting potential partnerships. This finding parallels Kontinen & Ojala (2011), who show that SMEs, more generally, tap into employee networks when seeking international opportunities. Vasilchenko and Morrish (2011) found that born global firms also identify international opportunities by tapping into existing networks or forming new ones specifically for this purpose. Therefore, this finding builds upon the literature that suggests networks are essential factors in international entrepreneurship opportunity identification.

In three cases, participants discussed the potential for investors to develop networks for opportunity identification. This was highlighted most frequently by firms with destinations outside the home market region, whereas investors tended to be based further away. This finding adds to the literature as investor networks, and opportunity identification have not been studied before (Sanchez & Perez, 2003). Further research on this may lead to a better understanding of how investors support the firms they invest in.

Two of the firms studied took an approach to identify opportunities through existing customers in the home market. These firms were both B2B EM digital INVs that leveraged existing customers to identify markets where an initial revenue stream could be developed, which could act as a springboard for further market development. This contrasts research conducted on family SMEs by Zaefarian et al. (2016), which showed that such firms identified their first opportunities primarily through close social networks before tapping into customer and partner channels. This difference in attitude reflects the contrasting dynamics of EM digital INVs and family SMEs as the former is more naturally globally positioned due to digital technology's nature.

Similarly, Oyson and Whittaker (2015) found that information about international opportunities is gathered from local customers and partners. One of the firms in this study adopted the route to tap into partner networks to identify international opportunities. However, this firm had a unique model that relied on partners that acted as international agents for their remittance products. This places the firm in a unique position that may not apply to firms in the broader EM digital INVs category.

7.3.3. Summary of Discussion of Research Question 1

Research question one investigated how EM digital INVs in emerging markets identify opportunities to internationalize to other emerging markets. This addressed the literature gap identified by several studies (Cavusgil & Knight, 2015; Paul et al., 2017; Buccieri et al., 2020). The findings revealed that there were two drivers at play that led to firms pursuing internationalization. The discussion is split into the first two stages, push factors and pull factors, outlined in the EM digital INVs internationalization model developed at the start of the chapter.

Firstly, push factors led firms to initially pursue internationalization projects. The first factor was subscale markets due to sub-Saharan African countries having relatively low technology penetration and small markets. Secondly, the venture capital-funded model that firms had pursued drove entrepreneurs to internationalize relatively early to reach the rapid return expectations required for such funding.

Once firms had decided to internationalize, a number of pull factors determined which markets firms considered to be the most promising opportunities. The most common approach taken by firms was systematic searches, where firms actively compared different markets to determine which held the most potential for an internationalization initiative. This differed from the literature on comparable born global firms, which found that such firms often lack resources for systematic searches (Mort & Weerawardena, 2006). An additional push factor to identify opportunities was tapping into existing networks such as founder, manager and investor networks. Finally, home market customers and partners were utilized to identify foreign markets opportunities.

These empirical findings point to the study of EM digital INVs across sub-Saharan Africa being a gap in the current literature. The contradictions found to the opportunity identification process studied in other INVs suggest that EM digital INVs in the context studied behave in a unique fashion that warrants further research. The next research question aims to further discuss this gap by investigating the specific contextual challenges firms face in sub-Saharan Africa.

7.4. Discussion: Research Question 2

What internationalization barriers do EM digital INVs face when internationalizing.

Following opportunity identification, firms in this study followed a path to exploit the most promising opportunities. This involved overcoming internationalization barriers, accumulating resources and determining entry mode. Research Question Two deals with the third stage of the EM digital INVs model developed in this chapter, internationalization barriers.

This question aimed to understand the barriers specific to emerging market firms internationalizing to other emerging markets. These barriers uncovered the contextual dynamics that exist in the home market as well as in markets firms sought to expand to. Emerging market INVs are a relatively nascent part of the internationalization literature that has not been explored fully (Uner et al., 2013). The discussion will compare results to past literature of emerging market new venture internationalization, thereby opening new directions of potential research.

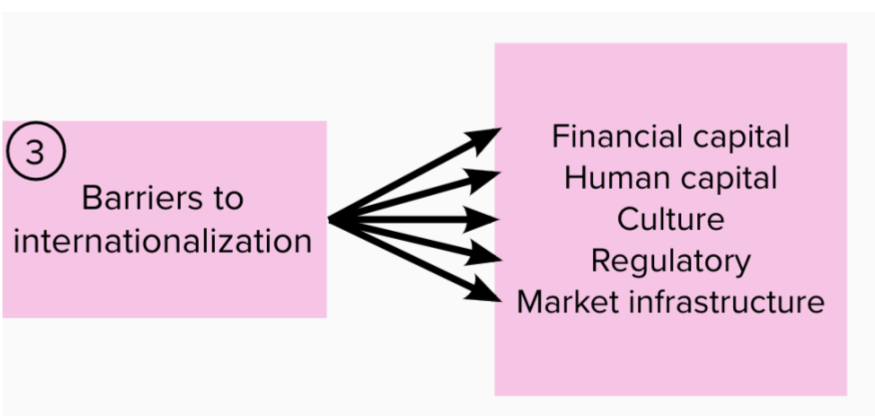


Figure 9 Discussion for RQ 2 - Barriers

7.4.1. Financial Capital Barriers

Eleven out of twelve firms participating in this study had raised venture capital funding, in many cases specifically to fund internationalization initiatives. Despite this, ten firms identified financial capital as a critical barrier for firms in this context. In a study of technology-based new ventures in Brazil, Cahen et al. (2014) found that firms in the context of emerging markets perceive access to financial capital as a key barrier. Supporting these findings, Ngoasong et al. (2015) specifically identified access to affordable venture financing being a key challenge for digital entrepreneurs from Cameroon. However, a number of participants' firms had raised funding from sources outside the region, thereby potentially providing a way to overcome lack of access to local capital sources. Some commented that this presented issues in itself as funders were not aware of the challenges faced in the context of sub-Saharan Africa. This provides an avenue for further research on funding for EM digital INVs, specifically how context shapes the relationship between firm and funder.

7.4.2. Regulatory Barriers

The most common barrier discussed by participants was regulatory barriers. These fell into four distinct categories: licences, ownership, fragmentation across countries and uncertainty. These regulatory challenges have been well documented across emerging markets and are often associated with other forms of political risk (Luo & Tung, 2007).

Licenses were raised as a significant barrier due to the cost associated with acquiring such licences and the limited financial resources that new ventures enjoy. Another challenge firms faced involved ownership of subsidiaries in host countries. Due to local ownership regulations in countries across sub-Saharan Africa, many firms struggled with the expensive and time-consuming processes involved with setting up operations in foreign countries. This barrier was exacerbated because many firms expanded to multiple countries and dealt with challenges associated with fragmented regulatory frameworks between each country. This fragmented regulatory environment posed significant challenges for firms that expanded with limited resources and a small team.

Five participants discussed the uncertainty of regulations as a barrier to internationalize successfully. As the firms studied are in the ever-evolving technology sector, many countries developed regulations after firms had been operating, thereby leading to uncertainty regarding firms' ability to operate. This supports findings by Peng (2001), who argues that creating firms in environments with fewer formal institutions results in firms dealing with more risk as regulations can shift.

7.4.3. Human Capital Barriers

As discussed in Research Question One, human capital (through networks) is crucial for a firm to identify opportunities and successfully internationalize. However, in emerging markets, two factors inhibit human capital supply in the labour market. Firstly, lack of access to education and training inhibits workers from gaining the skillset to work in a high-tech environment (Bhardwaj, 2014). Secondly, "brain drain", workers leaving to more developed countries, further limits the supply of skilled workers for firms (Docquier & Rapoport, 2012). Eight participants discussed the challenges they face due to access to the right human capital. This was in part due to the highly skilled human capital that such firms required to build technology products and services. Additionally, respondents discussed the challenges of building teams with experience to internationalize, a phenomenon which is relatively new for such firms across the continent. This phenomenon is mirrored by technology firms in Brazil, also an emerging market, which see access to human capital as one of the three key barriers to INVs internationalizing (Cahen et al., 2014).

7.4.4. Culture Barriers

Half the participants discussed the barriers of different cultures and languages posing challenges to internationalization. This was exacerbated by the fact that many firms expanded to more than one country, and many counties across sub-Saharan Africa have populations that speak many different languages owing to the many ethnic groups that live there. Cultural differences also extended to the way that business was done, with a number of participants highlighting the difference in business protocol between partners in foreign countries versus the home market. This finding supports Uner et al. (2013), who looked at born globals in Turkey, another emerging market. Similarly, Kahiya (2013) found that INVs from developed markets, in this case, New Zealand, also found culture and language a significant barrier to internationalizing. However, the extent to which African EM digital INVs outcompeted firms from outside the region in sub-Saharan Africa's cultural context is yet to be explored in the literature.

7.4.5. Market Infrastructure Barriers

Three of the participants in the study discussed the lack of market infrastructure in host countries as a barrier to internationalization. This market infrastructure follows the description of market intermediaries that enable businesses to operate more efficiently (Khanna and Palepu, 2010). This barrier relates to institutional theory and can be described as institutional voids in emerging markets. This barrier was raised most by firms founded in South Africa and expanding across other markets in the region. As South Africa has the most developed institutions and intermediary environment on the continent, it is interesting to note that South African firms found it most challenging to adapt to less institutionally developed markets.

Khanna and Palepu (2010) argue that institutional voids can also pose opportunities for firms that can fill the void and therefore provide a service to other firms in the market. Ogoasong (2018) found that several firms in Cameroon were explicitly using technology to build businesses from institutional void opportunities. Similarly, a number of firms in this study had become market intermediaries, thereby filling institutional voids.

7.4.6. Summary of the Discussion of Research Question 2

Research Question Two dealt with understanding the context EM digital INVs operate in while internationalizing from their home market to other emerging markets. This context was investigated by looking at the key barriers that firms face when determining internationalization to new markets. The barriers highlighted were both internal, such as access to financial and human capital, and external such as culture, regulation and market infrastructure.

The most cited barrier was regulatory challenges. Due to limited resources, firms struggled to overcome regulatory hurdles such as licencing and ownership regulation. This was exacerbated by the fact that regulation across the region varied, and many firms were expanding to several countries simultaneously. Additionally, uncertainty about regulatory changes in emerging markets added further complexity to internationalization initiatives, supporting findings of other firms in emerging market contexts (Peng, 2001). Participants also highlighted access to financial capital as a barrier, and although firms had raised venture capital funding, many still discussed the lack of capital in the emerging market context.

Lack of access to human capital, especially technical skill, also posed a barrier for firms when internationalizing, this was due to both lack of education and brain drain from markets. Additionally, cultural barriers posed challenges for firms, and the research found that although many markets share similar characteristics, some cultural features are vastly different such as business protocol. This supports findings from studies on firms from both developed and emerging markets, but highlights that within sub-Saharan Africa firms perceive significant cultural differences between markets (Kahiya, 2013).

Lastly, firms highlighted the lack of market institutions or intermediaries as significant barriers for internationalization to markets in the region. However, although these barriers posed challenges for firms, a number highlighted the opportunities that arise from overcoming them and potentially creating competitive advantages through these solutions (Khanna and Palepu, 2010).

7.5. Discussion: Research Question 3

What are the resources required for EM digital INVs to identify and exploit opportunities in foreign markets.

According to the entrepreneurial process proposed by Gruber (2002), following opportunity identification, a process of resource accumulation is conducted. In the model developed for EN digital INVs internationalization, this process is described as stage four. The process of resource accumulation involves acquiring the right resources for the firm to effectively exploit opportunity and build a competitive advantage in the market. Accumulating resources not only provides the means to execute but the right combination of resources also allows firms to overcome barriers they face while internationalizing. As firms in this study were INVs and internationalizing early in their development (sometimes before being profitmaking in their home markets) they followed an entrepreneurial approach to new market entry.

EM digital INVs in this study drove internationalization with limited resources, often only requiring a single person to identify opportunities and lead entry to multiple countries. This was possible through three main reasons. Firstly, the context of the region meant that entry was relatively cheap. Secondly, the nature of technology firms meant that many processes could be automated and adapted from the home market, thereby only needing some support from the technology team. And finally, due to modern supply chains, especially through digital channels, specific tasks and projects could be outsourced to specialists for relatively reasonable costs. This supports findings by Knight and Kim, (2009), who discuss how similar new technology firms are able to internationalize with limited resources. Furthermore, findings by Neubert (2017), show that technology firms from small markets can develop "lean internationalization" strategies that drive early international expansion.

The findings identified three primary resources that firms identified as crucial across the investigated firms: financial capital, human capital, and networks. The most discussed resource was human capital, under which four subsectors were noted including, expansion team, technology resources and local resources. This research addressed the gap identified by Ripollés and Blesa (2017), who determined that research on the entry mode process for INVs is lacking.

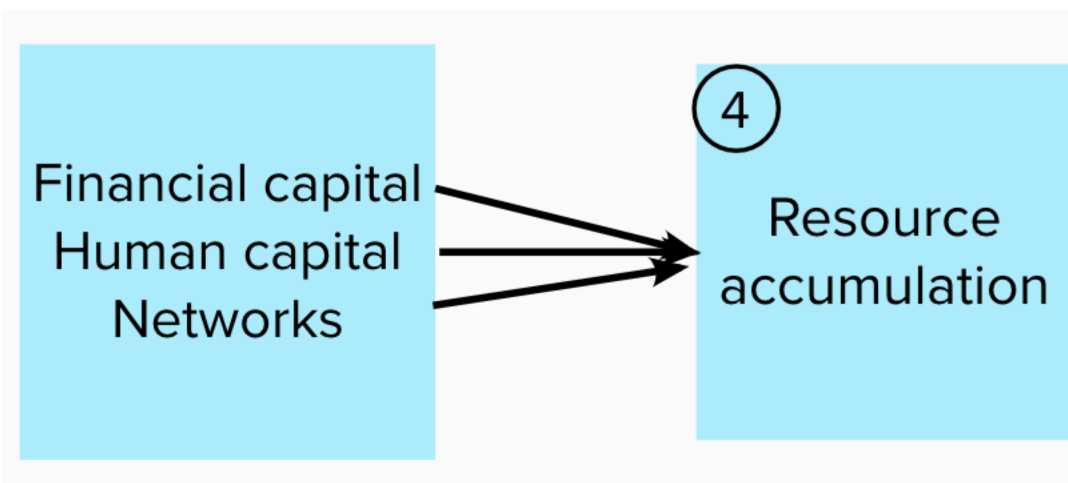


Figure 10 Discussion for RQ 3 - Resources

7.5.1. Financial Resources

Nine respondents identified financial capital as a crucial resource of internationalization. This was partly driven by the fact that eleven firms had raised venture capital funding, many specifically for internationalization. This means that firms saw such capital as being an essential resource for any entry decisions that they could make. According to RBV literature, financial resources are critical resources for firms to internationalize, especially if the entry mode requires presence in the new market (Wernerfeld, 1984). However, INVs have been found to emphasize intangible assets over tangible assets such as capital (Peiris et al., 2012). Similarly, Mudambi and Zahra (2007) found that INVs implement strategies that allow them to overcome the lack of financial resources in favour of other resources they can develop. This was also the case for participants in this study and driven by technology being a critical element for the firms studied.

In emerging market firms, the need for financial capital as a resource is even more pronounced as such firms have less access to a wide range of capital sources (Coviello, 2006). However, as respondents had raised capital, many noted that although capital was a crucial resource, they could internationalize on a small budget. For example one respondent, HConnect, spoke of running an international pilot for $20,000. This value was significantly less than what it would cost to do the same in developed markets. However, Daniels et al. (2014) argued that emerging market internationalization destinations often require more financial resources. There is a higher likelihood of uncertain changes in regulation such as tariffs, customs and border agencies. Respondents did not specifically discuss the need for such financial resources, but given that they all operate exclusively in emerging markets, the lack of emphasis for such allocation may have stemmed from this being the status quo in their environment.

7.5.2. Human Capital

Along with financial capital, human capital was seen as a crucial resource for firms to execute internationalization. Participants emphasized the need for three core subsets of human capital resources, expansion team, tech team and local team. INVs have in the literature been found to emphasise acquiring intangible resources such as human capital and knowledge over tangible resources such as financial capital (McDougall, 1994). Furthermore, such intangible resources are the core competencies that firms leverage to gain a competitive advantage in foreign markets (Peng, 2001).

Four of the respondents noted the importance of the expansion team as a critical resource. In all four cases, the expansion team consisted of less than three core people, which tapped into home firm resources. Several firms discussed the need for regulatory capabilities in home market teams to support navigating the fragmented regulatory environments of multiple countries across the region. The fact that these expansion teams were so small and often expanding to multiple countries at once highlighted the competencies required by the internationalization team. Furthermore, HConnect discussed how these teams played a critical role in shaping the effectiveness of any host market subsidiaries that were established as the culture of the home market had to be funnelled through the expansion team.

As all the firms studied were involved with producing digital products, there was a significant emphasis on the technical human resources required for internationalization. Firms had to adapt products for new markets and alter their business models to fit the local environment. Lahiri et al. (2014) argue that emerging market firms are less endowed with technical resources. One respondent, RetailPay, highlighted that the lack of technical capability for her firm was a result of a lack of supply of technical human resources in her local market. This respondent discussed how this affected their ability to gain competitive advantages in foreign markets, especially when competitor firms may have more supply to such resources.

Another respondent, Paynow, highlighted that internationalization could require less operational resources through a stronger tech team, thereby driving down costs. Mathews (2006) argues that emerging market firms generally have less technical capability and instead compete on strategic and organizational innovations. However, the results from participants of this study showed that technical capabilities were, in fact, key resources for firms and that they had been developed in the context of markets they operate, and formed part of the source of their competitive advantages.

Finally, local human capital resources were identified by three of the participants. The emphasis on these resources was driven by the challenging business environment that firms operate in across the continent with a fragmented cultural, language and regulatory environment. Firms found that local resources were a way to overcome liability of foreignness and tap into networks to access resources in the host country. The emphasis on local human resources could be tied to the influence on geographic proximity to internationalization. Gaur and Kumar (2010) found that firms tended to internationalize to proximate countries due to challenges of geographic distance. Therefore, participants of this study attempted to overcome cultural and environmental distance through access to local resources.

7.5.3. Networks

The final resource identified by respondents was networks. Networks are seen as a crucial intangible resource, especially for INVs, which typically lack tangible resources (McDougall, 1994).

For a number of respondents networks played a role in vetting potential opportunities in countries where information was not publicly available. These findings also revealed a network among EM digital INVs operating across the continent, which firms tapped into to make up for lack of resources. Johanson and Vahlne (2009) argue that no firms, including INVs, have every resource required to exploit international opportunities. Prashantham (2011) argues that firms, therefore, tap into networks to bridge these resource voids. However, Ojala (2011) argues that this view of networks relies on the assumption that firms are already part of a network that they can tap into in foreign markets. In the case of EM digital INVs investigated in this study, personal networks served to bridge the gap. As the technology ecosystem across the African continent is still small, networks span across the region. For example, one respondent, Care Assist, discussed the ability to tap into networks to find the best human capital in a market they were expanding into.

Unique to firms with venture capital investment, three respondents discussed investor networks as a resource. These networks were used to vet partners, access information in potential markets and raise more capital. This supports Sanchez and Perez (1998) findings on the ability of networks supporting access to capital. The research supports the literature that suggests that INVs rely heavily on intangible assets such as networks to build competitive advantages (Johanson & Vahlne, 2009). These networks specifically allowed firms to overcome barriers posed by the challenging business environment in the emerging markets INVs operate in.

7.5.4. Summary of Discussion for Research Question 3

Research question three investigates the fourth stage of the model proposed at the start of this chapter, resource accumulation. These resources tied to question two, as firms developed the tools to overcome barriers in the markets they operate in. The key resources identified by EM digital INVs operating across sub-Saharan Africa were financial resources, human capital and networks.

Firstly, financial capital was identified as a critical resource to drive internationalization. As most firms had raised venture capital investment specifically for internationalization, it was clear that financial resources drove the ability for firms to look at foreign market opportunities. Although respondents discussed the need for financial capital, findings supported the literature that INVs acquired intangible assets over tangible assets such as financial capital (McDougall, 1994). Among the resources discussed by respondents was human capital, which was further broken down into, expansion, tech and local resources. Firms emphasized small expansion teams that could play a bridging role between the home and host market. Secondly, technical human capital was highlighted since firms were in the technology space and needed human capital to build their products. However, respondents highlighted the challenge in finding talent, thereby supporting findings in past literature that suggests emerging markets have a lack of technical know-how (Lahiri et al., 2014). Finally, local market teams were discussed as helping overcome cultural barriers and tap into local networks.

The final resource highlighted by respondents was networks. Firms used networks to overcome a number of contextual barriers they faced in the challenging business environment they operated in. These networks revealed an EM digital INVs ecosystem with links across the continent, thereby giving firms access to information and potential human capital resources in different markets. This supported findings on previous research on INVs that suggests that they utilize networks to make up for the lack of other resources (Johanson & Vahlne, 2009).

7.6. Discussion: Research Question 4

How do entrepreneurs determine which entry mode to use when internationalizing?

With opportunities identified, firms developed a clear picture of the context (through barriers) and available resources. Findings from this process helped firms exploit opportunities in foreign markets. This research question identified stage five of the model: how firms conceptualize entry modes and how factors discussed in the barriers and resources discussion determined the strategy they used to exploit opportunities. Respondents identified two distinct forms of internationalization, organic and inorganic. Organic entry involved non-equity entry whereby firms took three approaches, experimentation (pilots), piggybacking (following customers) and partnerships. These entry modes supported findings by Sharma & Erramilli (2004), who argued that organic entry involved less cost. Three of the participants discussed utilizing inorganic entry modes, in this case, acquisitions. However, these cases occurred in unique situations and were not the firm's typical entry mode. This may have been due to the nature of INVs studied, as they had relatively more intangible assets than tangible assets that could support acquisitions (Zahra, 2007).

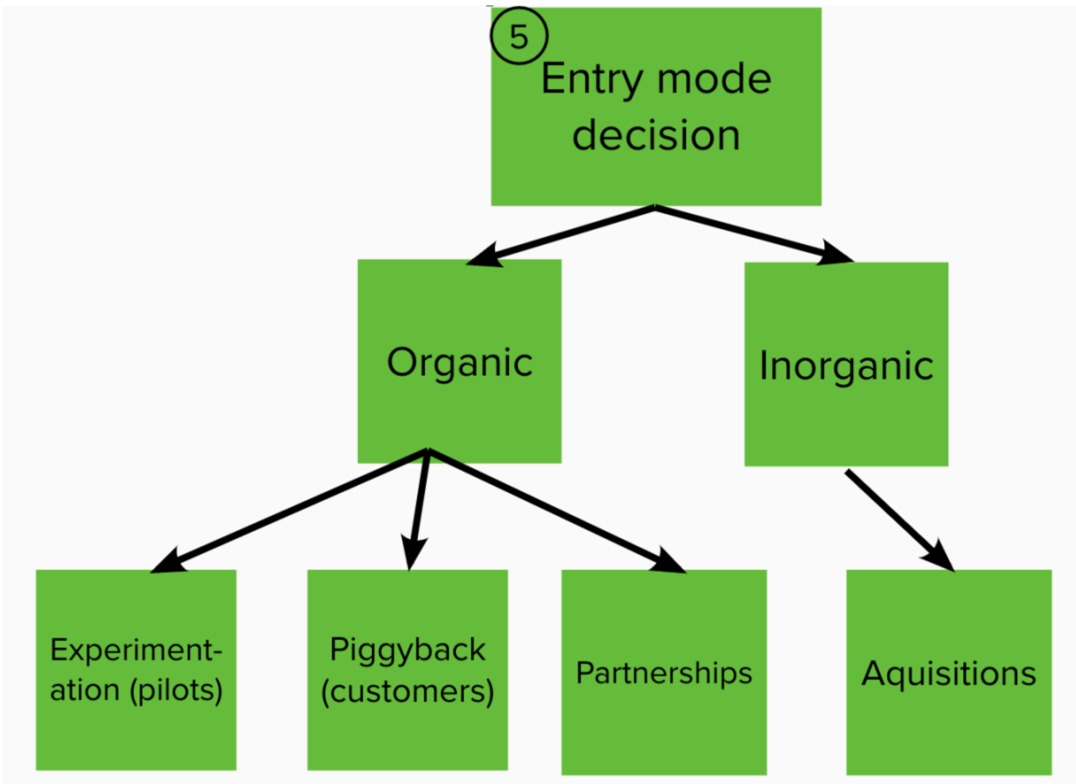


Figure 11 Discussion for RQ 4 - Market Entry

In some cases, firms discussed adapting their entry mode due to discovering unforeseen variables during the internationalization process. This showed internationalization to be an iterative process, whereby firms were learning and adapting. Neubert (2017) found that when attractiveness to markets decreases during the process, firms may decrease dedicated resources to the market and potentially exit. This was particularly the case for firms internationalizing to multiple countries simultaneously. Additionally, participants discussed how learnings from one market were applied to other markets. This highlights that markets across the continent, although culturally diverse, appear to have similar contextual dynamics. This supports work by Ngoasong (2018), who emphasizes lack of institutions in emerging markets poses similarities between markets. Khanna and Palepu (2010) argue that these similarities allow emerging market firms to turn these institutional barriers into opportunities, thereby creating competitive advantages across multiple emerging markets.

7.6.1. Organic Entry Modes

The most common entry mode discussed by participants was experimentation and pilots. This approach involved firms dedicating small teams to test their products in new markets. The process described involved setting up small groups of target customers and testing products with them over a given period. The pilot's success then led to more resources being committed to the host country and expansion into the broader market. Neubert (2017) found that this approach is implemented by high tech firms from small markets, although this research specifically looked at small open markets. As firms studied in this research were from relatively closed markets, this may suggest that technology firms from small markets generally tend to internationalize with a resource staggered approach. The pilot approach suggested that EM digital INVs studied adopted a fluid process, whereby resources were accumulated during the internationalization and barriers were encountered and overcome.

The second entry mode discussed by participants was called piggybacking customers, and involved a staggered investment of resources into new markets. This route involved firms following home market customers into markets where these customers already had a presence, thereby supplying them with the same products or services. This approach was utilized by firms who discussed the limited resources they had to drive expansion. One respondent, DevBuild, discussed how this approach provided a revenue stream to build a local team and begin creating a customer pipeline. This supports Wood et al. (2011), who argue that INVs often use existing customers to generate legitimacy in new markets. This was particularly applicable to firms investigated in this study as they did not have international brand recognition and therefore struggled with legitimacy perceptions. However, Neubert (2017) argues that technology firms often follow existing clients without thoroughly analysing the markets' attractiveness, only to struggle to acquire more customers later.

A key barrier to internationalization identified by respondents was regulatory issues, specifically the cost and time required to acquire licences to operate in foreign markets. For such firms, the most common route to overcome this barrier was to partner with local firms who already had such licences, thereby providing an entry mode. This supports Kahiya (2013) findings, who argues that barriers to internationalize determined path to entry mode for digital firms from resources scare environments. Several participants highlighted that such partnerships also provided access to local networks, which helped them overcome other internationalization barriers. Furthermore, organic entry modes were often used together; for example firms would start with a pilot and then use partnerships depending on how difficult it was to overcome barriers such as regulation.

7.6.2. Inorganic Entry Modes

The final entry mode highlighted by respondents was inorganic entry, in this case, acquisitions. Although three respondents discussed the potential of acquisitions, only two had actually gone down this route. This was due to the lack of tangible resources EM digital INVs have, especially those from resource scarce contexts (Ngoasong, 2018). Additionally, these firms were operating in markets with little competition, and their innovative products often were novel. This meant that acquisitions for other firms' resources and technology were often not an option.

Furthermore, acquisitions strayed away from the strategy that most firms adopted, which was to increase resource commitment to new markets over time. Acquisitions, on the other hand, are resource-intensive and time consuming, therefore to some extent committing firms to the market to which they are trying to internationalize (Zahra, 2007). However, Weerawardena et al. (2007) argue that INVs may develop strategic advantages from adopting higher resource commitments to internationalization as these provide access to resources such as human capital. Yet given the resource scare environments that INVs researched operate in, this approach may not be as applicable to emerging market firms. This is supported by Ngoasong (2018), who argues that emerging markets have less access to financial capital resources, which inhibits firms to expand.

7.6.3 Summary of Discussion for Research Question 4

Research question four investigated how EM digital INVs determine entry mode when internationalizing in an emerging market context. Both barriers and available resources were key factors that guided firms in deciding what entry mode to utilize. The discussion identified two entry mode categories, organic and inorganic, that supported past literature on INVs by (Sharma & Erramilli, 2004).

For organic entry mode, respondents discussed three distinct choices, experimentation (through pilots), piggybacking home market customers, and partnerships. Firms discussed implementing a combination of these modes depending on the barriers faces and resources available. The most common entry mode was experimentation or pilots that firms set up to determine whether their product or service could find a market fit. This approach involved a gradual strategy whereby increasingly more resources were committed to a market. This mirrored the lean internationalization strategy identified in the literature on technology start-ups and born globals (Neubert, 2017).

The second organic entry mode highlighted also took a staggered approach by following customers into new markets. This approach decreased risks associated with launching costs and provided a fast revenue stream from trusted customers. However, Neubert (2017) argued that such entry modes may create a false promise for a market's potential. It is unclear whether EM digital INVs also struggled with this approach as most had not been in foreign markets long enough to determine sustainable success.

Finally, the inorganic entry mode highlighted by EM digital INVs was acquisitions. However, this entry mode was relatively uncommon due to the limited resources INVs had at their disposal. This supports findings of previous research of technology firms operating across the continent and the constraints they face due to lack of access to sufficient financial capital (Ngoasong, 2018).

7.7. Conclusion

This chapter presents the discussion of the research, comparing results with findings from the literature on the topic studied. In answering the research questions, a five-stage model was developed to better conceptualize the process of international opportunity identification and exploitation that EM digital INVs implement in emerging markets. This model broke Reseaerch Question One into two stages, firstly push factors (or motivators) that drive EM digital INVs to internationalize. The second stage of the model outlined what push factors determine countries that hold the most potential for internationalization, including systematic search, networks, customers and partners. Following opportunity identification, Stage Three identifies barriers, highlighting the contextual challenges that firms face in emerging markets, specifically in sub-Saharan Africa. Stage Four identified essential resources firms accumulate for executing internationalization and was driven by how firms aimed to overcome barriers and exploit opportunities. This question revealed an EM digital INVs ecosystem that firms tapped into across borders, which helped entrepreneurs overcome resource scarcity. The final stage of the model was entry mode choice, which was determined by how firms could conceptualize barriers and accumulate resources. Overall, firms tended to take a gradual approach to internationalization, testing their products and services in markets with low resource commitment before deciding to allocate resources to new markets.

The following chapter will conclude the study and present limitations and practical applications to the aforementioned findings.

Chapter 8 - Conclusion

8.1. Introduction

This research explores how digital INVs in emerging markets identify and exploit international opportunities. The study identified a new classification of firm, EM digital INVs, which operate specifically in the context of emerging markets. As discussed in Chapter One, although INVs are seen to identify opportunities differently from other firms such as MNCs (Angelsberger et al., 2017), the empirical study of such firms in the context of emerging markets is lacking in the literature. To better understand the context of INVs operating in emerging markets, barriers to internationalization were investigated, specifically to understand how these firms fit into previous literature on emerging market firms. Following this, the study examined what resources firms accumulate to exploit international opportunities effectively. Finally, entry mode strategies were investigated, thereby uncovering how firms overcome barriers and allocate scarce resources to gain a competitive advantage in foreign markets.

The following chapter outlines the conclusions by presenting the model developed in the Discussion Chapter, key research findings, practical business application, avenues for further research, and the limitations of this study.

8.2. Research Findings

The research successfully explored the research aim to understand how digital INVs in emerging markets identify and exploit international opportunities in other emerging markets. A key finding was identifying EM digital INVs as a category of firm that exists in the context of sub-Saharan Africa. This resulted in empirical findings that uncovered the internationalization process for such firms in this context. The following section describes how the findings led to the development of a five-stage model for EM digital INVs internationalization. Following this is a description of the key findings, separated into the four main research questions posed in the study.

8.2.1. Development of the EM Digital INVs Internationalization Model

This section presents the model developed in the Discussion Chapter, which outlines how digital INVs in emerging markets identify and exploit international opportunities. This model integrated key themes from results described in Chapter Six and was further supplemented by the Discussion Chapter. The model employs the framework of the entrepreneurial process proposed by authors in the past literature and adapts it for the process of internationalization of digital INVs in emerging market contexts (Gruber, 2002). This approach was implemented as the digital INVs internationalization process followed a similar progression to developing an entrepreneurial business. The model was adapted to reveal how digital INVs in emerging markets conceptualize the process of opportunity identification and exploitation in foreign emerging markets.

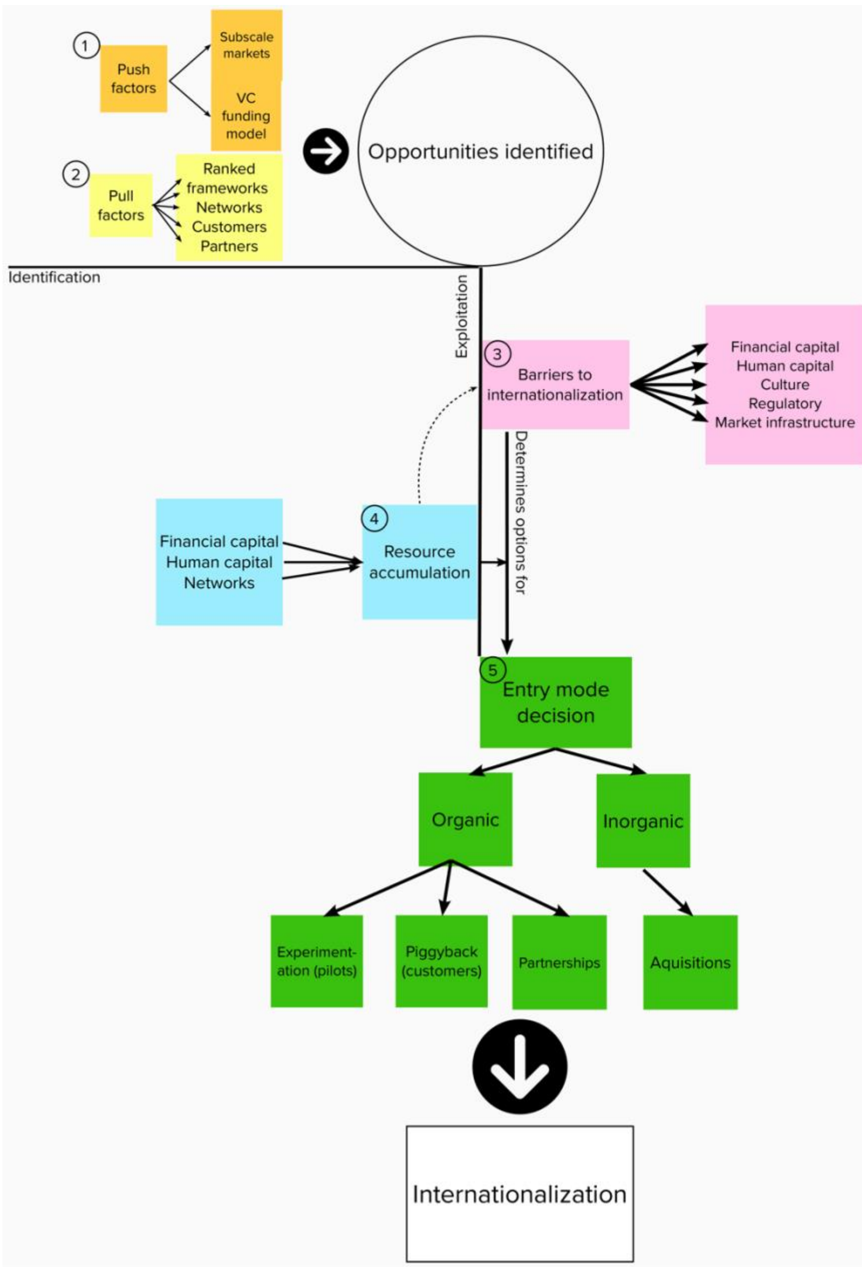


Figure 12 Conclusion - EM Digital INVs Internationalization Model

8.2.2. Explanation of the EM Digital INVs Internationalization Model

The EM digital INVs internationalization model was split into five stages that firms pass through from opportunity identification to market entry. Although the results showed that firms could be in more than one stage simultaneously, the stages provide a clear sequential structure of how firms conceptualize identifying and exploiting international opportunities. These five stages can be summed up as part of the key findings of the research study.

The first stage of the model can be described as the push factors (or motivators) which lead firms to seek international opportunities. These factors were subscale markets and venture capital funding that drive firms to pursue rapid growth outside their small home markets. The second stage is pull factors, which determine how firms identify potential opportunities in foreign markets. These could be summed up as a ranked framework strategy, networks, customers and partners. In stage three, firms analyzed barriers to entering other emerging markets, including financial capital, human capital, culture, regulation and market institutions. In stage four, firms acquired resources to overcome barriers and execute internationalization. Firms highlight financial capital, human capital, and networks as the key resources to internationalize. Finally, stage five deals with market entry, outlining how firms internationalized to a new market. The four entry modes identified were experimentation (or pilots), piggybacking customers, utilizing partners and acquisitions.

This model adds to the literature as it provides a framework to conceptualize the process EM digital INVs adopt when internationalizing to other emerging markets.

8.2.3. Findings for Research Question 1

How do entrepreneurs identify opportunities in foreign markets and specifically determine into which markets to internationalize.

The study successfully answered Research Question One, identifying key strategies and resources firms use to identify international opportunities. EM digital INVs looked predominantly to other markets in sub-Saharan Africa for opportunities for internationalization. Opportunities were identified via four channels: systematic searches (through ranked frameworks), networks, customers and partners.

Furthermore, Research Question One led to a critical finding for the study, identifying the motivators which drive firms to initially explore the possibility of internationalization. The push factors or motivators for EM digital INVs internationalizing were distilled into two key variables. Firstly, subscale markets for technology firms meant that from an early stage, firms looked to internationalize to reach the scale required for competitive advantage (Deng, 2004). As firms were developing products and services for the context of emerging markets (specifically sub-Saharan Africa), this naturally led firms to look for similar subscale markets to internationalize to. Furthermore, this meant that firms were driven to internationalize to several markets simultaneously. This adds to the literature, as technology firms internationalizing to other subscale markets has not been studied specifically (Neubert, 2017).

The second push factor that drove early internationalization was venture capital funding. Due to the nature of such financing, namely that investors expected large returns on their investments, firms were driven to internationalize to reach the growth expected to yield high returns (Ruhnka et al., 1992). This adds to the literature as venture capital-backed technology firms have seen limited study in the context of sub-Saharan Africa.

8.2.4. Findings for Research Question 2

What internationalization barriers do EM digital INVs face when internationalizing.

The exploratory study successfully answered Research Question Two, which dealt with the barriers EM digital INVs face when internationalizing to other emerging markets. Findings from this research uncovered the internationalization barriers specific to EM digital INVs in the emerging market context. These barriers were shaped by the resource scarcity in the context in which firms operated and the broader challenges of regulation and lack of market infrastructure (Ngoasong et al., 2015). The barriers to internationalization included financial capital, human capital, regulatory, culture and market institutions.

A key finding for this research question identified regulation as the most significant barrier for EM digital INVs operating in this context. Due to the nature of technology firms and the innovative products and services they produced, regulation was found to inhibit their ability to cost effectively operate. For example, firms struggled to acquire licenses designed for larger organizations that could afford to acquire them. Furthermore, uncertainty in regulation in emerging markets meant that firms often had to adapt and pivot due to regulators changing the rules of the game. Finally, the fragmented regulatory environment further inhibited small internationalization teams from simultaneously expanding to multiple countries. This adds to the literature as it provides a first empirical study of how regulation affects EM digital INVs in resource scare contexts.

8.2.5. Findings for Research Question 3

What resources are required for EM digital INVs to exploit international opportunities.

Research Question Three was successfully answered through the findings. This question led to the identification of three critical resources that firms accumulated to overcome internationalization barriers and successfully exploit opportunities. These resources were financial capital, human resources, and networks. Financial capital for internationalization was typically raised via venture capital funders. Human capital resources were a significant challenge for firms in the emerging market context, however these resources were critical for firms building digital products.

A key finding from the research showed that networks are a critical resource for firms operating in the challenging business environment of sub-Saharan Africa. These networks supported firms to identify opportunities, overcome barriers, and access resources in host countries (Vasilchenko & Morrish, 2011). Venture capital investment also supported firms in their internationalization campaigns with access to international networks that facilitates access to information, partners and customers. These networks provided a critical resource as the emerging market business environment was found to lack market intermediaries that often played this function in more developed markets.

The research also uncovered the existence of a technology startup ecosystem that spans across the region studied. Although nascent, this ecosystem comprises of founders and managers who share resources across different markets. This adds to the literature by revealing a technology ecosystem that can be compared in structure to that of technology hubs in other regions of the world.

8.2.6. Findings for Research Question 4

How do entrepreneurs determine which entry mode to use when internationalizing.

Research Question Four was successfully explored through the various entry modes identified in the results. The research found that firms employed two distinct forms of entry mode, organic and inorganic. Organic entry mode included experimentation (and pilots), piggybacking customers and utilizing partners. Inorganic entry was solely done through acquisitions of host country firms.

A key finding for the firms in this study was that they predominantly used an entry mode defined in this research as experimentation or piloting. This involved a gradual commitment of resources whereby firms started with a pilot to acquire a select number of customers to determine whether there was product market fit. Once fit was established, more resources were committed, thereby aiming to grow market share. This approach could be described as lean internationalization, which involved an iterative process to product development cycles (Neubert, 2017). This adds to the literature as it reveals that firms from sub-Saharan African markets also adopt this recently identified approach to internationalization.

8.3. Implications for Business

The research findings provide several practical lessons for both business managers and governments in emerging markets looking to foster their technology ecosystems.

- The model developed provides a guide that can be applied to practice for founders, managers and governments. Through the EM digital INVs internationalization model, managers can create a more cohesive sequential strategy for internationalization campaigns, adopting lessons from previous experiences from firms in the same context. The five-stage model provides the framework for this approach.

- The push factors identified give managers a better understanding of the pressures that come with VC funding and the potential pressures this creates to expand, especially for firms from small markets. Therefore, managers should be aware of these pressures and find funding according to their aims and capabilities.

- Pull factors such as ranked frameworks, networks, customers, and partners give managers a toolkit of the most important resources for identifying international opportunities. This is particularly valuable in the context studied where there has been limited public research conducted on international opportunity identification for EM digital INVs.

- Barriers to internationalization provide an overarching framework to the most significant hurdles digital INVs face in the context of sub-Saharan Africa. Managers should therefore develop strategies that mitigate risks associated with barriers e.g. regulatory hurdles.

- A continental technology startup ecosystem was discovered, connected through networks across the region. Managers should aim to tap into this network to effectively overcome challenges such as lack of information and human capital in the challenging business environment of the region.

- The third stage of the model, barriers to internationalization, provides an initial foray into understanding the biggest blockers for firms to internationalize. As many firms investigated are using innovative solutions to fill institutional voids, it is crucial for governments to understand why firms are not successfully entering their markets. This opens the opportunity to further study the EM digital INVs regulation, specifically how governments can create enabling regulation.

- The scarcity of resources such as financial and human capital was highlighted by firms operating in the emerging market context. Preempting this scarcity by developing more resources before internationalization will help managers develop the resources to execute internationalization successfully.

- The process of entry mode, specifically that of experimentation (or pilots) and comparable to lean internationalization, provides managers with a strategy to internationalize with limited resources, which is the norm in the contexts of the firms investigated.

8.4. Limitations

The limitations to the study were as follows:

- As the study was exploratory, the ability to generalize the results to other contexts is limited.

- The study used a small sample size for the firms investigated; this limits how the results can be generalized to firms in the broader context of emerging markets.

- Biases of the researcher may have affected the subjective perspectives of the qualitative research conducted (Saunders & Lewis, 2012).

- As EM digital INVs in sub-Saharan Africa are a new phenomenon in the literature, it is yet to be determined how comparable firms in different industries are. Therefore, this limits the generalizability of the results until a more concreate definition of such firms can be established.

- As all firms were INVs, none had spent enough time in foreign markets to determine their strategies' long-term success. This, therefore, limits the applicability of practical recommendations, particularly regarding entry mode choices.

- The sample consisted of a limited number of EM digital INVs originating outside the large markets (Nigeria, Kenya and South Africa) in the region studied, thereby limiting the results' generalizability to other countries in the region.

8.5. Suggestions for Further Research

The insights and discussion in this study revealed a number of avenues for further study in future research:

- The EM digital INVs internationalization model can be further validated through quantitative testing on a larger number of founders and managers. These studies could look at specific factors discovered in the model, such as regulatory barriers, to determine more precisely how firms overcome them in the context studied.

- The applicability of the EM digital INVs internationalization model could be studied for emerging market firms in general, thereby determining whether the model is more widely relevant outside the region studied in this research.

- A comparative study could be conducted on EM how digital INVs within the region studied differ from each other and how individual country contexts shape the actions of firms.

- A comparative study could be conducted on how EM digital INVs differ depending on which industry they operate in.

- A comparative study could be conducted on EM digital INVs from other emerging markets such as in Asia and South America to investigate how these firms differ from those in sub-Saharan Africa.

- A long-term study could be conducted on the strategies implemented by the firms in this study to determine whether their internationalization efforts lead to long-term competitive advantage.

8.6. Conclusion

Digital firms are playing an increasingly important role in the development of business ecosystems in emerging markets. A number of these firms are internationalizing to other emerging markets, thereby creating competitive advantages across borders. This study created a new classification for such firms, EM digital INVs, and successfully investigated how such firms identify and exploit international opportunities.

Through an exploratory approach, 12 founders and internationalization managers were interviewed across sub-Saharan Africa. The study led to the development of a model for digital INVs internationalization, thereby describing the process of identifying opportunities, overcoming internationalization barriers, accumulating resources and determining entry mode.

This study contributed to the literature of firms originating in emerging markets specifically those in the technology sector. Furthermore, the model and supplementary findings provide a practical guide for digital INVs founders and managers to successfully internationalize.

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Annexure A – Interview Consent Form

I am conducting research on digital platforms that are enabling market ecosystems across sub-Saharan Africa. Our interview is expected to last about an hour and will help us understand how digital firms identify and exploit opportunities, diversify and internationalize. Your participation is voluntary, and you can withdraw at any time without penalty. All data will be stored and reported without identifiers. If you have any queries or concerns, please feel free to contact me or my supervisor.

Our details are as follows.

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+27 076 948 4059	+27 011 771 4346

Signature of participant: ________________________________

Date: ________________

Signature of researcher: ________________________________

Date: ________________

Annexure B –Semi-structured Interview Questions

1) Can you describe how your firm operates, your customers and business model?
2) Can you describe to me how you identify market intermediary business opportunities in the international market?
3) How do you determine which markets to internationalize into?
4) What capabilities does your firm have that has helped it identify opportunities?
5) Can you describe the process of going from opportunity identification to exploitation?
6) What resources have you had to develop to effectively exploit opportunities in international markets?
7) What resources are you lacking that make you less effective at this execution, why don't you have those resources?
8) What barriers do you face when identifying and executing international expansion?
9) How do you overcome these barriers in your markets?
10) What lessons have you learnt from these experiences?
11) How do you determine what entry mode you
12) What is the process for you to identify potential partners in new markets
13) What challenges do you face when engaging in partners in foreign markets

Annexure C – Atlas.ti Codebook

Individual Codes:

Alignment within firm on expansion reasons and structure
Acquisition channel digital
Background
Barriers that turn to opportunities
Bias against action inhibits firms expanding
Build out home market first
Capabilities compliance info
Capabilities diversity
Capabilities financial capital
Capabilities leadership
capability community connectedness
Capability marketing
Challenges Foreign Environment
Commercialization stage
Competitors as collaborators
Competitors market identification
Conflicting interests within firm as barrier
Consolidation of culture across continent
Consolidation trend across continent
Constraints Financial
Culture
Culture challenges
Culture of different country teams
Customer driven demand as expansion driver
Deciding to expand is based of business model
Deeper analysis as entry mode
Disruption due to covid
Distribution not owned due to licencing and risk
Diversification
Ease of business
Emerging market focus
Entry mode community outreach initiatives
Entry mode direct due to better business environment
Entry mode indirect due to business environment
Entry mode not linear
Entry mode organic
Entry mode partnership due to regulation
Entry mode types
Execution Challenges
Expand or grow home market
Expansion from conception (Born Globals)
Expansion is essential for survival

Expansion is fast paced
Expansion new trend on continent
Expansion team plays bridging role
Expansion team wears many hats
Experimentation as entry mode
Failsafes built due to uncertainty of partners or infrastructure
Firm Structure
First hand information is critical
Fragmented environment across continent
Framework for expansion
Geographic proximity of expansion destination
Geography as barrier
Hire local
Human capital as a capability
Human capital challenges
Human capital critical
Incubators, events, conferences as drivers
Initial pilot phase
Investor network as due diligence
Investor network identifying opportunities
Investor relations
Lack of infrastructure
Language Barrier Challenge
Learning While Doing
Learnings can be brought back to home market
Legal capabilities
Limited data used to expand
Local context not factored in enough
Local market potential over expansion internationally
local ownership regulations
M&A as entry mode
Managing expectations from internal stakeholders
Market information lacking
Market infrastructure
Market need
Market research strategies
Market subscale
Misconception
Network to overcome lack of information
Opportunity Identification
Outsourcing research
Partnership challenges
Partnerships
Partnerships as entry mode
Partnerships entered to mitigate licencing
Perception of destination

Perception same as practice for reg environment
Potential for high impact
Potential of ecosystem
Primary research
Process of execution
Product focus for different markets
Qualitative research
Regional integration policies leading to more opportunities
Regulation
Regulation Hiring
Regulation Technology Challenge
Regulatory Environment Challenges
Role description
Sequential geographic expansion
Shaping regulation
Similar markets pose opportunities
Some countries are crucial destinations
Specific markets are analysed for best PMF
Structure within firm
technology as a capability
Technology team involvement
Time as barrier
Timing of expansion
Traits of expansion individuals
Travel to market
Trend verticals are turning into customer journeys across verticals
uncertainty of regulations
VC

Code Families (categories):
Africa (environment specific)
Barriers
Resources for internationalization
Entry mode
Expansion Team Features
Geography
Identifying Opportunities
Investors
Macro Trends
Regulation