

The utilization of Local Agent knowledge by multinational
MedTech firms in Emerging Markets Internationalization – a
Dynamic Capabilities perspective

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ABSTRACT

The Internationalization process of firms are well described in literature. The two foremost methods for Internationalization are the Uppsala model (phased commitments increasing over time) and the Born-Global model (immediate rapid expansion into various markets simultaneously). Regardless of which method is used, the utilization of market knowledge obtained from a Local Agent, is a key ingredient for a firm to develop Dynamic Capabilities to successfully Internationalize. There is a paucity of research on Internationalization in the MedTech industry, specifically regarding Internationalization into the markets of the Middle East and Africa. Historical research has focused on the internal perspective of the MedTech firm, or a complete external perspective. No research could be found on the perspective of Local Agents concerning this process.

The current study aims to share the opinion of Local Agents on the Internationalization of MedTech firms into the Middle East and Africa. The study followed an inductive philosophy with a qualitative design. Data was gathered through multiple individual interviews with key stakeholders.

The results show that Multinational MedTech firms do not effectively develop Dynamic Capabilities to address the market opportunities in these countries through the utilization of the knowledge they acquire from Local Agents. It contributes to the theory of Dynamic Capabilities by applying the current findings to the three building blocks for the first time in this industry in the MEA region. It also provides guidelines on structuring a questionnaire for the future escalation of these findings into a quantitative study through surveys across multiple settings.

KEYWORDS

Internationalization, Dynamic Capabilities, MedTech, Local Agents, Distributors, Africa, Middle East

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 in Corporate Strategy 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.

Jaco Erasmus

Date

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LIST OF ACRONYMS AND ABBREVIATIONS

BoP	Bottom of the Pyramid
EM	Emerging Markets
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IMF	International Monetary Fund
LA	Local Agent
MEA	Middle East and Africa
ME	Middle East
MedTech	Medical Technology
MedTech Rep	Medical Technology firm Representative
MNC	Multinational Corporation
MRI	Magnetic Resonance Imaging
MT	MedTech
RQ	Research Question
SME	Small and Medium-sized enterprises
SSA	Sub-Saharan Africa
WHO	World Health Organization

CHAPTER 1: PROBLEM STATEMENT

1.1 INTRODUCTION

The Internationalization strategies of multinational firms have been studied extensively. The early development of the Uppsala Internationalization model (Johanson & Vahlne, 1977), was followed by the Born-Globals (Chetty & Campbell-Hunt, 2004; Knight, 1997a). It also moved into more specific strategies like timing and scope of entry (Teplensky et al., 1993), differential pricing policies (Class, 2012) and ambidextrous business models (Winterhalter et al., 2017). Recently the idea of parachuting Internationalization was proposed (Fang et al., 2017) as a combination of the phased approach and rapid globalization.

Eventually, the Internationalization of firms was studied as they entered Emerging Markets (Calof & Beamish, 1995; Dutta, 2007). It also broadened across industries to address the need for firm-specific guidance. Internationalization strategies were soon combined with the need for the firm to develop Dynamic Capabilities to overcome Outsidership (term to denote market entrants from another country) in new markets (Augier & Teece, 2007; Knight & Cavusgil, 2004). The two ways to overcome this Outsidership were through firm-specific advantages or the acquiring of target market knowledge (Zaheer & Mosakowski, 1997). The first solution was mostly grounded in the Resource Based Theory, while the second was grounded in Dynamic Capabilities. This acquiring of target market knowledge is used as a strategy to overcome Outsidership and the Liability of Foreignness, therefore allowing the firm to be competitive in their new foreign markets (Cuervo-Cazurra et al., 2007).

The Medical Technology (MedTech) industry is a prolific sector with high levels of innovation (MedTech Europe, 2018). This industry has also been expanding into Emerging Markets, through a variety of Internationalization strategies, since the 1980s (Johanson & Kao, 2015). However, industry research shows that multinational MedTech firms have had mixed Internationalization results in Emerging Markets (Donoghoe et al., 2012; Dora et al., 2017). There is therefore an opportunity to extend knowledge of the perception of multinational MedTech firm Internationalization strategies into Emerging Markets, specifically in the Middle East and Africa.

1.2 THEORETICAL ANCHOR OF THE RESEARCH

The Dynamic Capabilities Framework (Teece & Pisano, 1994) allows for identifying methods and strategies for achieving and maintaining competitive advantage for firms operating in dynamic environments of rapid change. From the literature, it is clear that the successful Internationalization of firms requires a flexible and adaptable approach to different market dynamics (Tang et al., 2020). In other words, developing Dynamic Capabilities is a crucial enabler for firms entering markets which has unpredictable characteristics. One of the main themes for this successful Internationalization is overcoming Outsidership, also referred to as the firms' Liability of Foreignness (Cuervo-Cazurra et al., 2007), which increases the cost of doing business abroad if it is not addressed. The literature identifies the acquisition of target market knowledge as the most important aspect in overcoming this Liability of Foreignness (Heiss, 2017). The most successful way for a foreign firm to acquire this knowledge is to partner with a Local Agent (Lagerström & Lindholm, 2021), who will then share this knowledge with the firm.

This pathway is well researched and documented, but there is very little literature about understanding this Local Agent, except for concluding that they are important for successful Internationalization due to them being a source of knowledge. Some researchers have studied the impact of these Local Agents on successful Internationalization in Emerging Markets (Nikolchenko et al., 2018) , while there are some studies on the Local Agent role in the retail sector in Africa (Ferrucci et al., 2018) and Pandey (Pandey & Thombal, 2018) studied the role of the Local Agent in strategic pricing in the MedTech sector in India. But these studies are mostly one-sided, focusing on the relationship from the top-down, i.e. the understanding of the network and Local Agent from the perspective of the multinational firm. Research studies that investigate the perception of Local Agents regarding the strategies multinational firms use to enter their markets, i.e. the opposite direction, could not be found. In a recent review of the latest research, Paul identified the importance of intra-firm relationships in establishing networks for Internationalization as a key agenda for future research (Paul & Rosado-Serrano, 2019).

Do firms execute on the advice given by Local Agents? Do they enter markets as proposed by Local Agents? Or do they follow a more generalized expansion strategy without tailoring it for individual markets? More specifically for this study into the MedTech sector, is there a lack of understanding between MedTech firms and Local Agents which leads to failed Internationalization? Answers to these questions will be the objective of this study.

1.3 PURPOSE OF THE RESEARCH

There is ample research on the Internationalization of firms (Jie et al., 2021) and the Internationalization of firms into Emerging Markets (Gammeltoft & Cuervo-Cazurra, 2021). There is also ample research on the Internationalization of MedTech firms (Lagerström & Lindholm, 2021), but less so on their strategies for entering Emerging Markets. In Emerging Markets, most research is directed into China (Igwe et al., 2022), India (Mahasuar, 2022) and Eastern Europe (Nikolchenko et al., 2018), but very little into the Middle East and Africa. The researcher could find no studies which petitions the opinion of Local Agents regarding the Internationalization of multinational MedTech firms into their markets. The current project aims to contribute to where these three gaps triangulate: The perceptions of Local Agents regarding the Internationalization strategies of multinational MedTech firms into the Emerging Markets of the Middle East and Africa.

1.4 RESEARCH QUESTIONS

The gaps in the literature (Paul & Rosado-Serrano, 2019) and the scope of the current debate (Igwe et al., 2022) are aligned with the purpose of this study and its aims. Whether Local Agents perceive the Internationalization strategies of firms in the Emerging Markets of the Middle East and Africa to be successful drives the research question. It is from their perspective that we approach these questions.

The acquisition of knowledge of the target (host) country is an important component of Internationalization (Lagerström & Lindholm, 2021) and an important contributor to the “Sensing” building block of Dynamic Capabilities (Teece, 2014). The development of a network and partnering with Local Agents are key to gathering this knowledge, therefore the main research question is:

- RQ1: How are multinational MedTech firms developing Dynamic Capabilities to address their market through the knowledge they acquire from Local Agents?

There are several sub-questions to inform the main question:

- RQ1a: How do multinational MedTech firms develop and utilize knowledge from Local Agents?
- RQ1b: What is the role of Local Agents in driving multinational MedTech firm Internationalization strategies?

- RQ1c: What are the experiences of Local Agents in this process?

Furthermore, since the nature of the relationships within these networks are so critical (Lee et al., 2020), there should also follow some proactive advice from Local Agents to allow for the Multinational MedTech firm to learn vicariously. Thus, a secondary research question arises, namely:

- RQ2: What would Local Agents advise multinational MedTech firms to implement or consider when Internationalizing into their home countries?

The answers provided by Local Agents and MedTech firm representatives (MedTech Reps) on the questions above might show why multinational MedTech firms are struggling to unravel the complexities of markets in this region.

1.5 RESEARCH SETTING

Healthy lives, and the promotion of well-being for all, are the foundations for the third United Nations Development Goal (United Nations, 2018). It advocates the addressing of shortcomings and disruptions to essential health services. The World Health Organization (WHO) identified the availability of medical technology as critical “in the achievement of health system performance goals” (World Health Organization, 2012, p.7) and that there is a lack of access to medical technology in low- and middle-income countries. The African Union has identified the application of medical technology as a key sustainable improvement to health system performance in their 2016-2030 Africa Health Strategy (African Union, 2015). Localization of MedTech manufacturing in low- and middle-income countries is progressing, but not at pace with the requirements (World Health Organization, 2012). It is therefore clear that MedTech plays an important role in developing healthcare in Emerging Markets throughout the world to achieve these goals and strategies, but also that this is still largely dependent on importation of products from multinational MedTech firms. Since there is evidence that MedTech firms still fail in this regard (Dora et al., 2017), this study serves to address their shortcomings and provide suggestions to improve.

1.6 CONTRIBUTIONS OF THE RESEARCH

The historical practical contributions of research into the Internationalization of firms were to identify best practice and provide options for management to consider when opening foreign avenues of business. The current study aims to complement these contributions.

1.6.1 PRACTICAL CONTRIBUTIONS

Practically, MedTech management needs to become aware of the opinions of Local Agents in the MEA region. The success of MedTech Internationalization is often measured either in revenue growth (Exploit) or the number of countries entered (Explore). Instead, a view into the perceptions/experiences of Local Agents and MedTech Reps will allow them to re-evaluate their performance based on their strategic hits or misses. Also, as most MedTech Reps commented on these markets becoming a growth engine for their firms, the understanding of the complexities of these regions could assist strategic leadership to realize this expected growth contribution. The identification of a second inflection point inside the MedTech firm also serves to focus leadership attention on the potential internal disconnect that impact their Internationalization strategies into these markets.

1.6.2 THEORETICAL CONTRIBUTIONS

The development of Dynamic Capabilities to overcome Outsidership during Internationalization is well documented, but there is a paucity of research on this in the MedTech field, especially in the Middle East and African (MEA) region. The current theoretical debate on the Internationalization of MedTech firms in Emerging Markets covers process theory (Gammeltoft & Cuervo-Cazurra, 2021), capabilities (Jie et al., 2021), SMEs (Lagerström & Lindholm, 2021) and ambidexterity/innovation (Sharmelly & Ray, 2021). Therefore, theoretical contributions can be made in the field of Dynamic Capabilities of Multinational MedTech firms in the Emerging Markets of the Middle East and Africa.

There is also a call to study the role of intra-firm relationships (networks) in Internationalization in more detail (Paul & Rosado-Serrano, 2019). There is a need for a body of evidence documenting the perceptions of Local Agents in this network. These opinions remain untapped in the body of literature and can contribute to new avenues for future studies. The current study addresses this lack of evidence with an initial insight into the relationships.

The findings of the current study show that Multinational MedTech firms fail to develop Dynamic Capabilities through utilization of Local Agent knowledge when entering the Emerging Markets of the Middle East and Africa. This opens the opportunity to transition this field into quantitative research designs.

1.7 DEFINITIONS OF KEY CONCEPTS

The current study will define key concepts as follows:

- Internationalization

The process in which firms develop or adapt their capabilities to expand successfully into other countries (Calof & Beamish, 1995; Igwe et al., 2022).

- Dynamic Capabilities

The original definition of Dynamic Capabilities by Teece applies to this study, which is "...the dimensions of firm-specific capabilities that can be sources of advantage, and to explain how combinations of competences and resources can be developed, deployed and protected." (Teece et al., 1997, p. 510). Later iterations of this definition will also be discussed.

- Liability of Foreignness / Outsidership

The challenges firms encounter in Internationalization which escalate the cost of doing business and lead to high failure rates if it is not overcome (Cuervo-Cazurra et al., 2007). Also known as Outsidership (Lagerström & Lindholm, 2018).

- Emerging Markets

Low-income countries with high growth rates achieved through market liberalization (Lee et al., 2021). In this study, specifically the Emerging Markets of the Middle East and Africa (MEA).

- MedTech sector/industry

The definition of the European Medical Technology trade association suffices for this definition as "Any technology used to save lives or transform the health of individuals suffering from a wide range of conditions." (MedTech Europe, 2018, p. 5). This excludes pharmaceuticals and biotechnology. Generally, the MedTech sector is divided into Medical Devices, Medical Capital and Diagnostics.

- Local Agents

Competent local companies/firms/individuals from the *host* country which assists the firm from the *home* country to enter the *host* country market through services/knowledge/skills (Knight & Cavusgil, 2004).

1.8 OUTLINE OF THE REMAINDER OF THE DOCUMENT

The remainder of this thesis is structured as follows: Research Literature regarding Dynamic Capabilities in Internationalization is reviewed in Chapter 2, which leads to the Research Questions detailed in Chapter 3. The Research Methodology is described and discussed in Chapter 4. Chapter 5 covers the results of the data collected and presents it along applicable themes, while an analysis of the findings of the study follows in Chapter 6. Finally, a conclusion is provided in Chapter 7, which contains guidance on Internationalization strategies from Local Agents, as well as identifying further avenues for research. A comprehensive list of references is shared and appendices have been added to provide details on the codebook, interview guides, access requests, letters of consent and other documents.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter details the literature relevant to the current research project. The research anchor is identified and applied to the current research problem. Then the relevant literature is explored from historical seminal indicative works to more recent publications throughout the fields of Internationalization, Emerging Markets and the Medical Technology (MedTech) sector.

2.2 THEORETICAL ANCHOR

The competitive advantage of firms has been studied since the early 1980s through the seminal work of Michael Porter (Porter, 1985). This theory of how firms can achieve and maintain their strategic advantage leads to understanding how they can defend against and out-perform their competitors and remain relevant in the market.

Initially, this was explained and supported by how firms manage and strategically apply their unique resources, through the Resource-Based View (Rumelt et al., 1991). However, this view described the firm as relatively stationary. It does not easily allow for flexibility in competitiveness as the firms' resources are unique, inimitable and firm-specific, thus securing strategic competitive advantage almost by default.

This shortcoming in evolution and flexibility theory was addressed by Teece (Teece & Pisano, 1994) by developing the Dynamic Capabilities Framework. This framework allows for identifying methods and strategies for achieving and maintaining competitive advantage for firms operating in dynamic environments of rapid change.

Although there are other strategies to develop and maintain competitive advantage, the field of Dynamic Capabilities has remained very relevant and has undergone various iterations, recently restated by Niel Kay (Kay et al., 2018), which Teece co-authored. Gradually, this framework was applied to the Internationalization of firms (Augier & Teece, 2007; Weerawardena et al., 2007) and eventually established as a multinational firm strategy to develop further Dynamic Capabilities through Internationalization (Teece, 2014). This is especially true for the ability of managers to evaluate the competencies of the firm, to position it to overcome a dynamic business environment (Knight & Cavusgil, 2004), which points to the development of a Dynamic Capability. In the Born-Global approach (discussed in Section 2.1.2), innovation and entrepreneurship feature strongly in the success of the Internationalization of the firm, Teece defining this as the

“...management capability to effectively coordinate and redeploy internal and external competences.” (Teece et al., 1997, p. 515). In 2016, Teece (Teece et al., 2016) extended this to the agility of firms. Teece argued that achieving agility often comes at the cost of efficiency, and therefore firms should not strive for a constant state of agility, but rather become agile as certain inflection points arrive. It is important to note that Teece suggested three core building blocks of Dynamic Capabilities, namely Sensing, Seizing and Transforming (Teece 2014). These building blocks could be applied to managerial orchestration activities to assist a firm to develop Dynamic Capabilities, namely:

- “(1) identification and assessment of opportunities at home and abroad (Sensing);
 - (2) mobilization of resources globally to address opportunities, and to capture value from doing so (Seizing); and
 - (3) continued renewal (Transforming)”
- (Teece 2014, p 18).

The processes and strategies of Internationalization are described later, but one of the challenges a firm should attempt to overcome to expand internationally is its Liability of Foreignness, which could be seen as an inflection point mentioned by Teece. The Liability of Foreignness was first mentioned by Buckley (Buckley & Casson, 1998) as a “cost of foreignness” that a firm should address by using a compensating advantage. Liability of Foreignness is also known as “Outsidership” (Lagerström & Lindholm, 2018). It is sensible to assume that a firm’s ability to overcome this challenge would depend on its ability to develop an advantage to remain competitive, which would be possible under the Dynamic Capabilities Framework. Even more so if the expansion is into the dynamic and unpredictable countries of Emerging Markets. Partnering with a Local Agent to overcome this liability is critical for firm success (explained in Section 2.3.2). According to Wöcke “...local companies benefit from local understanding of institutional practices and social embeddedness” (Wöcke & Moodley, 2015, p. 1), such knowledge would suit the firm well in overcoming their Outsidership. As per Teece (Teece et al., 2016), this is also a component of the Dynamic Capabilities perspective, as it is essentially a risk that is contracted away as a natural hedge. Therefore, the development of competencies to overcome Outsidership by establishing a robust network in the host country can be seen as the development of a Dynamic Capability to Internationalize successfully (Khan & Lew, 2018; Zhou & Guillén, 2015). This was recently confirmed in the systemic review of Internationalization capabilities in Emerging Markets by Igwe, where eight studies

described certain firms having “...limited international network which prevents incremental Internationalization...” (Igwe et al., 2022, p. 11).

The Dynamic Capabilities Perspective thus provides a clear theoretical anchor to the current study, which will guide the interpretation of data and drive the research questions.

2.3 MARKET ENTRY STRATEGIES – THE INTERNATIONALIZATION OF FIRMS

Internationalization strategies have been studied since the 1970s. Generally, there are a multitude of Internationalization strategies, but the two most popular ones are the Uppsala model and the Born-Global models.

2.3.1 UPPSALA MODEL – A PHASED APPROACH TO INTERNATIONALIZATION

One of the first Internationalization strategies to be popularly adopted is the Uppsala model of Internationalization (Johanson & Vahlne, 1977). This was initially explained through the developing of target market knowledge and increasing foreign commitments (Johanson & Vahlne, 1977) and eventually into a theory of phased approach (Buckley & Casson, 1998; Johanson & Vahlne, 1990), which is an incremental method of moving from countries with the least psychic distance to the most. The notion of psychic distance “attempts to conceptualise and, to some degree, measure the cultural distance between countries and markets” (Buckley & Casson, 1998, p. 541). The phased approach proposes that firms Internationalize with each stage of expansion requiring more knowledge to be developed (to decrease the psychic distance) and higher commitments to be made (Calof & Beamish, 1995). The original four sequential stages in the Uppsala Model are as follows (Johanson & Vahlne, 1990a):

1. No regular export activities – The firm does not export to foreign markets, but remains in the home country.
2. Export via independent representatives (agents) – The firm utilizes an intermediary to do business on its behalf in the host country.
3. Sales Subsidiary – The firm opens a legal entity in a host country and recognises revenue in that entity.
4. Production/Manufacturing – The firm opens a production/manufacturing facility in the host country to establish a local value chain.

The Uppsala model has been reworked several times, with the latest iteration focusing on process ontology and the emergence of advantage (Vahlne & Johanson, 2017). However, the basis of the theory remains grounded in the acquiring of knowledge of the candidate firm in order to make commitments, thereby developing a Dynamic Capability. This is also a core principle of other Internationalization strategies.

2.3.2 BORN-GLOBAL APPROACH

Another Internationalization approach is the concept of the “Born-Global” company (Chetty & Campbell-Hunt, 2004; Knight, 1997a). These firms are global start-ups, who typically Internationalize within three years of being established and generate at least 25% of total sales from foreign markets (Knight & Cavusgil, 2004; Paul & Rosado-Serrano, 2019). Therefore, the main difference between these firms and firms using the phased approach is the speed at which Internationalization takes place and the scale of it (Ferrucci et al., 2018; Paul & Rosado-Serrano, 2019). Augier and Teece, in an early revamp of the Dynamic Capabilities Framework, referred to these technology-oriented Born-Globals as “mini”-multinationals which use “internet-based technology to anchor the coordination of their global activities” (Augier & Teece, 2007, p. 182). As per the initial studies of Born-Globals, “these early internationalizing firms leverage innovativeness, knowledge, and capabilities to achieve considerable foreign market success early in their evolution” (Knight & Cavusgil, 2004, p. 124). This is in contrast with larger older firms, where long-established bureaucratization limits innovation, which must be unlearned first. Since the world has become more connected and it is less difficult for firms to use technology, the Born-Global view is also that this decreases Psychic Distance, making Internationalization easier (Chetty & Campbell-Hunt, 2004). These firms also typically do not rely on firm-specific advantages like large corporations, thus it is mostly applied to small and medium-sized firms (SMEs) that are technology-oriented (Fang et al., 2017; Paul & Rosado-Serrano, 2019), although it is not limited to this industry. These tendencies to innovate rapidly allows for Born-Globals to develop Dynamic Capabilities, making rapid Internationalization of younger firms possible, but only if combined with appropriate accumulation of knowledge to understand the target market (Augier & Teece, 2007). Although Born-Globals have these competencies that allow them to be more flexible in terms of Internationalization, they still need to leverage Local Agent capabilities, like knowledge, to maximise their performance (Knight & Cavusgil, 2004). In fact, one of the perceived

shortcomings of Born-Globals in some studies, is that they largely underestimate the cultural knowledge required to enter new markets. This stems from their arms-length approach to entering new markets through using technology (the Internet) to gather information, target and enter new markets that differs substantially in terms of psychic distance. Fang states: “The failure to consider the concept of culture from a dynamic perspective represents a limitation of the Born Global paradigm” (Fang et al., 2017, p. 557). Therefore, it represents a missed opportunity to develop a Dynamic Capability in some instances, and this competitive advantage is sacrificed for speed. However, other recent studies found that Born-Globals rely on support networks from the host country to make their Internationalization successful, indicating the use of Local Agent knowledge (Gammeltoft & Cuervo-Cazurra, 2021). It is fair to say that this model is evolving continuously.

2.3.3 OTHER INTERNATIONALIZATION STRATEGIES

Other Internationalization strategies stemming from the literature include the following:

Differentiation strategies arise where the firm distinguishes itself with the portfolio of products or services it brings to the host market. The firm can either target a niche or full-line segment, thereby having a focused or broad approach (Muñoz et al., 2016; Teplensky et al., 1993).

Localization strategies refers to the commitment from a firm to launch a form of local operational capacity through the acquisition of a host country firm or establishing its own local operating entity (even Joint Ventures). In most sectors this results in the capacity to manufacture products locally (Anderson et al., 2009; Ernst et al., 2015).

Outsourcing is a strategy where certain activities from the value chain of a home country firm is sliced out and relocated to Emerging Market countries to enable economies of scale. Although the firm continues to primarily sell in countries with low psychic distance, it eventually serves as a beachhead to enter the host country (Mohiuddin et al., 2017), which is similar to the furthering of commitments mentioned in the Uppsala model.

Pricing strategies are specifically attractive to Emerging Markets as they service the larger share of the global population known as the Bottom of the Pyramid. In this strategy a firm brings their product into an Emerging Market country at a

lower cost than in developed markets, hoping to stimulate demand and therefore deliver larger volumes of sales, to achieve economies of scale (Chliova & Ringov, 2017; Naidoo & Suleman, 2021; Pandey & Thombal, 2018; Winterhalter et al., 2017).

Product innovation strategies are perhaps the most pioneering strategies and it relates to firms applying their acquired Local Agent knowledge to develop products that will suit the market needs (Agarwal et al., 2018; Kahn, 2011). In the MedTech industry there are specific examples that are often cited from companies like General Electric (Govindarajan & Ramamurti, 2011; Immelt et al., 2009; Kachaner et al., 2011; Sharmelly & Ray, 2021; Winterhalter et al., 2017) and Electa (Fang et al., 2017; M. Johanson & Kao, 2015).

Value strategies includes bricolage, social embeddedness and product standardization. This refers to the firm's attempt to make their portfolio part of a complete value solution. This aims to provide an affordable innovation for low-income segments (Chliova & Ringov, 2017; Depasse et al., 2016; Ernst et al., 2015; Winterhalter et al., 2017).

Ambidexterity strategies refers to the firm's ability to focus on two different strategies at the same time. This might be two different streams of innovation (balanced vs combined), or different intrinsic firm-specific knowledge (refinement vs risk) (Dunlap et al., 2016). More generally, in Emerging Market Internationalization attempts, it usually refers to the firms' capacity to manage different business models (explore vs exploit) in such a way that they do not compete for resources (Khan et al., 2021; Khan et al., 2022; Liu et al., 2021; Peng et al., 2021; Wu et al., 2020).

It is, however, critical to note that all these strategies still require a basic knowledge of the target market to be established before entry (Paul & Rosado-Serrano, 2019). Therefore, the development of local networks and partnering with Local Agents remains a key driver for successful Internationalization in all these strategies.

2.4 ACQUIRING TARGET MARKET KNOWLEDGE

It is therefore clear that most Internationalization strategies and processes strongly advise the acquisition of prior market knowledge (except to some extent the Born-global model). This is proven by the acquisition of market knowledge before successful Internationalization as well as the proven lack of knowledge identified as a reason for

failed Internationalization. So, a firm acquiring knowledge of a target market is essentially developing a Dynamic Capability to enter that market, and the more knowledge it acquires the more likely it is to Internationalize successfully.

One of the major reasons for acquiring knowledge to expand into foreign markets is to overcome the firm's "Liability of Foreignness", generally referred to as its Outsidership, which is a source of competitive disadvantage (Zaheer & Mosakowski, 1997). This potential lack of knowledge can increase the psychic distance of the candidate firm and can lead to a rise in the cost of doing business in foreign markets, thus requiring extra investment to overcome this disadvantage. Generally, there are two ways for multinational firms to overcome their Liability of Foreignness (Tang et al., 2020). Firstly, through the firm-specific advantages of the company, where these advantages are of such importance or scarcity (niche) in the target market that it overcomes the disadvantage of Outsidership. Secondly, through acquiring knowledge of the local environment, where it will assist in understanding the dynamics of the new market to develop effective competitive strategies. It is this second approach that is of interest in the current study as it speaks more closely to the development of knowledge as a Dynamic Capability.

This obtaining of knowledge has been described by many researchers and is understood to be a Dynamic Capability of a firm that attempts to Internationalize (Cuervo-Cazurra, 2011; Paul & Rosado-Serrano, 2019; Teece et al., 2016), especially as it requires management to renew their thinking. In a recent review of Internationalization literature, Paul & Rosado-Serrano found that "Foreign market knowledge prior to the first international venture had a positive impact on venture performance" (Paul & Rosado-Serrano, 2019, p. 837). One of the ways in which to acquire this knowledge is through partnering with a Local Agent in the target market to assist (Lagerström & Lindholm, 2021; Nikolchenko et al., 2018; Paul & Rosado-Serrano, 2019). These agents can take the form of consultants, advisors or distributors (Nikolchenko et al., 2018) and can be considered as driving factors for Internationalization to succeed. Lee found that "specific knowledge can be developed from partners' interactions, and this knowledge can nurture partners' resources and capabilities [towards] each other" (Lee et al., 2020, p. 487). This is referred to as "general relationship knowledge". Most recently in an excellent study by Park (Park & Chung, 2019), it was shown that affiliates and subsidiaries are more likely to expand successfully if they develop a high level of absorptive learning. Park states "subsidiaries create value by understanding local markets better than their parents and thus proactively develop and accumulate local resources and knowledge" (Park & Chung, 2019, p. 685). Although many studies (Lagerström & Lindholm, 2021;

Nikolchenko et al., 2018; Paul & Rosado-Serrano, 2019) refer to the use of agents or distributors or partners and the role they play in successful Internationalization, no studies could be found on their (the partner's) perceptions and experiences towards multinational firm Internationalization strategies. In other words, the reported measure of successful Internationalization is almost entirely dependent on the evaluation from the multinational firm of its success, be that in terms of revenue growth in a specific market (exploitation) or the number of markets expanded to (exploration). No studies could be found from the partner perspective, asking Local Agents whether multinational firm strategies are effective in their markets.

2.5 EMERGING MARKETS

Defining Emerging Markets is a moving target depending on the source consulted. In 2004, Mody (representing the IMF) commented that Emerging Markets cannot be measured on their level of per capita income, but rather a combination of growth prospects, rates of return, the level of risk, the absence of historical FDI and their phase of transition into market economies (Mody, 2004). More recently Duttagupta, also from the IMF, preferred to look at the systemic presence (nominal GDP, population, share of global exports), market access (share of external debt, global indices, bonds issued) and income level (GDP per capita) (Duttagupta & Pazarbasioglu, 2021).

Generally, Emerging Markets seem to have the following in common: low income and high growth through market liberalization (Lee et al., 2021). For the purpose of this study, we are not going to dwell on the differences between emerging, emerged and developing countries, as the definitions vary greatly. Rather, we are going to focus on a specific region encompassing a large number of countries that can be defined along any of the above lines. Therefore, the scope of the current study is the countries that constitute the Middle East and Africa (MEA).

Emerging Markets are known for their volatile and unpredictable nature. In their recent Emerging Market Multinational Report, Casanova and Miroux mentions the critical challenges to investing and expanding into Emerging Markets, namely institutional voids, problematic regulatory frameworks, low enforcement of laws, underdeveloped capital markets, political instability and inherent corruption (Casanova & Miroux, 2021). It is therefore a challenging region, but with lots of potential.

2.6 INTERNATIONALIZATION INTO EMERGING MARKETS

Recent reports (Casanova & Miroux, 2021), indicate that the contribution of Emerging Markets to global GDP has increased from 32% in the early 2000's to 44% in 2020. Therefore, these markets with their high growth rate and large populations, are very

attractive to firms who wish to expand into new markets. But what does the literature say about Internationalization into Emerging Markets?

The strategies of Internationalization have been applied to Emerging Markets relatively early (Hoskisson et al., 2000a; London & Hart, 2004a). Eventually, it was also used to explain the Internationalization of firms expanding from Emerging Markets into Developed Markets or other Emerging Markets (Bonaglia et al., 2007; Cuervo-Cazurra & Genc, 2008; Gammeltoft et al., 2010; Gammeltoft & Cuervo-Cazurra, 2021; Oliveira et al., 2018; Tang et al., 2020). Most recently, a couple of studies reworked and reanalysed Internationalization models for Emerging Markets, specifically focusing on the current applicability of the Uppsala model (Oliveira et al., 2018; Yamin & Kurt, 2018). However, another recent study confirmed through a systematic review that research on the Internationalization strategies into and from Africa are lacking (Igwe et al., 2022).

The majority of Emerging Markets play host to the population at the Bottom of the Pyramid (BoP), where there has been a lot of academic focus in terms of innovation (Anderson & Markides, 2007; Chliova & Ringov, 2017; Prahalad et al., 2012) and profitability (Agarwal et al., 2018; Jones Christensen et al., 2015; Prahalad & Hammond, 2002). Therefore, a lot of research has focused on the countries with very high populations in the BoP, where business model innovation or product innovation is required. The question should be asked whether specific countries are studied more often than others?

There is an abundance of literature available on Internationalization strategies and Dynamic Capabilities in China (Cheong et al., 2020; Johanson & Kao, 2015; Peng et al., 2021; Rao, 2008; Tang et al., 2020; Winterhalter et al., 2017; Wu et al., 2020), India (Agarwal et al., 2018; Depasse et al., 2016; Mahasuar, 2022; Meyer et al., 2009a; Mohiuddin et al., 2017; Pandey & Thombal, 2018; Winterhalter et al., 2014) and Brazil (Dunlap et al., 2016; Moura & Moura, 2016), but there is unfortunately very little research available on MEA. Specifically, in the medical and healthcare field. Although there are important and relevant studies to be found, they focus primarily on governance, regulation, leadership and consumer behaviour (Ahen & Salo-Ahen, 2018; Ahmed et al., 2020; Depasse et al., 2016; George et al., 2016; Hubner et al., 2021; Jones Christensen et al., 2015; Kahn, 2011). These are appropriate directions to follow when studying Internationalization into Emerging Markets (MEA specifically), as it has been pointed out earlier that these countries suffer from institutional voids and lack of transparent regulatory or legal frameworks. Unfortunately, it means there is a dearth of research on the development of Dynamic Capabilities in MEA countries.

There are, fortunately, some studies regarding the use of knowledge to overcome Liability of Foreignness in MEA. Lagerström (Lagerström & Lindholm, 2021) found that phased Internationalization of healthcare SMEs in Emerging Markets can only sequentially move from one phase to the next if the preceding phase is completed and that the firms actively entering into local networks become insiders, supporting the literature about the importance of partners mentioned in the previous section. They found that the ability of an outsider to convince an insider to form a relationship is key. They also specifically identified the role of a local *distributor* to apply for and own product registration, resulting in an insider-outsider relationship. Although, they return to the firm-specific advantages to overcome the Liability of Foreignness by acquiring legitimacy through products being perceived as “scientific” or “evidence-based”, hence reverting to the Resource Based Theory to maintain a competitive advantage. Therefore, their solution does not solely rest on relationships and knowledge of insiders, but leans toward the pedigree of their product. Falahat (Falahat et al., 2018a) found that the networking capabilities of firms result in positive foreign market performance in Emerging Markets. Cuervo-Cazurra (Cuervo-Cazurra, 2011) probably performed the most in-depth work on the knowledge required to Internationalize effectively in Emerging Markets, specifically MEA. He found that there are three types of knowledge that should be developed in the home country, one of which is the “knowledge to manage differences in institutional environments, developed by having an alliance to a foreign firm at home” (Cuervo-Cazurra, 2011, p. 426), supporting the role of partnerships and networking.

There is certainly a gap in the literature where multinationals meet Emerging Markets in MEA countries. As soon as knowledge is approached at market level in MEA, the focus shifts from multinationals from Developed Countries to multinationals from Emerging Markets (Contractor, 2013; Oliveira et al., 2018; Tang et al., 2020), reversing the direction of Internationalization. Although there is mention of networking and acquiring knowledge from local partners, once again there is no focus on the partner perspective, asking whether multinational firm strategies (either from Developed Markets or Emerging Markets) are effective in their markets or whether multinational firms are exhibiting/developing Dynamic Capabilities.

2.7 FAILED INTERNATIONALIZATION INTO EMERGING MARKETS

There is a large body of research investigating why firms fail to Internationalize. The first criticism against the phased approach to Internationalization was by Hadjikhani in 1997 citing that lack of commitment by the firm is a strong indicator of failure and that market knowledge only plays a role in the opening stages of Internationalization (Hadjikhani,

1997a). Kahn quoted early statistics of international new venture failure rates as "...40% in the first year and 90% over 10 years" (Khan & Lew, 2017, p. 149).

These failures can be caused by external forces, as cited by Millington (Millington & Bayliss, 1997a), but they also confirm that Internationalization can only be accelerated if international experience and planning can overcome the lack of prior market knowledge. More recently, Hunt found that Walmart's international expansion failures were due to "the lack of understanding about the cultural habits..." (Hunt et al., 2018, p. 25), a lack of understanding of local labour unions and also a lack of understanding of local legislation. It is true that many companies learn this lesson after failing first and some research supports the position that initial failure leads to stronger performance as firms learn lessons (Amankwah-Amoah & Wang, 2019a; Martins et al., 2021; Wang, 2021). Khan confirmed this, stating that "When [International New Ventures] enter international markets, they need to develop the necessary capabilities and adapt them to their operations, as different host country markets present different institutional settings" (Khan & Lew, 2017, p. 151). It was also found that some firms abused Emerging Markets for access to low cost labour or resources, which lead to the eventual failure of the firm to Internationalize into those Emerging Markets as the abuse was discovered and addressed (Cuervo-Cazurra et al., 2021).

A critical characteristic of Emerging Markets that contributes to failed Internationalization are their persistent institutional voids and volatile political environments (mentioned earlier). Hadjikhani's case study of MNC performance before and after the revolution in Iran is an excellent example of these Emerging Market attributes (Hadjikhani, 1997b). Hadjikhani found that firms who maintained their intangible assets in the Iranian market throughout the period of the revolution succeeded in re-establishing operations post-revolution due to the market perception of their commitment, thereby supporting the theory of the importance of utilizing their network of Local Agents effectively.

In general, most research shows that the reasons for failure of Internationalization into Emerging Markets are either driven by deterministic perspectives (external organizational factors like deregulation or technological change) or voluntary perspectives (firm specific factors like poor leadership or mismanagement) (Amankwah-Amoah & Wang, 2019b). This second perspective shows the lack of firm leadership to develop a Dynamic Capability to address the complex nature of Emerging Markets.

2.8 THE MEDICAL TECHNOLOGY INDUSTRY

The scope of the current project concerns the Medical Technology (MedTech) industry. The use of "MedTech" as an acronym is widely accepted and yields more results on

database searches than the complete title. According to MedTech Europe, the association that represents the MedTech industry in Europe, medical technology “is any technology used to save lives or transform the health of individuals suffering from a wide range of conditions.” (MedTech Europe, 2018, p. 5). MedTech products range from items such as syringes and gloves to pacemakers and joint replacements. It does not include Biotechnology or Pharmaceuticals. According to 2018 figures, MedTech is the number one technical field for patent applications and there are 27 000 MedTech companies in Europe alone, resulting in a €110 Billion market in Europe.

A cursory search of industry articles seems to indicate that Emerging Markets are a focus area for MedTech companies to expand to (Bagla et al., 2018; Donoghoe et al., 2012; Dora et al., 2017; Pedersen, 2022). But at the same time, it seems that there are a lot of missed opportunities. According to Donoghoe (Donoghoe et al., 2012) Medtech firms are still trying to unravel Emerging Market complexities. A Boston Consulting Group report from 2017 (Dora et al., 2017) states that Emerging Markets are a small contributor to global MedTech revenue, contributing only 2%. Thought leaders (Pedersen, 2022) comment that “manufacturers often fail to fully realize commercial opportunities in Emerging Markets” (Pedersen, 2022, p. 1). It is difficult to gather from MedTech firm annual reports which Emerging Markets prove more successful for them, as different firms group Emerging Markets differently. Some group Africa and South America together, while others group the Middle East with Eastern Europe or the Far East. Mostly, MEA is lumped into EMEA (Europe, Middle East and Africa) and reported as such. Of the top 20 MedTech firms, none of them report revenue or growth separately for MEA.

The literature, or rather a lack thereof, tells a similar story. As can be expected, there are abundant studies regarding pharmaceuticals (Ahen & Salo-Ahen, 2018; Mohiuddin et al., 2017; Moura & Moura, 2016; Muñoz et al., 2016; Tannoury & Attieh, 2017). There is some research on medical devices (Cheong et al., 2020; Hubner et al., 2021; Pandey & Thombal, 2018; Salie et al., 2021). Although the literature is scant on diagnostics (Winterhalter et al., 2014, 2017) and medical capital equipment (Depasse et al., 2016; Winterhalter et al., 2017). The industry therefore can benefit from further research into performance in Emerging Markets, specifically Internationalization strategies.

2.9 INTERNATIONALIZATION STRATEGIES OF MEDTECH FIRMS

Early studies in the Internationalization strategies of MedTech firms followed the Uppsala route of phased entry (Heiss, 2017; Teplensky et al., 1993). It seems that in most instances the MedTech industry is not fit for Born-Global Internationalization due to the resources required for product innovation in this specific industry, hence the small

number of SMEs in this sector (MedTech Europe, 2018), but there are contrary examples (Lagerström & Lindholm, 2021). However, the Liability of Foreignness features regularly in the research (Fang et al., 2017; Heiss, 2017; Lagerström & Lindholm, 2018), indicating that the need for overcoming Outsidership is clearly identified. As mentioned before, the best way to overcome Outsidership is to develop knowledge of the target market, and this seems to be supported in the MedTech industry as well (Hadjikhani, 1997b; Heiss, 2017; Lagerström & Lindholm, 2018, 2021).

There are examples of successful Internationalization by MedTech firms. Some companies managed to use their acquired knowledge to innovate appropriate products for Emerging Markets. Both General Electric (Govindarajan & Ramamurti, 2011; Immelt et al., 2009; Sharmelly & Ray, 2021; Winterhalter et al., 2017) and Electa (Fang et al., 2017; Johanson & Kao, 2015) have been widely referenced for their effective method of entering Emerging Markets with low complexity products to meet the need of resource-constrained environments. Johanson (Johanson & Kao, 2015) specifically notes the success in the accumulation of market knowledge through phased entry activities that leads to these innovations.

On the other hand, Sharmelly (Sharmelly & Ray, 2021) noted that there is a higher chance of Internationalization failure in Emerging Markets if there is a lack of knowledge sources. Some MedTech companies seem to have failed to Internationalize into Emerging Markets due to this point. As explained earlier, in Hadjikhani's case study (Hadjikhani, 1997b), the absence of well-developed networks throughout the Iranian revolution caused firms to exit the country. While both studies by Lagerström detailed the inability to overcome Outsidership as the major cause of failure in this sector in Emerging Markets (Lagerström & Lindholm, 2018, 2021). References to other failures are mentioned in trade magazines and articles, but they are not well studied nor subjected to the scientific method. It seems that MedTech firms do not graciously communicate failures in Emerging Markets or that research into this field still needs to develop.

2.10 SUMMARY

The literature thus shows that the process of Internationalization by Multinational firms has been studied widely. There are different Internationalization strategies, of which the Uppsala Model and the Born-Global approach is the most common and popular. One of the features which all Internationalization strategies display, is the need to acquire knowledge of the target market in order to overcome their Liability of Foreignness. This knowledge is usually assimilated through the expansion of local networks and

relationships and it should drive the development of effective entry strategies. Thus, allowing the firm to develop a Dynamic Capability.

The literature also shows that there is a wide body of knowledge about the Internationalization into Emerging Markets and that these markets brings extra complexity to the process which is best overcome by acquiring even higher levels of knowledge about the target market. Many companies fail to enter Emerging Markets effectively, due to the complexity and volatility of these markets, but they are attractive growth engines for MNC's.

The Internationalization of MedTech firms are well studied into the Emerging Markets of China, India, Eastern Europe and South America. However, there is very little research about their entry into MEA. Furthermore, no research could be found detailing the perspective of the Local Agent on this process.

CHAPTER 3: RESEARCH QUESTIONS

3.1 INTRODUCTION

It is clear from the research that Multinational MedTech firms still do not fully realize the revenue potential of countries in Emerging Markets serving the Bottom of the Pyramid, based on the skewed contribution from Emerging Markets to reported MedTech firm revenue. Although they are present in these markets, their success is not a certainty. An investigation is required into the reasons for this, which is where the current study aims to contribute. Research gaps were identified in three recent academic papers from reputable sources, namely, “Outsidership vs insidership – internationalization of health-care SMEs” by Lagerström and Lindholm (2021). Secondly, “Improvement of Operational Performance of Internationalized Companies through Collaboration in Distribution Networks” by Nikolchenko et al. (2018). And lastly, “The role of subsidiary learning behavior and absorptive capacity in foreign subsidiary expansion” by Park and Chung (2019).

To target these gaps and to further the objectives of the current study, the research methodology was prepared with this aim in mind: To determine the ability of Multinational MedTech firms to develop Dynamic Capabilities through Local Agent knowledge. The research methodology is detailed in Chapter 4. These calls for further research, as well as the dearth of available literature on the industry and region, drives the research questions.

3.2 MAIN RESEARCH QUESTION

RQ1: How are multinational MedTech firms developing Dynamic Capabilities to address their market through the knowledge they acquire from Local Agents?

In 1993 Teplensky studied the Internationalization strategies of MRI manufacturers into Emerging Markets and drew the broad conclusion that it depends on scope (niche vs portfolio vs full-line) and timing. But the same study detailed the beginnings of the knowledge dimension, noting the identification of uncertainties such as regulatory, technology and demand (Teplensky et al., 1993). A large amount of literature on the Internationalization strategies of MedTech firms focuses on the impact of innovation (Cheong et al., 2020; Depasse et al., 2016; Gupta & Thomke, 2014; Salie et al., 2021; Sharmelly & Ray, 2021; Winterhalter et al., 2017) and this innovation is borne from a better understanding of Emerging Markets from earlier Internationalization activities, i.e. learning. Certainly, this learning and development of knowledge allow the firm to exhibit some Dynamic Capabilities if it leads to innovation of either products or business models.

Lagerström identified this as a key future research direction, specifically in the healthcare sector, stating “how to recognize and exploit business opportunity in relation to the business network for these firms is a promising topic for future research” (Lagerström & Lindholm, 2021, p. 2033).

3.2.1 SUB-RESEARCH QUESTION 1

RQ1a: How does multinational MedTech firms develop and utilize knowledge from Local Agents?

Based on the importance of the acquisition of knowledge through a Local Agent, this process of acquiring knowledge and how it is utilized is critical to understand. It could assist in understanding whether firms are developing the required Dynamic Capabilities to succeed in Emerging Markets. This interaction process between Multinational MedTech firm and Local Agent is not well documented in the literature. A recent study by Nikolchenko specifically referred to the successes of these networks in challenging markets as a future direction to study, stating “More multinational companies should be involved in the research for better understanding and explanation how collaboration in networks involving Internationalized and domestic companies impact on the operational and firm performance” (Nikolchenko et al., 2018, p. 363).

3.2.2 SUB-RESEARCH QUESTION 2

RQ1b: What is the role of Local Agents in driving multinational MedTech firm Internationalization strategies?

There seems to be a gap in the research on whether the Local Agent actually drives multinational Internationalization strategies or whether this is developed within the firm through learning. Academics have specifically identified this as an avenue for future research, “Future studies may investigate whether the knowledge was gained through acquisition or internal development” (Park & Chung, 2019, p. 694). It needs to be approached from the MedTech perspective as well as the Local Agent perspective, to determine the real source of this knowledge.

3.2.3 SUB-RESEARCH QUESTION 3

RQ1c: What are the experiences of Local Agents in this process?

From the research, it is clear that MedTech firms require local knowledge to be successful in Emerging Markets, much like other industries studied in Internationalization literature. However, there is a similar gap in the literature as in broader Internationalization. There is no focus on the partner perspective, asking whether multinational firm strategies (either from Developed Markets or Emerging Markets) are effective in their markets. There are calls for research to explore this relationship between the Multinational firm and the Local Agent more effectively (Lagerström & Lindholm, 2021).

3.3 SECONDARY RESEARCH QUESTION

RQ2: What would Local Agents advise multinational MedTech firms to implement or consider when internationalizing into their home countries?

Furthermore, since the nature of the relationships within these networks are so critical, there should also follow some proactive advice from Local Agents to allow for the Multinational MedTech firm to learn and gain knowledge vicariously. This requirement to explore these relationships in more detail to further the understanding of the importance of host country networks was recently encouraged by Lee (Lee et al., 2020a).

CHAPTER 4: RESEARCH METHODOLOGY

4.1 INTRODUCTION

The research methodology for this study was driven by the lack of exploration in this specific field. In the previous section, the paucity of articles was identified and the need for this direction was confirmed by calls for exploration into the key driving forces of inter-firm relationships in the Internationalization process (Paul & Rosado-Serrano, 2019). This chapter details the research methodology that was used to inform the research question and sub-questions. Figure 1 shows the roadmap used to arrive at the chosen methodology.



Figure 1: Methodological Roadmap for current study

4.2 RESEARCH NATURE

The nature of this research study is a combination of Exploratory Research and Descriptive Research. Firstly, there are mostly elements of Exploratory Research, as the lack of available data lends itself to the building of theory on how MedTech firms utilize Local Agent knowledge in the MEA region. Therefore, the current study maps out the themes which will drive future studies on this topic (Bell et al., 2019). Secondly, there was an opportunity to conduct a measure of Descriptive Research by gathering additional information through the correct selection and configuration of the data collection instrument (Gehman et al., 2018). This venture into Descriptive Research was achieved through specific questions in the interview guide leading to advisory statements.

4.3 RESEARCH PHILOSOPHY

The importance of knowledge acquisition in the successful Internationalization of firms was well described in the previous chapter and thus generally defined. Therefore, the theory is in place and we can apply the theory to the data collected in this study, bringing the theory to the phenomenon. The paucity of research and data concerning the perception of Local Agents leads the current study to have an inductive philosophical

approach. It builds theory and uses observations to develop potentially generalizable implications (Bell et al., 2019; Eisenhardt, 1989; Gehman et al., 2018). The expectation is that this study will lead others to perform further data collections to test the opinions gathered from this research, thus moving the topic from a qualitative design to a quantitative one.

4.4 RESEARCH DESIGN

The aim of this research study was to examine the relationship between entities. In this case, these entities were the multinational MedTech firms and the Local Agents. Therefore, the research design was Qualitative, to extract new knowledge on the relationships between these entities (Creswell et al., 2007; Eisenhardt, 1989; Gehman et al., 2018) and to support the inductive approach to the research (Bell et al., 2019). It also aimed to build theory in a field where there is very little previous research.

4.5 RESEARCH STRATEGY

This project aimed to study the phenomenon inside its context. Therefore, the method of multiple individual interviews was recommended (Eisenhardt, 1989). Interviews lie firmly in the inductive approach (Bell et al., 2019; Gehman et al., 2018), in this study specifically the revelatory interview design (Bell et al., 2019), which serves to explore a single concern across multiple interviews (Creswell et al., 2007; Gehman et al., 2018). The interviews that were conducted are explained in detail in Sections 4.10 and 4.11. The next three sections will provide justification to prove that the selection of cases was reflective of the population and that they were homogenous in relation to their connection to the research question, even if they were non-homogenous in relation to their company cultures. Figure 2 shows a summary of the chosen methodology.

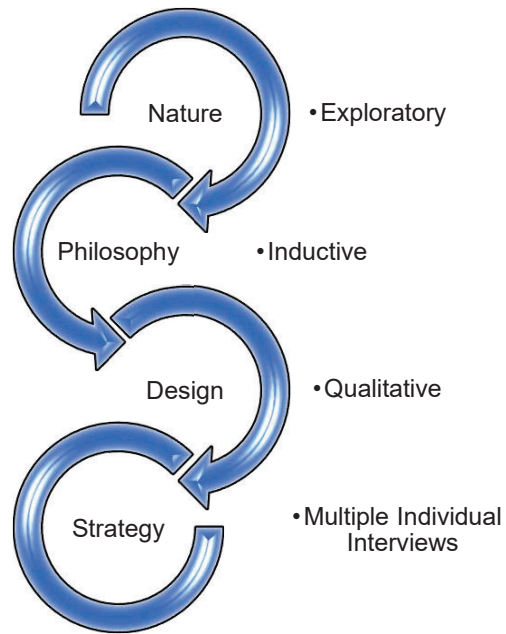


Figure 2: Summary of Research Methodology

4.6 POPULATION

The population consists of MedTech distributors, agents and suppliers (collectively the Local Agents) as well as multinational MedTech firms operating in the countries of the Middle East and Africa.

The Local Agents are a very large population. A quick search of medical suppliers in Africa alone yielded a result of just over 3900 companies. But it was difficult to determine which of these are MedTech suppliers and which supply other medical items. Therefore, a list of MedTech distributors was sourced from MedTech trade unions and industry associations and 223 companies were identified and approached.

The number of multinational MedTech firms operating in MEA is a little less. A search on LinkedIn using algorithmic analysis delivered a list of just under 100 individuals that serve in decision-making roles in multinational MedTech firms in MEA.

To ensure the correct companies and individuals were identified, it was requested that they identify which sector they operate in. Generally, the MedTech industry is divided into three main sectors (Medical Devices, Medical Capital and Diagnostics). There are further sub-divisions, but the importance of this is not applicable to the current study.

Therefore, for further stratification, participants were classified as operating in the following sectors:

- Medical Devices

- Medical Capital
- Diagnostics

4.7 SAMPLING STRATEGY AND SIZE

The Non-Probability Sampling technique was used in this study (Bell et al., 2019). Since the population is non-homogenous (Local Agents versus MedTech Reps), the average sample size would be 32 interviews (Saunders & Townsend, 2016). The goal was to conduct a minimum of 15 interviews (Saunders & Townsend, 2016), on MedTech Reps and Local Agents respectively, resulting in a total of 30 interviews.

The sampling also followed the quota technique (Bell et al., 2019) where possible, to gain an understanding of differences between regions (variables being Sub-Saharan Africa, Middle East and Sub-Saharan Africa AND Middle East) where business is conducted. Quota sampling also serves to support an exploratory research nature (Bell et al., 2019) where new concepts might be generated.

Regions

The region applicable to this study is the Middle East and Africa. For further stratification, participants were classified as operating in or having responsibility for the following sub-regions:

- Sub-Saharan Africa (SSA) including all countries south of the Sahara
- Middle East (ME) including North Africa (African countries facing the Mediterranean)
- Middle East and Africa (MEA) where participants have responsibility for the whole MEA region

For the Local Agents, the aim was to sample individuals on the level where strategic decision-making is required (Chief Executive Officer, General Manager, Country Manager, Owner, etc.). As a relative control in determining the relationship between these entities, samples were also taken from MedTech Reps operating in MEA. These samples were chosen in the same way as for Local Agents. For these MedTech firms, the aim was to sample individuals on the level where strategic decision-making is required (General Manager, Country Manager, Business Unit Manager, Distribution Channel Manager, etc.).

Although the aim was to conduct 30 interviews, the reality was somewhat different. It was difficult to gain commitment from Local Agents to participate. Even though over 200 Local Agents were contacted, only 11 interviews could be concluded. On the contrary,

MedTech Reps were more approachable and it was possible to conduct the required 15 interviews.

4.8 UNIT OF ANALYSIS

The unit of analysis for this study was the decision-making individual (Bell et al., 2019) within the multinational MedTech firm or the Local Agent from the host country. In the case of Local Agents, these were Owners, Part-Owners, Board Members, Chief Executive Officers, General Managers, Country Managers, etc. In the case of MedTech Reps, these are Vice-Presidents General Managers, Country Managers, Business Unit Managers and Distribution Channel Managers. Since these individuals have different levels of responsibility in executing firm strategy, the coding of interview questions reflected their level within their organizations, to quantify the organizational level of analysis (Bell et al., 2019).

Roles

The unit of analysis dictates which individuals was interviewed. Furthermore, many companies (both MedTech and Local Agent) have a variety of titles for roles that fulfil the same inherent function. Therefore, as per above, the following over-arching categories was used to stratify participants:

- Senior Leadership
 - For MedTech, being removed from dealing with Local Agents by one level of management (Vice Presidents and General Managers), therefore not having direct contact with Local Agents on a daily basis.
 - For Local Agents, Owner, Part-owner or Board Member of the distribution company or entity.
- Middle Management
 - For MedTech, being in direct contact with Local Agents and having direct responsibility for their performance (Country Managers, Business Unit Managers, Regional Managers and Distribution Channel Managers).
 - For Local Agents, one level below Owners, Part-owners or Board Members (Sales Managers, Business Development Managers and Marketing Managers).

4.9 SUMMARY OF PARTICIPANTS

Based on the above (population, sampling strategy and the unit of analysis), the participants were classified into their respective Regions and Roles. Table 1 shows a summary of the participants by this classification. It also shows the length of interviews as they were conducted.

Table 1: Characteristics of Research Participants

RESPONDENT	ROLE	ROLE CATEGORY	Region	INTERVIEW DURATION
LA-001	Managing Director	Senior	SSA	35,03
LA-002	General Manager	Senior	SSA	36,29
LA-003	Sales Director	Middle	SSA	46,17
LA-004	Director	Middle	SSA	31,16
LA-005	Business Manager	Middle	SSA	36,03
LA-006	Business Manager	Middle	ME	29,27
LA-007	COO	Senior	ME	31,04
LA-008	Group Managing Director	Senior	SSA	43,29
LA-009	Marketing & Sales Manager	Middle	ME	29,21
LA-010	CEO	Senior	SSA	36,01
LA-011	General Manager	Senior	ME	36,57
MT-001	Country Director	Middle	SSA	36,23
MT-002	Strategy Manager	Middle	MEA	41,15
MT-003	Sales Manager	Middle	SSA	43,24
MT-004	Regional Director	Middle	SSA	41,51
MT-005	Distribution Channel Manager	Middle	MEA	40,05
MT-006	Managing Director	Senior	SSA	30,14
MT-007	Vice President of Therapy Group	Senior	MEA	36,32
MT-008	General Manager	Senior	MEA	36,54
MT-009	Commercial Director	Middle	SSA	35,4
MT-010	Director	Middle	MEA	37,18
MT-011	Business Director	Middle	MEA	37,28
MT-012	Vice President	Senior	MEA	32,32
MT-013	Strategy Manager	Middle	SSA	47,39
MT-014	Global Chief Marketing Officer	Senior	MEA	30,08
MT-015	Account Manager	Middle	ME	42,36
				Average = 36min

4.10 DATA COLLECTION INSTRUMENT

The data collection instrument best suited for this research nature (Exploratory), research approach (Inductive) and research design (Qualitative) is the interview guide. To provide a measure of descriptive analysis and to better understand the process of Local Agent knowledge utilization, the researcher conducted semi-structured interviews (Bell et al., 2019; Gehman et al., 2018; Saunders & Townsend, 2016). The list of topics covered in the interview guide was fairly specific, but there was leeway to explore interviewee responses and delve into applicable areas, therefore making the interview more flexible (Bell et al., 2019).

The interview guide included themes with key queries driven by the Research Questions from Chapter 3. A draft interview guide is available in Appendices D and E. This draft guide was tested to ensure clarity by piloting it with two interviews. The researcher conducted these two pilot interviews with one MedTech Rep and one Local Agent. Both individuals have completed their MBA studies and could therefore provide sound advice.

They were consulted after their respective interviews on the research methodology and provided valuable inputs. The interview guide and approach were then amended from this experience/advice and used for the official interviewing process.

To ensure the required sample size was viable and to confirm the voluntary nature of the study, access was requested and letters was obtained from the MedTech firms and Local Agents the researcher intended to interview, granting access to the respective organizations.

4.11 DATA COLLECTION APPROACH

All interviews were conducted via an electronic platform (Zoom) as there were physical restrictions in accessing interviewees across such a wide range of countries selected for this study. Interviews were recorded with the consent of the individual and transcribed by the researcher (Bell et al., 2019) using Otter.ai as transcription software (Lai, 2022). The researcher further confirmed the correctness of transcription by reviewing the recordings in parallel to the transcript. All transcripts were then entered into analysis software for easier analysis (next section). All transcripts were also anonymised by removing interviewee data as well as references to companies or individuals.

4.12 DATA ANALYSIS

The thematic analysis approach for qualitative data analysis was recommended for this study (Bell et al., 2019; Saldaña, 2013), as it is well associated with the inductive research philosophy. The research question also lends itself to thematic analysis, as the goal of thematic analysis is to identify patterns and to describe/interpret those patterns (Braun & Clarke, 2021; Eisenhardt, 1989).

Atlas.ti was utilized as an analysis tool to code transcribed interviews for easier scrutiny (codebook in Appendix F and G). Codes were not identified beforehand, but was assigned reactively as the transcripts were analysed, following the inductive coding approach to allow the codes to emerge from the data. The in-vivo coding method was followed, using the original words and phrases from the interviewees. The codes were then studied and assigned into first order categories (or sub-dimensions) to facilitate the inductive approach (Rong et al., 2015).

The identification of themes from these first order categories were imperative. The Research Questions and Sub-questions drove the identification of themes from this data. The researcher searched for the following themes: repetitions to establish patterns, similarities and/or differences and theory-related material (Bell et al., 2019). These key themes were linked to the coded framework for easier analysis through the coding

reliability approach (Braun & Clarke, 2021; Hsieh & Shannon, 2005; Saldaña, 2013). Following the literature review from Chapter 2, the Dynamic Capabilities Framework informed the themes ultimately selected. These key themes then formed the foundation for the development of a theoretical construct by the researcher, which will be explored further in Chapter 6. The path from first order categories to themes can be seen in Figure 3 below:

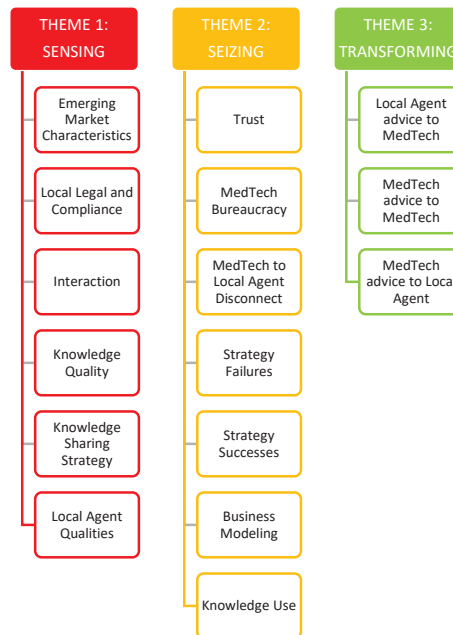


Figure 3: Categories informing the main Themes

In Figure 3, the first order categories that best align with the building blocks of Dynamic Capabilities are positioned under that specific building block. For example, the characteristics of Emerging Markets determine how firms Sense the opportunities in these markets. In the same way, the level of trust between entities in these markets determine how they work together to Seize opportunities.

4.13 DATA QUALITY

The reliability and validity of the study was achieved through the measurement of key concepts (Bell et al., 2019). Care was taken to safeguard reliability by developing the interview guide to offset the potential influence of participant error/bias as well as researcher error/bias. External reliability was driven by the nature of the interview guide which, although being semi-structured, focused on fairly consistent topics (Bell et al., 2019). Internal reliability was accomplished by having only one observer/interviewer (Bell et al., 2019).

The interview guide also certified the internal validity of the study by aligning the research questions to the questions in the interview, making sure the interview measured what it intended to (Bell et al., 2019), this can be seen in the interview guides (Appendix D and E). External validity was controlled through replicability of sampling selection, ensuring that findings can be generalized as far as possible (Bell et al., 2019).

Researcher bias as a threat to coding reliability was managed by using another coder with experience in Dynamic Capabilities and the MedTech field (Braun & Clarke, 2021). This coder, an MBA graduate, randomly sampled five interviews and confirmed the correctness of coding.

4.14 RESEARCH ETHICS

Approval was obtained from the individual organizations through permission letters to confirm their consent to contact their employees (Appendix A and B). Informed consent was then obtained from all interviewees in MedTech firms and Local Agents to ensure approval is given to proceed (Appendix C and D). This informed consent had a short explanation of the study as well as the practical contribution to management theory and practice. A non-disclosure declaration was similarly issued by the researcher. In the preamble to every interview, the researchers confirmed the participant's approval to proceed under these conditions.

All data collected were anonymized, ensuring that no individual or firm name was published in the final document, nor the individual transcripts. Participant data and transcripts was never stored on the cloud, but only on an external hard drive, which was only accessible to the researcher. No data was stored with identifiers.

The research proposal was submitted to the GIBS Ethics Committee for approval, which was duly received without a request for adjustments.

4.15 LIMITATIONS

There were physical restrictions in accessing interviewees. Due to the wide range of countries selected for this study and the remnants of Covid restrictions, in-person interviews were not possible. Therefore, all interviews were conducted via Zoom. This made it challenging for the researcher to establish rapport and act on visible cues in body language and other nuances.

The duration of this study was also of a short nature. Therefore, only one interview per participant was possible, without the privilege of conducting follow-up interviews for clarification of certain concepts and/or opinions.

There was also a limitation in the availability of Local Agents to conduct interviews on. Although the researcher contacted over 220 Local Agents, it was still only possible to interview 11 Local Agents for this study. While the number of interviews were close to the minimal threshold of 15, more interviews with Local Agents would have been beneficial.

In dealing with interviewees from MEA, it needs to be understood that the majority do not consider English their first language. Therefore, care had to be taken to ensure they understood the questions posed during the interview, in order to solicit a valid response. But it is possible that some questions or concepts were still misunderstood and that responses therefore could be unsuitable. Most of the interviewees also had strong non-English accents, which made transcription very difficult. This also means that coding and quotations, which aligned to the actual words spoken, could reflect incorrect grammar or syntax. Care had to be taken by the researcher not to infer unintended opinions in this way.

There existed a theoretical conflict of interest regarding the position of the researcher in his current employment, which is in a multinational MedTech firm. Therefore, although the interviews were general in nature and the questions revolved around relationship development, some MedTech firms and some Local Agents refused to partake in the study.

CHAPTER 5: PRESENTATION OF RESULTS

5.1 INTRODUCTION

This chapter presents the results of the data collection process detailed in Chapter 4. A total of 26 interviews were conducted, 11 with Local Agents and 15 with MedTech Reps. This chapter briefly describes the interviewees for stratification, followed by notes on the coding process. The rest of the chapter is structured according to the Research Questions, against which the relevant themes are aligned and described. The findings defined in this chapter are discussed and scrutinised in detail in Chapter 6.

5.2 DESCRIPTION OF THE INTERVIEWS

The MedTech industry has a vast number of players in the market. For this study, it was decided to target the larger MedTech firms and as many local Agents in the region as possible. Eventually, 15 MedTech Rep interviews and 11 Local Agent interviews were concluded. As detailed in the previous chapter, the interviews were semi-structured. However, due to the exploratory nature and inductive philosophy of the study, the researcher was open to exploring other avenues during the interviews if they seemed to impact the research questions.

It was encouraging to be able to interview a good mix of senior- and middle-level management individuals from both MedTech and Local Agents. This ensured visibility of strategic-level decision-making, as well as ground-level connection.

It was also noted that Local Agents are mostly region bound (ME or SSA), whereas MedTech Reps assume responsibilities for wider regions (MEA). This can be seen in the large number of MedTech Reps having responsibility for both the Middle East and Africa (MEA), whereas no Local Agent had responsibility outside of SSA or ME.

Another aspect that became apparent is that not a single Local Agent, nor Multinational MedTech, is responsible for only one sector within the MedTech industry. All of them represent a variety of products within Capital (CAP), Devices (DEV) and Diagnostics (DIAG) to some extent. Table 2 shows the distribution of interviewees:

Table 2: Interviewee distribution across Roles, Regions and Sectors

Participant	ROLE		REGION			SECTOR		
	Senior	Middle	MEA	ME	SSA	CAP	DEV	DIAG
Local Agents	6	5	0	4	7	10	10	5
MedTech Reps	5	10	8	1	6	6	12	6
TOTAL	11	15	8	5	13	16	22	11

The above table shows that Local Agents were split almost evenly between Senior and Middle Management and most of them are from SSA. Conversely, the majority of MedTech Reps are from Middle Management, but there is a representative split across regions.

In the remaining sections of this chapter, participants are referred to by their cyphers. For example, Local Agent 1 is LA-001 and MedTech Rep 12 is MT-012. The order of cyphers was randomized to ensure anonymity and does not reflect any natural order.

5.3 CODING PROCESS

The 26 interviews were transcribed and loaded into Atlas.Ti, which was the chosen qualitative analysis tool. The 26 transcriptions were then grouped by Local Agent and MedTech Rep, after which the coding process was started. Table 3 shows this grouping:

Table 3: Local Agent and MedTech Rep split

PARTICIPANT	ROLE	Region	PARTICIPANT	ROLE	Region
LA-001	Managing Director	SSA	MT-001	Country Director	SSA
LA-002	General Manager	SSA	MT-002	Strategy Manager	MEA
LA-003	Sales Director	SSA	MT-003	Sales Manager	SSA
LA-004	Director	SSA	MT-004	Regional Director	SSA
LA-005	Business Manager	SSA	MT-005	Distribution Channel Manager	MEA
LA-006	Business Manager	ME	MT-006	Managing Director	SSA
LA-007	COO	ME	MT-007	Vice President of Therapy Group	MEA
LA-008	Group Managing Director	SSA	MT-008	General Manager	MEA
LA-009	Marketing & Sales Manager	ME	MT-009	Commercial Director	SSA
LA-010	CEO	SSA	MT-010	Director	MEA
LA-011	General Manager	ME	MT-011	Business Director	MEA
			MT-012	Vice President	MEA
			MT-013	Strategy Manager	SSA
			MT-014	Global Chief Marketing Officer	MEA
			MT-015	Account Manager	ME

The above table shows the split of Local Agents to the left and MedTech Reps to the right. It also includes the randomized cypher for each respondent to the left of their role.

As per the inductive approach, no set of codes were identified before coding began, therefore allowing the codes to emerge from the data as the researcher studied the transcripts.

The two-step coding approach was then applied to the transcripts. Firstly, the two inductive steps, namely first-order coding, followed by first-order categorizing (process of grouping the first-order codes). There emerged 94 first-order codes from the first inductive step. The researcher then linked interdependencies between codes to establish networks for future use. The grouping of codes, for the second inductive step,

resulted in 20 first-order categories. Appendix F shows a simplified codebook, while Appendix G shows the detailed codebook and category list as discussed above.

Moving from the natural to the theoretical, these categories were then sorted into themes. Because the research is anchored in Dynamic Capabilities, and the Research Questions are strongly driven toward identifying the successful development of Dynamic Capabilities, the themes are directly aligned with Teece’s building blocks of Dynamic Capabilities described in Chapter 2. Therefore, the three themes identified are:

5.3.1 Theme 1 – Sensing

This refers to the Multinational MedTech firm’s ability to sense, internalize and understand intelligence from the host market and thus be able to identify opportunities. The first-order codes associated with the Sensing Theme network can be seen in Figure 4 (clearer detail in Appendix H):

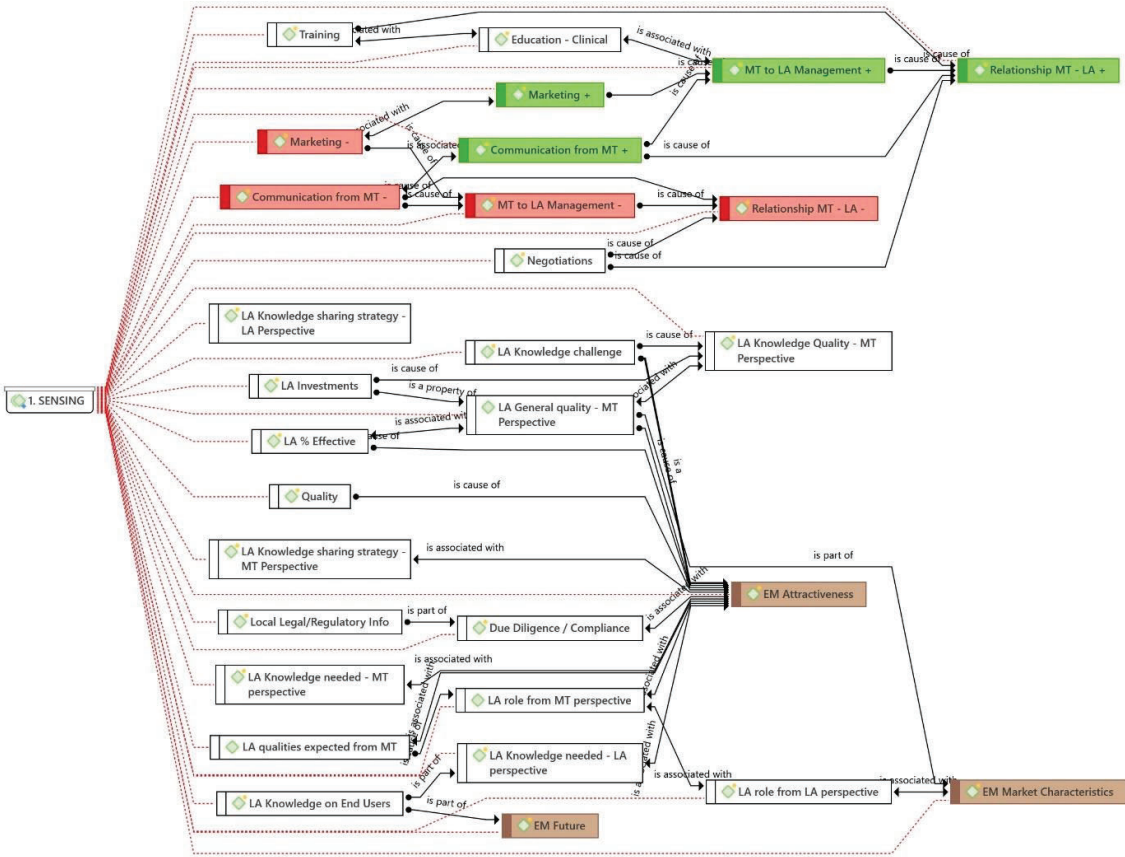


Figure 4: First-order codes feeding Sensing Theme

The above figure shows the negative impact of harmful management styles at the top and Emerging Market qualities at the bottom, while including general Local Agent qualities in the middle. All of this rolls up into the way the Multinational MedTech Senses the market.

Theme 1 mostly serves as informing RQ1a, RQ1b and RQ1c. Here it contributes to the understanding of how a MedTech firm internalizes knowledge shared by the Local Agent to gain a better understanding of the host market.

5.3.2 Theme 2 – Seizing

This refers to the Multinational MedTech firm’s ability to allocate resources, adapt business models, manage their relationship with the Local Agent and adopt the correct strategy to seize opportunities and capture value. The first-order codes associated with the Seizing Theme network can be seen in Figure 5 (clearer detail in Appendix I):

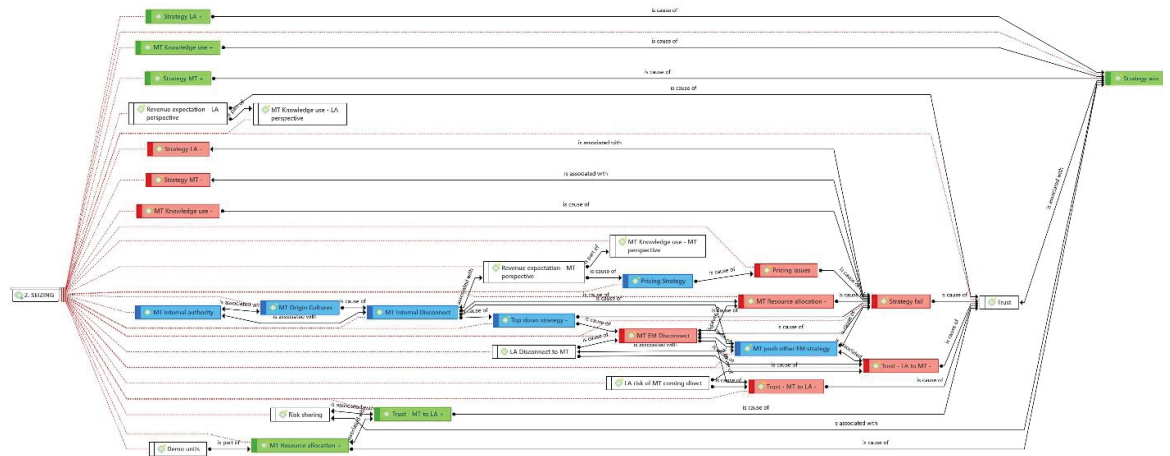


Figure 5: First-order codes feeding Seizing Theme

The above figure shows the negative impact of harmful strategic actions on the part of the MedTech firm, which is informed by inadequate market knowledge. All of this rolls up into the way the Multinational MedTech Seizes the market.

Theme 2 mostly serves as informing RQ1a, RQ1b and RQ1c. Here it contributes to the understanding of how a MedTech firm utilizes knowledge shared by the Local Agent, to capture opportunities in their market.

5.3.3 Theme 3 – Transforming

This refers to the Multinational MedTech firm’s ability to continually renew its internal structures, strategies and business models to remain innovative and relevant in a dynamic market. The first-order codes associated with the Transforming Theme network can be seen in Figure 6 (clearer detail in Appendix J):

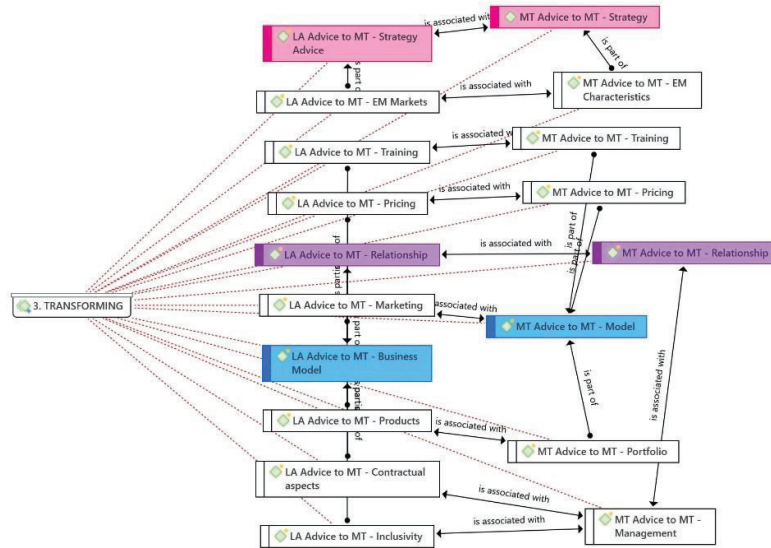


Figure 6: First-order codes feeding Transforming Theme

The above figure shows the potential advice informing effective strategies into these markets, as well as their sub-sections. All of this rolls up into the way the Multinational MedTech can potentially Transform their Internationalization strategies.

Theme 3 mostly serves as informing RQ1c and RQ2. Here it contributes to the understanding of how MedTech firms should transform their business models and strategies to be more effective in these markets.

These themes were then ranged against the Research Questions, which is what is presented in the rest of this chapter. Appendix F shows the allocation of first-order codes to first-order categories and from there to themes.

5.4 PRESENTATION OF RESULTS

As mentioned in the introduction, the presentation of results will be structured by Research Question. There are two Research Questions with three Sub-Questions informing the main Research Question. The main Research Question will be answered by delving into the detail of the three Sub-Questions.

Each Sub-Question will be introduced and a short explanation of its importance will be shared. The specific interview questions that inform the relative Research Question will be shared from both the Local Agent and the MedTech interview guide. Thereafter, the findings will be presented according to the theme, from two perspectives. Firstly, the findings from the Local Agent will be described, followed by the findings from the MedTech Rep. After this, there will be a short conclusion based on these findings, as well as comments on the relative interdependent network.

5.5 FINDINGS: MAIN RESEARCH QUESTION (RQ1)

How are Multinational MedTech firms developing Dynamic Capabilities to address their market through the knowledge they gain from Local Agents?

As stated in Chapter 3, the Main Research Question (RQ1) was divided into three sub-questions, to enable a detailed investigation of each contributing aspect. These Sub-Questions, denoted as RQ1a, RQ1b and RQ1c, will inform the Main Research Question. In the next three sections, they will be analysed individually.

5.6 FINDINGS: RESEARCH QUESTION 1a (RQ1a)

How do multinational MedTech firms develop and action knowledge from Local Agents?

The first Sub-Question addresses the core of the research problem, whether Multinational MedTech firms develop Dynamic Capabilities to overcome their Outsidership in these markets. In Chapter 2, the role of knowledge shared by Local Agents was shown to be critical for a firm to understand these markets and thus create successful entry strategies, hence the development of Dynamic Capabilities. The literature suggests that other industries and other global regions understand this interaction and the importance of effective knowledge utilization by the Internationalizing firm.

The findings of this investigation into RQ1a should give us an indication of whether Multinational MedTech firms understand the market dynamics, therefore performing the Sensing function correctly. It should also give us a perspective on their success in Seizing these opportunities, based on their internal assessment of success as well as the assessment from the Local Agent.

5.6.1 Analysis of themes

As mentioned in Chapter 2 (Section 2.2), the research anchor of the current study lies within the Dynamic Capabilities framework. The building blocks of this framework consists of Sensing, Seizing and Transforming. They follow each other in order. The current study applies these building blocks as the main themes of the current study. The evidence from Research Question 1a will be

analysed against the Sensing and Seizing building blocks to attempt to draw a conclusion on their satisfaction of these criteria.

5.6.2 Interview Questions for RQ1a

The interview questions that inform RQ1a from the Local Agent perspective were directed to understand the Local Agent perspective of the MedTech firms' utilization of their knowledge. The interview questions that inform RQ1a from the MedTech perspective were directed to understand the MedTech firms' perspective of the value of this information as well as their success or failure in adopting this knowledge. There was also an added dimension where this level of MedTech firm management was allowed to feed back into their organizations on the internal processes of developing knowledge, this refers to question eight (MT-viii) and will also be applied to RQ2 in Section 5.9. Table 4 shows these questions from the interview guide:

Table 4: RQ1a Interview Questions

Target	Nr	Question	RQ Justification
LA	i	What do you feel you contribute to MedTech firms' understanding of your market dynamics?	RQ1a
LA	ii	How do you think MedTech firms utilize the knowledge you share with them?	RQ1a
LA	iii	Do you think your knowledge is acted upon in a positive manner? I.e. How could it contribute to successful entry strategies for MedTech firms?	RQ1a
LA	iv	Do MedTech firms generally utilize local knowledge effectively or are do they revert to their own internal strategies?	RQ1a
Target	Nr	Question	RQ Justification
MT	i	Do you have the capacity to make decisions on entry strategies on your level or do you need to revert to your superiors?	RQ1a
MT	ii	Do you generally follow the advise shared by distributors on how to enter their market or do you prefer to make your own assessment?	RQ1a
MT	iii	Do you feel pressure from your organization to follow specific strategies to enter markets or do they follow the advice from distributors?	RQ1a
MT	iv	Would you agree with the strategies you follow to enter markets in general or do you feel there is room for improvement?	RQ1a
MT	v	If you think there is room for improvement, what would that look like?	RQ1a
MT	vi	Where your firm has failed to enter a market effectively, what do you think was the reason for that?	RQ1a
MT	vii	Where your firm succeeded in entering a market effectively, what do you think was the reason for that?	RQ1a
MT	viii	As downstream manager, what advice would you give upstream management on how to approach internationalization in Emerging Markets?	RQ1a & RQ2

5.6.3 Evidence from Local Agents

The following findings appeared when analysing evidence from Local Agents concerning RQ1a. These findings will be presented by knowledge needed, knowledge-sharing strategies and knowledge utilization.

5.6.3.1 Knowledge needed by MedTech firms – Local Agent Perspective

It seems like Local Agents have a fair grasp of the knowledge MedTech firms require them to share. This ranges from the local culture, to market dynamics,

customers, competitor information, legal, regulatory, etc. Table 5 details their understanding of the knowledge required.

Table 5: Local Agent Illustrative Quotes - Knowledge needed by MedTech Firms

Document	Quotation Content
LA-001	"What we do as well is provide as much information as possible concerning the market we'll operate in, to the manufacturer. So that will help them decide on strategy as well."
LA-004	"I provide them with knowledge, the local demographics. I provide them with the business plan, my business plan, how I operate in this country. Also for them to understand the culture where I operate."
LA-005	"...we try to share information about the market, we try to share information about knowledge of the customers that will show them that we know the customers, we know the market that we are working. And also, we try to share information about the capital equipment that is already installed in the country, from the competitors and what we can do to leverage how we keep and to enter the markets"
LA-006	"we have to share very deep image from the business, market share, the business by unit, number of case, a very deep image from competition also, we have to have to put a profile for every partner or when we said physician sometime, we have to be very selective."
LA-007	this business plan, we need to share again, all type of hospitals because they are a different type of hospitals under different categories. And, and it's showing everything to them related to the business plan. So that's how we start with them either to send them an official presentation, and after that, we'll discuss about it in the meeting
LA-008	"...the most important conversation we have is about the size of the opportunity, and the current market dynamics, in terms of the key players and the market shares that are available"
LA-009	"...the market volume market dynamics, like trends, market expectations, and price expectation, and here comes the longest part of the agreement negotiation."
LA-011	"What we share are our actual potential, we do business plans, if I'm interested in getting a new line from any of our suppliers, we present the business case with a three to four-year forecast and expected sales. And we also highlight the strategy that we will implement in the market in terms of a number of employees that will be dedicated to a certain line and what the strategy in the market will be"

The table above shows the understanding of market dynamics and characteristics. It is also referring to the development of business plans for MedTech's to evaluate.

5.6.3.2 Local Agent knowledge sharing strategies – Local Agent Perspective

Although it seems that Local Agents know which knowledge to supply, it transpired that they do not always share this information fully, some of them hold information back, considering it their intellectual property. The below quote from LA-003 summarizes this approach:

"We try and keep the information I wouldn't say current, but we try and keep it useful, but without giving away too much. Just purely because we want to always protect ourselves as well from those instances. And I think it is, to a certain degree, our own intellectual property, you know, we've gone and done the market research, we've gone out there to look for the customers." 3:16 ¶ 55 in LA-003

However, this was not the case in all interviews, as some Local Agents preferred to share all knowledge openly, stating that it serves the interest of

both parties to share knowledge equally and amenably. The below quote from LA-008 supports this:

"Now, the question of very specific sales data, who the customer is, etc. These are things that it's not really a secret in the medical devices business to know which hospitals are doing what cases, because there's only a handful of surgeons in every country that do these types of cases and a handful of hospitals. So it isn't a material advantage. And in fact, we see the biggest or the most important thing is to have a transparent relationship and to address the issues head on. So we don't find it as an advantage in our specific business to, to hold information in that process." 8:31 ¶ 73 in LA-008

From the 11 interviews conducted with Local Agents, 5 preferred to share openly and 6 shared information only strategically if it suited their interests.

5.6.3.3 **MedTech knowledge utilization – Local Agent Perspective**

Participants from the Local Agent group showed strong opinions on the ability of MedTech firms to understand the knowledge they share. These opinions are mostly negative and focus on the Multinationals' inability to comprehend market characteristics, therefore failing to Sense. The highest grounded code in this category was the disconnect to the Emerging Market from the Multinational MedTech firm side. Table 6 shows how Local Agents perceive this challenge.

Table 6: Local Agent Illustrative Quotes – MedTech disconnect to EM

Document	Quotation Content
LA-004	<i>"Usually, multinationals always want to bring in their own culture or their own system, the way they operate. Without realizing that countries differ. They tend to group countries and then call them Africa, which is very wrong. There's nothing like Africa, it's a continent."</i>
LA-004	<i>"Look, we are not the same as the Middle East. So, I don't know why we are grouped together. It can never be the same. There's a big difference"</i>
LA-007	<i>"...they always have the same feeling that the market here is same as Europe or US and consumption and all of that, which is totally different."</i>
LA-007	<i>"I have multinational companies, they never come to me to see the market. They never come. And I have them for more than 10 years. Okay, they never come."</i>
LA-011	<i>"And lack of understanding. Many, many suppliers who think that doing business is a walk in the park, when they go into the details and understand the details more and more; we've had many instances where they came back and said, No, we're not interested in this."</i>

The above table details this frustration by showing quotes referring to the generalization of countries. The lack of understanding from the MedTech firm side is also mentioned.

Once this knowledge is shared with the MedTech firm though, the Local Agents also commented on how this knowledge was utilized. The Local Agents have strong ideas on how they expect the MedTech firm to utilize this knowledge, stating it should add to the firm’s understanding of their specific market, drive entry strategies and assist with business model generation. Table 7 shows some of these expectations.

Table 7: Local Agent Illustrative Quotes – How knowledge should be utilized

Document	Quotation Content
LA-001	"I believe that all information collected at the bottom is needed, so that decision makers at the top will affect whatever is going on in the market."
LA-002	"Many times, that kind of information ends up being statistics that the principle needs to do or follow through as a requirement of their own internal process. But it needs to be revisited and we try and work on revisiting it frequently when we are doing our budgets."
LA-003	"Some of them use it to try to determine the market potential. Some they use it to kind of look at your performance versus what they expecting out of a market of X-size. And others learn from it. And they understand and adapt their strategies accordingly."
LA-007	"They use that knowledge for certain things, first of all to determine the pricing of the product. Also, the payment terms of the products, it's completely different as well, and their focus or interest in the region, how much they would put into influence or decision taking inside this region."

The above table show that Local Agents are aware of how the knowledge they share should be utilized. Especially in reference to strategy adaptation, which is a core quality of Dynamic Capabilities (Transforming).

A comparison between examples of effective knowledge utilization versus failed knowledge utilization showed that failures outnumber successes by 31 to 23 in the coded examples. The following quote from LA-005 supports this:

"Sometimes they don't understand some of the requests that will come from the markets, it's difficult for them to understand some of the reality because they are not on the ground." 5:29 ¶ 72 in LA-005

It is perhaps best to look at this in network arrangement, as a function of the relationships between knowledge utilization and strategic wins or losses. This is shown in Figure 7.

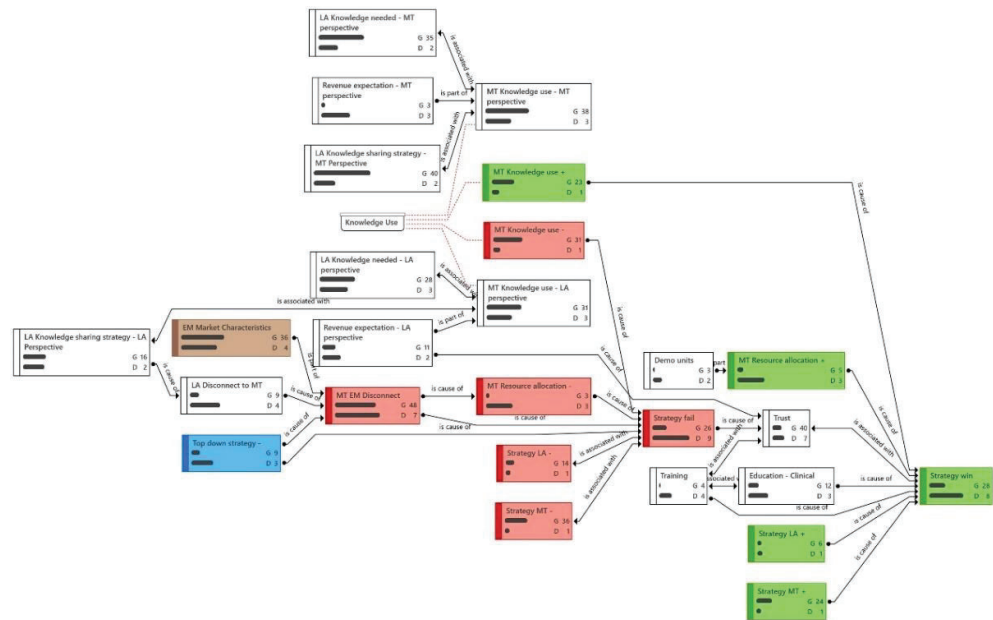


Figure 7: Network of knowledge utilization versus strategic wins or losses

The above figure indicates the linked interdependencies, which clearly show the direct relationships between ineffective knowledge utilization and failed strategies. This is clear from the grounded frequency (denoted by the letter “G”) of codes denoting negative comments (red blocks), which is much higher than positive comments (green blocks). This is driven by the requirement for the MedTech firm to understand the market effectively. However, it seems in this case Local Agents disagree with the MedTech firms’ ability to effectively utilize the knowledge they share. Thus, it seems MedTech firms fail to Seize the opportunities in these markets. Although the sample size is small, and therefore the differences are slight, the data seems to bear this out:

Table 8: Knowledge Utilization vs Strategy fails and wins

Code	Local Agents
● MT Knowledge use -	25
● MT Knowledge use +	19
● Strategy MT -	23
● Strategy MT +	19
● Strategy fail	12
● Strategy win	7

The table above clearly shows a higher number of incidences of incorrect knowledge utilization resulting in a high number of incorrect MedTech strategies, which in turn results in more failed strategies than successful ones.

5.6.4 Evidence from MedTech Reps

The following findings appeared when analysing evidence from MedTech Reps concerning RQ1a. These findings will be presented in the same topics as with Local Agents, by knowledge needed, knowledge-sharing strategies and knowledge utilization. An added dimension here is the MedTech Rep perception of the quality of Local Agent knowledge.

5.6.4.1 Knowledge needed by MedTech firms – MedTech Rep Perspective

As with Local Agents, MedTech Reps seem to have a clear understanding of the type of knowledge they require a Local Agent to share with them. Table 9 shows this clearly.

Table 9: MedTech Rep Illustrative Quotes – Knowledge needed by MedTech firm

Document	Quotation Content
MT-004	"...you should check with the agent, their understanding of the general market dynamics, which is why we would ask the agent to give us a business plan of how they intend to achieve or attain targets and objectives that the multinational is seeking to achieve in that market."
MT-012	"...what the regulatory landscape is, what the pricing structures and the competitive landscape is in the respective country."
MT-013	"...expect that they've got a good sense of the competitor landscape, and who the key competitors are for our product portfolio. And have a sense of also local pricing."
MT-005	"...we of course, rely on the on the channel partner, in terms of giving us visibility, what the market is looking like, what opportunities we have, how do we penetrate the market."
MT-011	"...competitor information, because the more I know of the competitor, the better I can help them in going against a competitor."

The above table shares proof of requests for regulatory information, as well as competitor activities and pricing, end-user characteristics and reimbursement pathways. As expected, the MedTech Reps link the knowledge needed to the way it is utilized as well as to determine the attractiveness of the market. Figure 8 show these interdependencies:

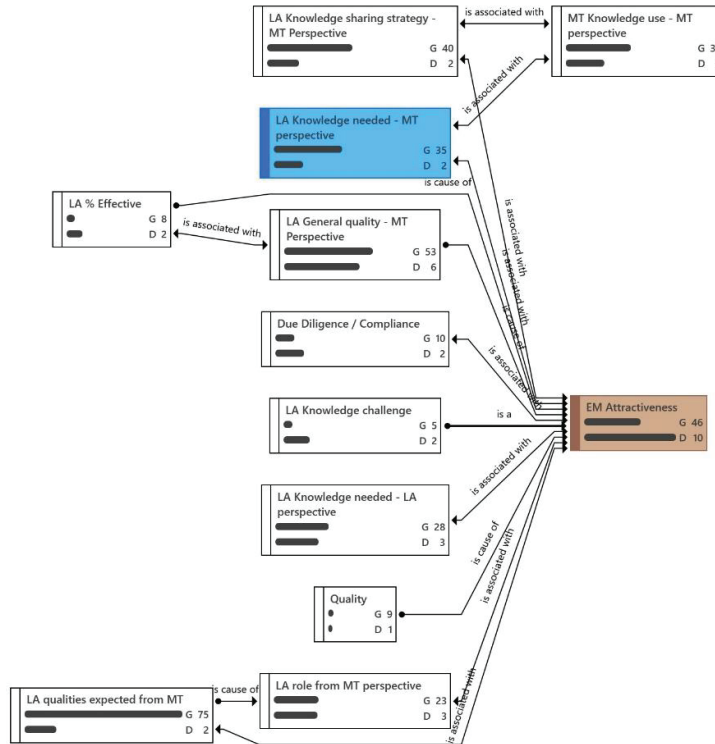


Figure 8: Knowledge needed interdependencies

The above figure shows the expected flow of knowledge. This is driven by market perspectives as it is supposed to be shared by the Local Agent. However, as can be seen in the next section, this is not necessarily happening.

5.6.4.2 Quality of Local Agent knowledge – MedTech Rep Perspective

MedTech Reps also made comments on the perceived quality of the information they receive. The data shows that MedTech Rep’s perception of the quality of data they receive is overwhelmingly negative, pointing towards a clear lack of trust or faith in the Local Agent to share the right information with them. Figure 9 shows the Sankey diagram proving this lack of trust.



Figure 9: Sankey Diagram of MedTech Rep perception of Local Agent knowledge quality

The above diagram confirms the negative perception MedTech Reps have about Local Agent quality, showing the clear disconnect. This is perhaps best revealed in the comment made by MT-011:

"...maybe it's not willingness, it's also sometimes lack of communication. So basically, the level of sharing that knowledge is relatively low, it's really low. There's so many times, there's no transparency on what they need," 22:19

¶ 86 in MT-011

5.6.4.3 Local Agent knowledge sharing strategies – MedTech Rep Perspective

Not only did MedTech Reps have a negative perception of the quality of knowledge shared, but they also picked up on the knowledge-sharing strategy of Local Agents mentioned in a previous section (Section 5.6.3.2). MedTech Reps believe that Local Agents withhold information from them and overwhelmingly so if compared to positive opinions, as can be seen in Table 10:

Table 10: MedTech Rep perception of Local Agent knowledge sharing strategy

Knowledge Sharing Strategy	MedTech Reps
● LA Knowledge sharing strategy - MT Perspective: Negative	30
○ LA Knowledge sharing strategy - MT Perspective: Neutral	7
● LA Knowledge sharing strategy - MT Perspective: Positive	3

The above table shows MedTech Reps made overwhelmingly negative comments on the knowledge-sharing strategy of Local Agents, indicating that they do not trust the information shared, mostly stating that the Local Agent is withholding information. This can be seen in the comment from MT-015:

"The first thing they'll teach you when you work at a multinational and you're dealing with distributors, is that distributors aren't truthful which is sad. But we have seen it, I've experienced it. Because distributors want the business, you're dealing with sometimes small companies, sometimes very large companies, but they want the business because it's a very reputable brand. And they will pretty much do what they need to do in order to keep it. So for sure we don't rely fully on what they have to say." 26:26

¶ 67 in MT-015

Indeed, when asked whether they prefer to go into a market to make their own assessment of the market dynamics and characteristics, most MedTech Reps indicated that they would, as can be seen in the Sankey diagram of Figure 10.



Figure 10: Sankey Diagram of MedTech Rep sense-checking Local Agent knowledge

The above diagram visually reflects the actions MedTech Reps take when faced with Local Agent knowledge, showing that most of them prefer to either check the validity for themselves or they will consult other sources. Whether the quality of information shared was poor, or whether the perception of the MedTech firm is that information is being withheld, the impact on the MedTech firms' Sensing ability could be profound.

5.6.4.4 MedTech knowledge utilization – MedTech Rep Perspective

Participants in this group were also asked to share their opinion on how their organization, the Multinational MedTech firm, should utilize the knowledge gained from Local Agents.

Firstly, it is necessary to determine whether the individual MedTech Rep actually had the correct authority to make decisions or whether that decision on knowledge utilization was centered somewhere else. From the data it seems that authority in the sample of MedTech Reps was almost evenly split between localized decision-making (the interviewee could drive strategy locally) versus centralized (the interviewee had to go to superiors for approval), as can be seen in Figure 11:



Figure 11: Sankey Diagram of MedTech Rep authority location

The above diagram visually reflects the almost equal split between loci of control. Looking at this another way, it is possible to determine from the data whether MedTech Reps with local authority were less likely to have internal disconnects within the firm or whether MedTech Reps with centralized authority were more likely to have internal disconnects within the firm. This is visualised in Table 11:

Table 11: MedTech Rep authority location versus internal disconnect

Authority	Number	• MT Internal Disconnect	• Strategy MT -	• Strategy MT +
Central	6	4	4	2
Local	7	17	3	2

From the above table, it is interesting to note that MedTech Reps who classified their authority as localized had more internal firm disconnects than those who reported to centralized authority. It is also interesting to note that the differences in associated strategy success or failures are negligible.

MedTech Reps had strong opinions on how Local Agent knowledge should be utilized. Most of their opinions align with the expectation of Local Agents, like developing entry strategies, building beneficial business models and determining correct pricing. There is much more focus on understanding the competitor and from there determining countermeasures than on the perspectives of Local Agents, but all MedTech Reps agree that local knowledge should be effectively utilized to design competitive and successful entry strategies.

However, it seemed that MedTech Reps have similar misgivings of the successful integration of knowledge into their internal strategic decision-making as Local Agents reported (Section 5.6.3.3). There seems to be agreement by MedTech Reps that their firms do not utilize knowledge effectively and therefore they have more examples of ineffective strategies than effective strategies. It is also interesting to note that MedTech Reps had a similar view of the strategies launched by Local Agents. This is reflected in Table 12:

Table 12: MedTech Rep perception of internal knowledge utilization and Local Agent knowledge utilization

MedTech Firm Internal	MedTech Reps
● MT Knowledge use -	6
● MT Knowledge use +	4
● Strategy MT -	13
● Strategy MT +	5
Local Agent Strategy	MedTech Reps
● Strategy LA -	14
● Strategy LA +	6

From the data in the above table, it can therefore be posited that MedTech firms do not effectively utilize the knowledge gained by Local Agents (or the knowledge they source themselves) and therefore they fail to Seize the opportunities in the market. This can be seen in the associated network between Knowledge Utilization and Strategy Win/Fail, visualized in Figure 12:

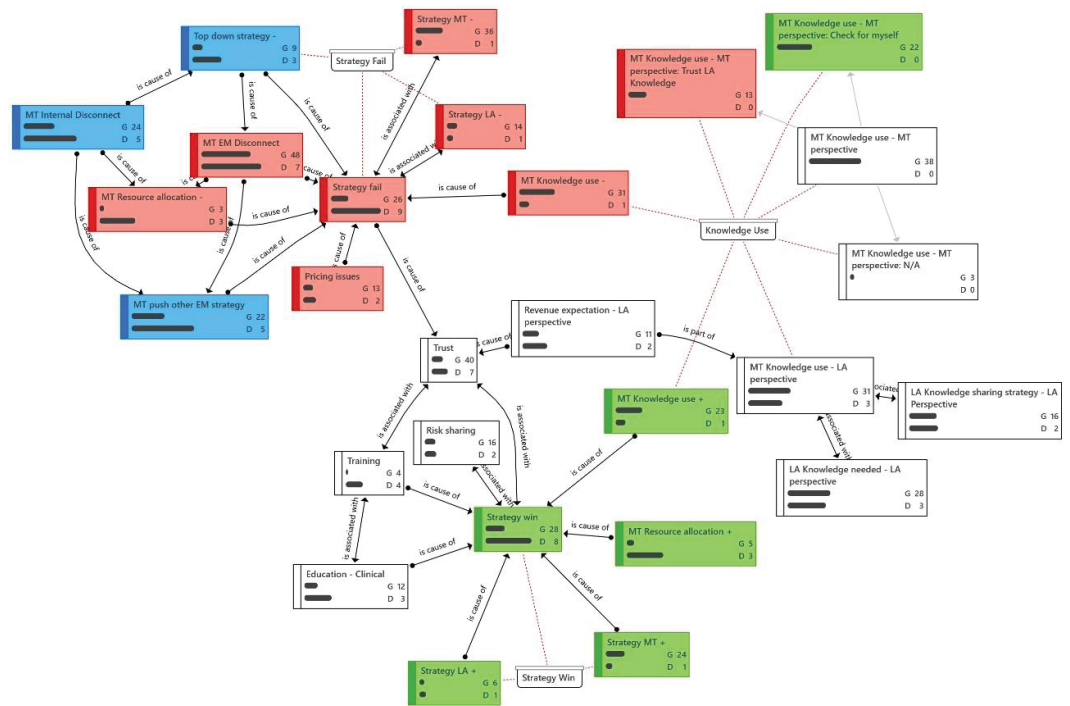


Figure 12: Knowledge utilization versus Strategy Fail/Win

The above figure shows the interdependencies between knowledge use and strategy. The strategic failures (in Red) and the strategic successes (in Green) can be compared for frequency by comparing the number of grounded quotes (“G” in each block). This shows the high incidence of failed strategies over successful ones.

5.6.5 Interpretation and Conclusion

The data suggests that there are a couple of similarities between the perceptions of Local Agents and MedTech Reps, but it also shows some dissimilarities. Firstly, both agree on the type of knowledge that is important to share and that this knowledge should serve to drive more effective strategies and business models. The disconnect seems to come where Local Agents withhold information and where MedTech Reps believe they do not get all the information from Local Agents. This results in a bilateral lack of trust between the two entities, which is worsened by the negative perception Multinational MedTech's have regarding the quality of knowledge sharing. Therefore, it could be posited that Multinational MedTech firms fail in terms of the Sensing Theme, in that they do not successfully internalize the knowledge regarding these Emerging Markets. However, the Local Agent might be playing a direct role in this Sensing failure, as they withhold knowledge from the MedTech firm.

Lastly, it seems there is one very important aspect on which both parties agree, which is that ineffective knowledge utilization leads to unsuccessful strategies. They also agree that unsuccessful strategies are much more prevalent than successful ones. Therefore, it could be posited that Multinational MedTech firms fail in terms of the Seizing Theme, in that they do not successfully utilize the knowledge they receive from Local Agents (regardless of whether the knowledge is withheld or of inferior quality).

Based on these two positions, it could be argued that Multinational MedTech firms fail to utilize Local Agent knowledge to develop Dynamic Capabilities to enter these volatile markets, but that the Local Agents could inadvertently be aggravating the disconnect.

5.7 FINDINGS: RESEARCH QUESTION 1b (RQ1b)

What is the role of Local Agents in driving Multinational MedTech firm internationalization strategies?

The second Sub-Question addresses the dynamics subsequent to the core research problem, investigating what roles and functions Local Agents can or should perform to

assist Multinational MedTech firms to develop Dynamic Capabilities to overcome their Outsidership in these markets.

In Chapter 2, the role of some type of Local Agent was shown to be critical for a firm to Internationalize successfully. The Local Agent has access to local networks and inherent knowledge of the host country landscape and players. The literature has a very strong perspective on the need for a multinational firm to develop these local relationships to Internationalize successfully.

The findings of this investigation into RQ1b should give us an indication of whether Multinational MedTech firms understand these Local Agents, therefore performing the Sensing function correctly from a relationship perspective. It should also give us a perspective on their success in Seizing these relationship dynamics, based on their internal assessment of the Local Agent's role as well as the assessment from the Local Agent's perspective on their role.

5.7.1 Analysis of themes

As mentioned in Chapter 2 (Section 2.2), the research anchor of the current study lies within the Dynamic Capabilities framework. The building blocks of this framework consists of Sensing, Seizing and Transforming. They follow each other in order. The current study applies these building blocks as the main themes of the current study. The evidence from Research Question 1b will be analysed against the Sensing and Seizing building blocks to attempt to draw a conclusion on their satisfaction of their criteria.

5.7.2 Interview Questions for RQ1b

The interview questions that inform RQ1b from the Local Agent perspective were directed to understand the Local Agents' understanding of the role that they should fulfil in the Internationalization process of MedTech firms. The interview questions that inform RQ1b from the MedTech perspective were also directed to understand the role which Local Agents should fulfil in the Internationalization process of MedTech firms, but added to that were questions exploring the MedTech perception of the quality of this role as it is performed by Local Agents. There are also questions exploring the internal MedTech process, to understand internal strategic decision-making. Table 13 shows these questions from the interview guide:

Figure 13: RQ1b Interview Questions

Target	Nr	Question	RQ Justification
LA	v	What is your perception of the main role of a distributor?	RQ1b
LA	vi	What is your perception of the role your company plays in assisting MedTech firms with expertise to enter your market?	RQ1b
LA	vii	What type of information do you supply to MedTech firms to assist them to enter your market?	RQ1b
Target	Nr	Question	RQ Justification
MT	ix	How would you describe the role of local agents in your internationalization process?	RQ1b
MT	x	What do you look for when engaging a local agent?	RQ1b
MT	xi	What is your perception of the quality of distributors in general in Emerging Markets?	RQ1b
MT	xii	How would you describe the quality of assistance and the sharing of knowledge from distributors?	RQ1b
MT	xiii	As local decision-maker, what advice would you give distributors on how to share knowledge and drive strategies for MedTech firms?	RQ1b

5.7.3 Evidence from Local Agents

The role Local Agents should play in Multinational MedTech firm Internationalization strategies was touched on briefly in the findings on RQ1a (from the Local Agent perspective in Section 5.6.3.1). These findings were mostly concerned with the information shared by the Local Agents on the dynamics and characteristics of their markets. Under RQ1b, this role is explored in more detail.

5.7.3.1 Local Agent Strategic role – Local Agent perspective

Local Agents believe that they bring a unique partnership opportunity to Multinational MedTech firms to further their Internationalization strategy through the Local Agents' strategic role. Firstly, this relationship centres around the Local Agent being the official local representative of the MedTech firm. In this role, the Local Agent performs all functions and responsibilities of the MedTech firm as a proxy, which means they have to align with the values of the MedTech firm. Table 13 confirms that Local Agents accept and excel in this role.

Table 13: Local Agent Illustrative Quotes - Local Agent strategic role

Document	Quotation Content
LA-001	"But definitely we are the face of the manufacturer in the market where we operate in."
LA-002	"So we need to keep that balance between what the users need and what the principles want to be sold in the market."
LA-004	"I believe that I'm bridging the gap between the MedTech and the end users"
LA-008	"So we are an extension of our principle partners in the markets in which we operate where they don't have a physical presence today."
LA-009	"So, basically, our role is to do a good representation of the company and the product we are dealing with to create a relationship between our market and the multinational"

From the above table, it is clear Local Agents understand their strategic role. Specifically, the reference to acting as local proxy, which is their primary role according to MedTech Reps as well.

Secondly, due to the important quality and compliance requirements for MedTech products, the ability to provide the product to the end-user with the required quality under compliant circumstances is a very important aspect for Local Agents to deliver on. It seems that Local Agents are fully aware of this requirement and they ensure they are positioned to deliver on this, as can be seen in Table 14:

Table 14: Local Agent Illustrative Quotes - Local Agent quality and compliance understanding

Document	Quotation Content
LA-001	<i>"I think they're more interested in the legal situation. I think they just tried to avoid the legal risk. In the future, say something like, we can bring the product in but later we find out what it is illegal to be doing so there's a real legal risk there. I think they're more aware of that than they're worried about prices."</i>
LA-006	<i>"When we are dealing with multinational third parties, we have to be very careful, we have to adapt, we have to be careful with the Third-Party Congresses, the scientific workshop, etc"</i>
LA-009	<i>"We start with the regulatory part, because there's no point in going further into any discussions or potential agreement if they don't pass our regulatory requirements."</i>
LA-010	<i>"I think they must understand that the most of them, they don't in Africa, they don't want to be involved in corruption. And that's something that I saw, I don't do."</i>
LA-011	<i>"The regulatory requirements, they have to provide us with the needed paperwork to register, the registration process and everything is up to us to do, we don't count on them to do anything from this. All they ne"ed to do, they have to supply us with the paperwork that the MOH requires."</i>

The above table shows that Local Agents understand the non-negotiable aspects of quality and compliance required by Multinational MedTech firms. This requirement is a yes-no requirement, without it there will not be a relationship.

Thirdly, MedTech products are technologically advanced and require high levels of support. This support is either in the engineering capacity (as with capital or diagnostic equipment) or the clinical support capacity in theatres (as with medical devices). Therefore, Local Agents need to be able to provide these support services. It seems from the evidence that Local Agents also understand this role, LA-005 explains this:

"So one of the things that they are also very concerned, it's about the support, because support is really important and it is difficult to find capable people supporting those types of equipment." 5:8 ¶ 30 in LA-005

In summary, the clearest responses in terms of Local Agents grasping their strategic role, came in reply to the question "Why would a MedTech firm work through a distributor and not come into the market direct?" Here, the best

response, which sums up the role of Local Agents in this capacity, came from LA-008:

"And we see the impact of that being that outside of some key markets, multinationals will drive towards a much more arm's length model, where they want a partner that can manage end-to-end." 8:70 ¶ 145 in LA-008

The evidence therefore shows that Local Agents understand the strategic role they should perform in driving Multination MedTech Internationalization strategies.

5.7.3.2 **Local Agent Commercial role – Local Agent perspective**

Local Agents also believe that they bring an opportunity to Multinational MedTech firms to further their Internationalization strategy through the Local Agents' commercial capacity. Firstly, this concerns the capacity to make investments. The evidence shows that Local Agents are aware of the investments required to successfully deliver the MedTech firm's Internationalization strategy, but it is interesting to note that they perceive that MedTech firms do not grasp the full impact of this investment, as the following quotes state in Table 15:

Table 15: Local Agent Illustrative Quotes - Local Agent investment perspective

Document	Quotation Content
LA-003	<i>"...that also requires a significant investment, you know, moving equipment around, it's not cheap. The equipment itself is also not cheap. So we've also got to be clever with how we do that, to try and be efficient where we can as well."</i>
LA-008	<i>"...we talk about commercial terms, which would include investment in demand creation, expiry risks, payment terms, working capital requirements, headcount that would be required, so those type of commercial terms."</i>
LA-008	<i>"...the cost of marketing and headcount is significantly higher. So because it's not a scaled business, the return on capital is significantly lower."</i>
LA-011	<i>"They look at the numbers, sometimes thinking that the margins are extremely high, not knowing how much is going into logistics and service."</i>
LA-011	<i>"You make your margins, we agree you have to make higher margins because you have high costs."</i>

The above table shows the beginnings of frustration from Local Agents regarding the business model. It will be explored further in the next paragraph.

Secondly, the commercial role of the Local Agent concerns the sharing of risk. This sharing of risk includes the expenses the Local Agent would incur, as well as the cost of doing business (salaries, operations, accounts receivable, etc.). The evidence shows that Local Agents are aware of the risk sharing required to successfully deliver the MedTech firm's

Internationalization strategy, but a closer look at the quotations shows a certain amount of frustration from the Local Agents interviewed. The following quotes in Table 16 show these opinions on risk sharing, but also detail some of the frustrations (highlighted in yellow by the researcher):

Table 16: Local Agent Illustrative Quotes - Risk sharing perspective

Document	Quotation Content
LA-001	"The third one, I believe is a sharing of the risk. We do share the risk in terms of salaries, because some of them they don't want to do a credit, they but those who do credits, we definitely have to share a credit risk."
LA-003	"And I think once you get that balance between that shared risk and shared value system, you have the recipe for a great partnership"
LA-005	"Anyway, it's a compromise, but we cannot have everything"
LA-008	"The first is expiry risk. Ultimately, you're bringing a new therapy and a new product to market and there's an expiry risk, who bears that risk. And when it's a new therapy, what is the potential likelihood of that risk. So there is a commercial expiry risk that has to be priced in."
LA-008	"The second is obsolete inventory risk, you have in MedTech, many products that don't expire, but might be obsolete, they don't move, etc. So there is a commercial risk associated with that. And who bears that, do you have the ability to return the product to the company or not?"
LA-008	"The third is the commercial risk, the risk that you don't get paid in a timely manner from the customers in the country. Now, remember, in the MedTech business, the buyers have significantly more power than in any other sector within the healthcare industry, because you might have only a handful of accounts where business is done. And those accounts know it and they have the muscle. And so you end up with very long payment cycles, you end up in a situation where you may not necessarily be able to get your money back in a timely manner. And in some cases, fine, have to write off some of the supplies. So the credit risk that as a distributor you're taking is a significant risk"
LA-009	"I buy from my supplier, I pay my bills. If there's any financial risk in the market, it's on me."
LA-010	"If you don't sell the risk is with the distributor. That means the distributor is the one carrying the risk. And there is no advantage for the distributor"

The above table clearly shows the Local Agent frustration. Specifically, LA-008, who is the COO of a Local Agent firm spanning various countries. Therefore, these comments are applicable across multiple countries, confirming their validity.

It should be noted that not all comments on risk sharing are negative, as this quote from LA-011 shows:

"It allowed us to sell and to introduce very easily new products on the market, because it was like a co-investment from our part and from the part of the supplier."

11:34 ¶ 131 in LA-011

At this point, it's important to look at this potential perception of disconnect between the Local Agent and the MedTech firm regarding the sharing of risk. Firstly, we need to understand whether there is a difference in this perception by region. Figure 14 shows the following:

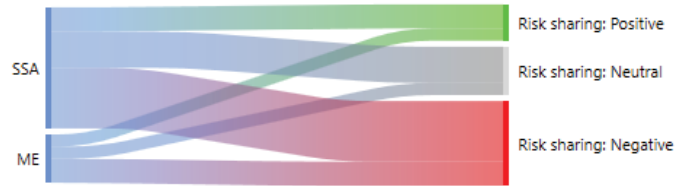


Figure 14: Sankey diagram of Local Agent Risk Sharing perspective by Region

The above Sankey diagram shows that the Sub-Saharan Africa region has a higher negative perception of risk sharing from Multinational MedTech firms than the Middle East region. MedTech firms may be shying away from sharing risk in the SSA region.

Secondly, it bears analysis to investigate whether there is a difference in the risk-sharing perception by sector. Figure 15 shows the following:

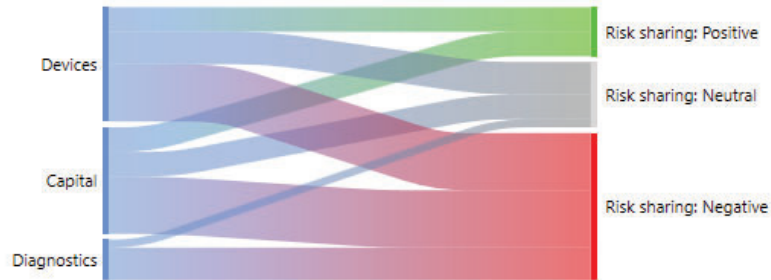


Figure 15: Sankey diagram of Local Agent Risk Sharing perspective by Sector

The above Sankey diagram shows that there are almost similar negative perceptions regarding Medical Devices and Medical Capital, but there is a relatively lower negative perception for Medical Diagnostics. MedTech firms may be shying away from sharing risk in the Medical Devices and Medical Capital sectors.

In summary, the evidence shows that Local Agents understand the commercial role they should perform in driving Multinational MedTech Internationalization strategies. However, it does seem that Local Agents' opinions lean towards the perception that Multinational MedTech firms do not comprehend the intricacy of this commercial role, nor that they grasp the impact of this on the Local Agent.

5.7.4 Evidence from MedTech Reps

The role Local Agents should play in Multinational MedTech firm Internationalization strategies was touched on briefly in the findings on RQ1a (from the MedTech Rep perspective in Section 5.6.4.1). These findings were

mostly concerned with the information shared by the Local Agents on the dynamics and characteristics of their markets and the MedTech firms' utilization of this knowledge. Under RQ1b, the Local Agent role is explored in more detail. In this section, from the MedTech Rep perspective.

5.7.4.1 Local Agent Strategic role – MedTech Rep perspective

The need for a local strategic partner in Internationalization strategies is well-defined in the literature. The opinions of MedTech Reps align with the requirement of other industries and regions. The majority agrees on the critical need for a Local Agent in the specific market and Table 17 shows some illustrative quotes:

Table 17: MedTech Rep Illustrative Quotes - Local Agent strategic role

Document	Quotation Content
MT-004	<i>"The role of agents is to really do business development, to connect with all the stakeholders, to connect into and develop a value chain that allows that flow to work on a sustainable basis."</i>
MT-006	<i>"The role of a local partner is very important"</i>
MT-007	<i>"Together, we work as a team to lay down the specific strategies, action plans that we need to take for that specific country. So, they will be the executor of that strategy that we put together."</i>
MT-008	<i>"They need to represent our vision and our mission."</i>
MT-009	<i>"...our whole approach is rather to see a distribution partner as a real strategic partner, who's got the same vision and strategic roadmap as us and adopts our strategy to their specific territory of focus."</i>

The above table shows the importance of Local Agents from the MedTech Rep perspective. This is in line with other Internationalization literature (see Chapter 6) proving the value of a local partner in this process.

There is also a clear understanding within MedTech firms that all Local Agents should observe global compliance and quality prerequisites, as well as local regulatory requirements. The following quotes from MT-006 and MT-014 illustrate this perspective:

"Compliance and quality is totally out of any negotiations. It is something that we will follow religiously." 17:46 ¶ 141
in MT-006

"We are not interested into any non-compliant business, because the tendency from distributors in Africa to do this is compared to the rest of the world higher. So, we have always to remind them that we would not never like to expose ourselves into any non-compliant business" 25:40
¶ 106 in MT-014

Regarding the support aspect mentioned in Section 5.7.3.1, there is parity in the perspectives from MedTech Reps, MT-003 states it most clearly (emphasis by the researcher):

"We expect them to take the product to where it's needed at the end user level, the expectation is will they be able to sell and also to offer after-sales support, which it can be in terms of consumables that will support the capital equipment, technical training, and also servicing the instrument as part of the maintenance, and making sure that actually, they uphold compliance and quality assurance that the company that I'm representing, live by. So, I expect distributors to be an extension of the company that I'm representing." 14:5 ¶ 37 in MT-003

In summary, the evidence shows that MedTech Reps have a clear expectation from Local Agents in terms of the role they play in driving the Multinational MedTech firm's Internationalization strategy forwards. There also seems to be parity between the MedTech Rep and the Local Agent regarding this strategic expectation.

5.7.4.2 Local Agent Commercial role – MedTech Rep perspective

MedTech Reps also require the Local Agent to bring an opportunity to Multinational MedTech firms to further their Internationalization strategy through the Local Agents' commercial capacity. Firstly, the expectation of investment is echoed by the MedTech Reps, as can be seen in Table 18:

Table 18: MedTech Rep Illustrative Quotes - Local Agent investment perspective

Document	Quotation Content
MT-001	<i>"Remember medical devices are hard, but pharma is easy. Pharma has got an established supply chain, you import it, you whip it through the supply chain, no problem, medical devices, you're going to go find your customer, you got to go and make the investment."</i>
MT-002	<i>"Distributors need to understand that it's their business, they need to grow. It's not that they selling this equipment for the multinational, it's their business, they need to grow their business, they need to grow their network and stuff like that."</i>
MT-007	<i>"You really need to make sure that proper investment is put. And when I say proper investment, it's not only buying stocks, because we've witnessed that some big companies, they just say they signed the agreement with you, they buy the stock, and then the stock stays there for ages without being moved. So, buying stock is one element in terms of investment. But the most important thing is that investing in people, in the right people, to be in the field, people who are knowledgeable about what they're trying to sell, people who would give feedback to the local agent, that this is the market, this is what we need in the market."</i>
MT-010	<i>"...if they invest, they'll be rewarded."</i>

The above table shows a potential disconnect between the two entities that needs to be explored further.

Secondly, the MedTech firm also seems to echo the need for risk sharing. This seems to be in contrast with the opinion of Local Agents on the matter. The following quotes, in Table 19, from MedTech Reps, prove the intent to share risk effectively:

Table 19: MedTech Rep Illustrative Quotes - Risk sharing perspective

Document	Quotation Content
MT-001	<i>"...understanding who's sharing what risk, who's funding what, and I think you've got to be very clear that you can't screw your distributors, you've got to make sure that they have enough profit to operate, you've got to be very mindful of the fact that these guys are often having massive cash flow issues in terms of currency and all the rest of it."</i>
MT-011	<i>"But you're trying to find a way how you can share risk. And sharing risk could be shared investments, could be sharing exposure to exchange rates. So I think it's about sharing risks and sharing success."</i>
MT-013	<i>"...we were in agreement there, we had a clear plan on who was going to invest on what. I think it was particularly worked out best when there were those shared investments. So, when the company was also saying, okay, this is what I'm going to invest in this market, this is what I expect from you. That was very positive."</i>

It seems that from the MedTech perspective, the sharing of risk with the Local Agent is an important aspect of the successful internationalization of MedTech firms. From Section 5.7.3.2 it seemed that Local Agents did not agree that MedTech firms fully grasp the equal sharing of risk. This could be a point of disconnect between the two entities.

5.7.4.3 MedTech Rep perception of Local Agent quality

MedTech Reps have strong opinions on the quality of knowledge shared by Local Agents, this was considered in Section 5.6.4.2 and the result was mostly negative, concluding that MedTech Reps consider Local Agents to give them information of low quality. The strategy which Local Agents employ to share knowledge was also considered. Local Agents confirmed that they withhold some information (Section 5.6.3.2) and MedTech Reps confirmed that they are aware of this practice and that they take countermeasures to gain market knowledge from other sources (Section 5.6.4.3). The next step in understanding this relationship is to determine the general impression of Local Agent quality as perceived by MedTech Reps.

Firstly, MedTech Reps were asked to allocate a percentage to the Local Agents of high quality in their region. In other words, what percentage of Local Agents they deal with was effective in moving their strategy forward.

MedTech Reps were not easily drawn into answering this question, but seven of them were not averse to committing to a percentage. Table 20 shows the result:

Table 20: MedTech perception of the percentage of effective Local Agents

MedTech Rep	LA % Effectiveness
MT-002	15%
MT-004	40%
MT-009	10%
MT-011	20%
MT-013	30%
MT-014	10%
MT-015	5%
Average	19%

The above table clearly show the low expectations and experiences of Local Agent effectiveness. This is a sobering figure to comprehend. In effect, only 20% of the Local Agents that MedTech Reps deal with are effective in the opinion of the interviewed MedTech Reps. Next, it was necessary to understand whether this is specific to a region. When this comparison was made, the following results are seen in Figure 16:



Figure 16: Sankey diagram of percentage effective Local Agents Region

The above table and the study findings indicate that most of the MedTech Reps with a low perception of Local Agent effectiveness are responsible for SSA. There is possibly some variation here, as the MEA region includes SSA, but the applicable MedTech Reps did not indicate whether they are referring to ME or SSA. It is possible that the number of interviewees per region could be skewing this statistic, but if we consider Table 2 (Chapter 4), it is clear that there is an almost equal split between MedTech reps from MEA (eight) and SSA (six). Therefore, the result can be accepted. Regardless of this, the findings seem to show that there is a very low percentage of Local Agents who are considered effective by MedTech Reps and that the majority of these ineffective Local Agents reside in SSA.

Secondly, MedTech Reps were asked to comment on the general quality of Local Agents in their region. This question elicited a throng of comments, 53 grounded codes, the third highest of all. It seems that MedTech Reps have strong opinions on the quality of the partners they deal with in their markets. A basic sub-coding exercise of this variable into positive and negative opinions yielded a result that is strongly tilted towards negative perceptions. Figure 17 shows this result:

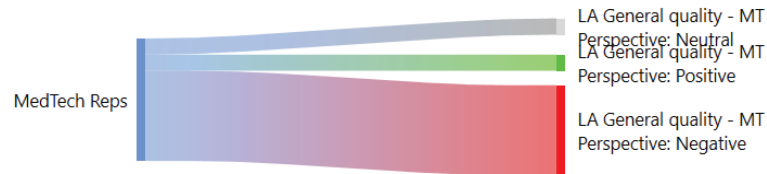


Figure 17: Sankey diagram of MedTech Rep perspective of General Local Agent quality

The above diagram shows small variation in perception of Local Agent quality. The negative perceptions outweigh the positive ones greatly.

Throughout the comments, there were many referrals to the relevant region, but these were aligned to the region of responsibility of the MedTech Rep and does not yield objective interdependent data. A selection of positive opinions follows in Table 21:

Table 21: MedTech Rep Illustrative Quotes – Positive Local Agent quality

Document	Quotation Content
MT-007	"Middle East, and specifically in the Gulf region, this is where we look at it in a way that those are the qualities that we should expect."
MT-008	"I'd put Sub Saharan Africa superior to service levels in all of the Middle Eastern region"
MT-012	"Middle East is a lot stronger, better represented, in essence, the market is a lot older."
MT-012	"MENA region is a lot more established from a distribution channel side of things"
MT-012	"Middle East without a doubt, very robust distribution channels"

The above table also shows positive comments per region, but we should be careful to add too much value to the region analysis, as many MedTech Reps had responsibilities across various regions.

Adversely, as stated before, the majority of the opinions on Local Agent quality as perceived by MedTech Reps are negative. Table 22 presents a selection of these opinions.

Table 22: MedTech Rep Illustrative Quotes – Negative Local Agent quality

Document	Quotation Content
MT-001	"So, I think regrettably, there's a lot of rats and mice, there's lots of very small distributors that are trying to get a small piece of the pie."
MT-002	"My distributor was were very passive. They were not active. So, you spend more time doing the work. And they do nothing."
MT-003	"The bulk of them, they don't have a clue"
MT-004	"Some of them start off well, and because of the challenges of the environment, will cut corners."
MT-005	"I haven't seen a lot of highly mature or experienced partners. Like I said, the turnover is pretty high in Africa, when it comes to channel partners and people within the channel partners as well."
MT-006	"Africa, unfortunately, we don't have so many good partners"
MT-007	"Sub-Sahara Africa, then the situation is a bit different there, were those kinds of qualities, although we still be looking for them, but we don't expect them to be fulfilled 100%"
MT-008	"You're never going to find the perfect entity everywhere."
MT-009	"There's a lot of traditional thinking that needs to be broken down first"
MT-012	"The African market, generally speaking, is very young. And dare I say immature in its approach"
MT-013	"Some of the companies are better setup for pharma than they are for medical devices"

The above table mentions the lethargy, which will be addressed in a later section regarding drive. However, the quotes indicate the opportunistic nature of Local Agents.

In summary, the evidence seems to show that MedTech firms are aligned with Local Agents regarding the strategic role Local Agents are supposed to play in driving MedTech firm strategy. It also seems to show that MedTech firms realize and support the need to share risk with their partners. Lastly, even though there seems to be parity from the MedTech Rep's perspective on these issues, they still feel overwhelmingly negative about the quality of the partners they are dealing with.

5.7.5 Interpretation and Conclusion

In summary, there seems to be parity between Local Agents and MedTech Reps concerning the importance of the strategic role of Local Agents in driving MedTech firm strategy. Heavy focus is placed here on compliant business practices and adherence to legal and regulatory requirements. Therefore, Local Agent knowledge is critical in this instance.

The evidence further shows that there is a disconnect between Local Agents and MedTech Reps regarding the commercial role of Local Agents in driving the MedTech firm strategy. Although Local Agents realize they need to invest, their perception of the MedTech firm's understanding of the challenges and magnitude of these investments is strained. Local Agents seem to believe that MedTech firms are asking for more investment than is prudent or possible. Also, when it comes to sharing risk, the Local Agents feel frustrated by the extent to which the

MedTech firm shares risk with them. Whereas the MedTech Rep feels they are aligned on the aspect.

Lastly, it is abundantly clear that MedTech Reps rate the quality of their partners very low in the majority of relationships.

5.8 FINDINGS: RESEARCH QUESTION 1c (RQ1c)

What are the experiences of Local Agents in this process?

The third Sub-Question addresses the relationship dynamic subsequent to the core research problem, investigating the Local Agent's perception of the general experience of sharing knowledge with a Multinational MedTech firm.

In Chapters 2 and 3, the gaps in the literature were identified, and one of the calls for further research concerned the advancement of understanding of the network relationships during the Internationalization process. As shown, there is a paucity of research petitioning the opinion of Local Agents in this process (especially in the MedTech industry), the literature is rather focused on the experiences of the Internationalizing firm.

The findings of this investigation into RQ1c should give us a glimpse into the network relationship experiences from the Local Agent perspective, delivering insights that have not been documented before. This will also give us another avenue of understanding into the Sensing and Seizing capabilities of the Multinational MedTech firm, as we explore the impact of their home country, their relationship management skills and their ability to foster trust.

5.8.1 Analysis of themes

As mentioned in Chapter 2 (Section 2.2), the research anchor of the current study lies within the Dynamic Capabilities framework. The building blocks of this framework consists of Sensing, Seizing and Transforming. They follow each other in order. The current study applies these building blocks as the main themes of the current study. The evidence from Research Question 1c will be analysed against the Sensing and Seizing building blocks to attempt to draw a conclusion on their satisfaction of their criteria.

5.8.2 Interview Questions for RQ1c

Interview questions informing RQ1c were solely directed to Local Agents and not to MedTech Reps. These questions were focused towards developing an understanding of Local Agent experiences of the knowledge-sharing process with MedTech firms. Table 23 shows these questions from the interview guide:

Table 23: RQ1c Interview Questions

Target	Nr	Question	RQ Justification
LA	viii	How do you experience this process of sharing knowledge with MedTech firms?	RQ1c
LA	ix	Where MedTech firms fail in their strategy, what do you think is the major reason for that?	RQ1c
LA	x	Where MedTech firms succeed in their strategy, what do you think is the major reason for that?	RQ1c

5.8.3 Evidence from Local Agents

The following findings appeared when analysing evidence from Local Agents about RQ1c. The findings will be structured by MedTech Firm origin country, relationship management, expected outcomes and trust.

5.8.3.1 MedTech firm Origin Country

During the interviews, all Local Agents made unsolicited comments on the difference between dealing with Multinational MedTech firms from different origin countries. As this was a spontaneous topic that arose from discussions, the researcher made note of these comments as they seem to have an impact on the knowledge-sharing process. Table 24 documents these opinions.

Table 24: Local Agent Illustrative Quotes – Differences between MedTech origin cultures

Document	Quotation Content
LA-003	"We have that the Japanese tend to be more conservative and reserved with the Americans tend to be Americans put it that way. Depending on who we're dealing with, we adapt our strategy accordingly. The Americans tend to be boisterous, like it's our way or the highway type approach, until they realize it doesn't work. So I think the Europeans tend to understand us very well."
LA-004	"I'll say what I've noticed, is that Europeans; or should I say European MedTech's? They understand the culture. But when it comes to the Americans, nope, it's their way. I'd say Europeans are very flexible. Compared to Americans."
LA-005	"So, if we are talking about the European companies, manufacturers, they are more well organized in terms of giving their own support. If we are talking about Chinese companies or Indian companies, they don't have that type of structure. They are expecting us to do everything and to bring everything to the table. So it's more difficult to develop the business with them. What we can see is the Chinese and Indian companies are winning a lot of grounds nowadays because they are now starting to listen what is needed and they are now starting to put some of the resources that is needed on those on those strategies."
LA-007	"Europe regional managers, or even the whole philosophy of the company, is that we're in the market, and whatever comes out of the market, we shared with them, and they're happy to grow step by step. No, US companies don't do that US companies. No. This is it. And this is how we're gonna do it. And this is what we need."
LA-009	"I find the European people more flexible to deal with."
LA-010	"German, they do positively understand the problems that you face in Mozambique. The most difficult is with the American companies, because they have a lot of forms to fill in. And even in processing the orders, there are a lot of requirements we don't think are necessary, and then lose a lot of business because of that. And the relationship with Germany, and UK is easy. You ask what you want, they give you the price, you pay, they send it to you. The Americans give you a target if you do not get the target after two years they take out the distribution."

The above evidence shows that Local Agents have different opinions on the MedTech company they deal with based on the origin country of that MedTech firm. There seems to be agreement that European firms are more understanding of the cultures in MEA, whereas American firms have a more rigid approach. It also appears that Eastern firms (India, China, etc.) are developing their relationships in this region and adapting their business models accordingly.

5.8.3.2 Relationship Management

The way the relationship between MedTech firms and Local Agents is developed and managed needs to be investigated to understand the Local Agent perspective on the process of knowledge sharing. There are two aspects to consider: The Local Agent’s perspective on how they are managed by MedTech firms, and the Local Agent’s opinion on their general relationship with MedTech firms.

Firstly, the Local Agents’ comments regarding their experience of being managed by MedTech Reps were coded as positive or negative comments. Table 25 shows these results:

Table 25: Number of positive vs negative comments regarding management by MedTech Reps

Opinion	Local Agents
● MT to LA Management -	16
● MT to LA Management +	6

The above evidence shows that there is a difference in the way Local Agents perceive how they are being managed by MedTech Reps. It seems that this process is mostly negative, additional clarity can be obtained from comparative quotations. Table 26 shows these quotations:

Table 26: Local Agent Illustrative Quotes - Positive vs Negative management by MedTech Reps

Document	Quotation Content - Negative
LA-003	"We've seen it whenever we get a new regional sales manager or someone to deal with who doesn't understand the way we work, because we worked with another guy for six or seven years. There's a transition period. Takes a couple of weeks for them to understand how we do things."
LA-004	"They come into the country, the next thing they meet you, they want you to do things exactly the way they want."
LA-006	"When we are dealing with multinational they're very strict correct they deal with us as a number only"
LA-007	"And some of them are totally new. Okay. So they struggle a lot with us."
LA-008	"And we really put it down to the fact that the change of manager and the change of strategy was quite abrupt. And that affected it."
LA-010	"I think because the market is small, they don't care."
Document	Quotation Content - Positive
LA-007	"These people sometimes have experience in the market that have been here for a long time, 10 years, 15 years"
LA-008	"And so you tend to find that when businesses are not so large, and we tend to think that that number sits somewhere between two and \$5 million. The multinationals wouldn't really prefer to have, or would be very comfortable not to have that level of control and allow the distributor to, to manage the business"
LA-009	"The Area sales manager and the Vice President of Sales for our region came to, and we've met with our customer, a big customer, the biggest in Lebanon actually"

As can be seen in the above table, the quotations show that the perceptions from Local Agents on how they are managed by MedTech Reps are more negative than positive.

Secondly, the Local Agents' comments regarding their general relationship with MedTech Reps were coded as positive or negative comments. Table 27 shows these results:

Table 27: Local Agent examples of positive vs negative management by MedTech firms

Opinion	Local Agents
● Relationship - MT-LA -	3
● Relationship - MT-LA +	15

The above table shows a very interesting result, as the evidence from the coding with regards to the relationship between Local Agents and MedTech Reps seems to contradict the comments made regarding the management of Local Agents by MedTech Reps. If we look at the individual illustrative quotes, a pattern emerges. Table 28 shows the illustrative quotes:

Table 28: Local Agent Illustrative Quotes - Positive relationship experiences with MedTech Reps

Document	Quotation Content
LA-002	"They do expect a sharing partnership, but when they do see the potential, they are quite ready to share resources."
LA-003	"But they've learned over time to, to realize that we may do things differently, but it works for us. And indirectly, it works for them too the end of the day. And once we understand each other, we work together with one another. The rest of it just falls into place pretty easily."
LA-005	"But the important thing is that we continue to work as a partner in the market and keep doing the work that we are doing."
LA-009	"We wouldn't have been able to do it ourselves alone without the support of our supplier. And the supplier wouldn't have been able to do it if he was not really present."
LA-011	"All this leads to success when we apply the strategy as we had agreed on."

The above comments confirm the converse nature of the subject. Comparing the positive opinions from Local Agents with the negative ones, the pattern that emerges is that certain Local Agents only have negative experiences, whereas other has both or only positive experiences. If we compare all the opinions in the same table against individual Local Agents, we see a pattern. Table 29 shows this data.

Table 29: Comparison of Positive and Negative Local Agent opinions on Management and Relationship

Local Agent	● MT to LA Management -	● MT to LA Management +	● Relationship MT - LA -	● Relationship MT - LA +	Totals
LA-001	2	0	0	1	3
LA-002	0	1	0	2	3
LA-003	2	0	0	2	4
LA-004	2	0	0	0	2
LA-005	0	0	0	1	1
LA-006	2	0	0	1	3
LA-007	1	1	0	0	2
LA-008	4	3	0	1	8
LA-009	0	1	2	3	6
LA-010	2	0	4	0	6
LA-011	1	0	1	1	3
Totals	16	6	7	12	41

From the above table, the pattern that emerges is that some Local Agents have only negative experiences (LA-009, LA-010 and LA-011), some have only had positive experiences (LA-002 and LA-008) and then some Local Agents had both experiences (LA-008, LA-009 and LA-011).

In summary, although the data on management and relationship can be perceived as inconclusive, the veracity of some of the negative comments point towards a need for improvement. It would probably suffice to conclude that in general Multinational MedTech firms need to improve the way they manage Local Agents and grow their relationships with them.

5.8.3.3 **Expected Outcomes**

The outcomes which MedTech firms could expect a Local Agent to deliver could be an important source of disconnect between the two entities, especially where this concerns the expected revenue the market should deliver. This avenue of investigation was also unsolicited but emerged from Local Agent responses to in-market disconnects between them and the MedTech Rep. Therefore, their responses were coded in-vivo and expected to have an impact on Local Agent perception of the knowledge-sharing process. Some of these opinions are shared in Table 30:

Table 30: Local Agent Illustrative Quotes – Revenue Expectations from MedTech firms

Document	Quotation Content
LA-004	"No, of course, they need to change, that's something they have to be realistic."
LA-006	"And it's very hard in the beginning to start with number in your small market and small business and small country."
LA-007	"We still sold their products, but we didn't match anything of the budget which has been put for the region. Because they put the budget upon other regions. And again, it doesn't work like that. You cannot say if I sell 100 pieces in Europe, I will sell 50 pieces in the middle east."
LA-008	"But in many cases, that number doesn't come from us and match the proposal that we are given. So it possibly is done at a regional level, where a target is set for a region and then that target is then sort of on the basis of a regional managers allocation then divvied up between various geographies in various markets. And that's how a number gets allocated to a market."

The above evidence shows that, without exception, every Local Agent considers the revenue expectation for their market to be out of touch with what the market can provide, or at least what the market can provide if all investments and education requirements are agreed upon and delivered by the MedTech firm. This is an important disconnect which can influence the Local Agent's perception of the knowledge-sharing process. If we look at the RQ1a summary in Section 5.6.5, both parties agreed that the market knowledge to be shared should include the monetary size of the market. If Local Agents perceive their revenue expectations to be out of line with what the market can provide, it might result in a negative experience of knowledge sharing. Perhaps one of the quotations from a MedTech Rep explains the disconnect here:

"Call us when you meet the target" 15:26 ¶ 68 in MT-004

5.8.3.4 **Trust**

The concept of trust between the MedTech Rep and the Local Agent surfaced very early in the data collection process and seemed to play a very big role

in the relationship between the two entities, as it was the 6th highest grounded code.

Generally, Local Agents believe that trust is an important requirement to operate effectively in a partnership with a MedTech firm. All Local Agents (as well as MedTech Reps) show very strong opinions on the way that trust can be cultivated as well as which entity plays which role. A couple of examples of these opinions from the Local Agents can be seen in Table 31:

Table 31: Local Agent Illustrative Quotes – Trust

Document	Quotation Content
LA-002	<i>"To develop a long-term relationship, this element of trust is very important. To bring in trust, they need to see how we are investing in promoting the product in the market, they need to see that."</i>
LA-003	<i>"At the end of the day, a distributor principle relationship is a partnership, there has to be an intrinsic trust, and an intrinsic belief that you've chosen the right principle from your side and the principles chosen the right distribution partner from their side."</i>
LA-004	<i>"If there's no mutual agreement, or understanding, it usually fails."</i>
LA-005	<i>"So it's a partnership between both parties."</i>
LA-008	<i>"By and large, you find that the relationship starts off fairly transparent. You find more and more in today's situation that having the difficult discussions earlier, is seen as being productive for all sides."</i>
LA-011	<i>"Transparency is key in both sides on both fronts."</i>

The above evidence shows that Local Agents have a firm grasp on the importance of trust as well as how it should be cultivated.

Furthermore, it would be required to determine whether Local Agents feel there is a measure of trust in their relationship with MedTech firms. For this to be well understood we need to also look at the MedTech Rep perspective of that level of trust. Therefore, the number of negative comments should be compared to the number of positive comments relating to trust from both sides. This allows us to determine whether Local Agents believe their relationships with MedTech Reps are inherently trustworthy and through the perceptions of MedTech Reps we can confirm whether that is true. As a comparative exercise, we shall look at these in the same table, Table 32:

Table 32: Comparative Quotes – Trust

Opinions	● Trust - Negative	● Trust - Positive	Totals
Local Agents	5	4	9
MedTech Reps	6	3	9

The above evidence seems to suggest that Local Agents have got almost equal negative and positive opinions when it relates to trust in their relationship with Multinational MedTech firms. However, MedTech Reps

seem to have the opinion that in general Local Agents should not be trusted. One comment from a MedTech Rep might put this into perspective:

"I think typically, the company has not always trusted distributor partners" 24:6 ¶ 29 in MT-013

5.8.4 Interpretation and Conclusion

The evidence shows that Local Agents perceive some MedTech firms to be more difficult to deal with than others when conducting the exercise of sharing knowledge. Firms from the US are in general more difficult to deal with, while firms from Europe seem to understand the conditions in these markets better. Therefore, it is possible that Local Agents could be more willing to share knowledge with firms from countries they feel more of an affinity to.

In general, it also seems that Local Agents feel they should be better managed by MedTech Reps and that more effort should be put into developing a positive relationship. This is seen in the disconnect regarding the expected outcomes a Local Agent is supposed to deliver. If there is a disconnect regarding the expected revenue in a country, it will show the Local Agent that the knowledge they share is not internalized and converted to a manageable outcome by the MedTech firm.

Lastly, there is a lot of disconnect regarding the levels of trust between the two entities. Although the amount of negative and positive comments from Local Agents are almost equal, the negative comments outweigh the positive ones from MedTech Reps. This will result in a divide between the two entities and Local Agents will find it much harder to get their information across in the knowledge-sharing process.

5.9 FINDINGS: RESEARCH QUESTION 2 (RQ2)

What would Local Agents advise Multinational MedTech firms to implement or consider when internationalizing into their home countries?

Research Question 2 addresses the transforming dynamic subsequent to the core research problem, investigating the modifications the Local Agent would propose to the Multinational MedTech firm for it to be more effective in utilizing knowledge.

In Chapters 2 and 3, the gaps in the literature were identified, and one of the calls for further research concerned the advancement of understanding of the network relationships during the Internationalization process. Since RQ1c investigated the reactive aspect of the relationship, RQ2 focuses on approaching this proactively.

The findings of this investigation into RQ2 should give us a glimpse into the guidance a Local Agent would provide to a Multinational MedTech firm to assist it in successfully utilising the knowledge and implementing it in its market.

In other words, it will allow us to consider how a Multinational MedTech firm could renew itself continually to be more effective in Sensing and Seizing, thus delivering on the last building block of Dynamic Capabilities, namely Transforming.

5.9.1 Analysis of themes

As mentioned in Chapter 2 (Section 2.2), the research anchor of the current study lies within the Dynamic Capabilities framework. The building blocks of this framework consists of Sensing, Seizing and Transforming. They follow each other in order. The current study applies these building blocks as the main themes of the current study. The evidence from Research Question 2 will be analysed against the Transforming building block to attempt to draw a conclusion on their satisfaction of its criteria.

5.9.2 Interview Questions for RQ2

The interview questions that inform RQ2 were initially only posed to Local Agents. These questions were focused towards gathering advice from Local Agents to MedTech firms on how to utilize knowledge, develop relationships and successfully enter their markets. Table 33 shows these questions from the interview guide:

Table 33: RQ2 Interview Questions to Local Agents

Target	Nr	Question	RQ Justification
LA	xi	What advice would you give potential future MedTech firms who wishes to enter your market in terms of how they deal with local agents?	RQ2
LA	xii	What suggestions can you give MedTech firms to have a more successful business model in Emerging Markets?	RQ2

However, from the data gathering process, it was clear that there is often an internal disconnect within MedTech firms regarding the utilization of knowledge and the learning process. Therefore, question MT-viii (seen in Table 34) from Section 5.6 was also used to inform RQ2:

Table 34: RQ2 Interview Questions to MedTech Reps

Target	Nr	Question	RQ Justification
MT	viii	As downstream manager, what advice would you give upstream management on how to approach internationalization in Emerging Markets?	RQ1a & RQ2

5.9.3 Evidence from Local Agents

The role Local Agents play in Multinational MedTech firm Internationalization strategies was considered from a reactive view in RQ1a, RQ1b and RQ1c. In this view the perception of the interaction between Local Agents and MedTech Reps was studied after the fact, investigating past relationships and strategies. In RQ2, the Local Agent is allowed to advise MedTech firms on how to successfully Internationalize into their markets. In other words, it potentially serves as a proactive approach to successful Internationalization.

The advice from Local Agents can generally be grouped into three areas and the network interaction can be seen in Figure 18.

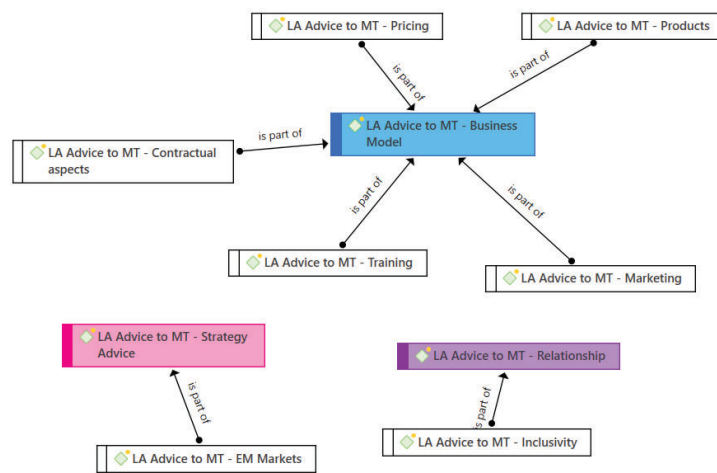


Figure 18: Local Agent advice network

The above figure clearly shows the supporting codes feeding the main advice categories. It aligns the following findings when analysing evidence from Local Agents concerning RQ2. This is presented along the above three areas, namely Business Model, Relationships and Strategy.

5.9.3.1 Business Model

The general Business Models utilized by Multinational MedTech firms to enter the markets in MEA need to be improved, according to Local Agents. Considering the direct model and contractual interaction between the Local Agent and the MedTech firm, the evidence shows that Local Agents require flexibility in credit limits and payment terms. They also need financial support from MedTech firms and there needs to be a shared risk model for capital equipment. Table 35 shows illustrative quotations from Local Agents demonstrating this:

Table 35: Local Agent advice on Business Model – MedTech terms with Local Agent

Document	Quotation Content
LA-004	"I have never understood their business model where they wanted their distributors to purchase capital equipment, which never made sense, because not everyone can afford orthopedic sets"
LA-005	"It's difficult for them to trust us to give us credit lines for these markets"
LA-006	"Honestly, when they put the agreement they are very, very strict, because especially when it's dealing with North Africa countries"
LA-006	"They have to reduce the deadline of payment, because actually we are dealing with hospitals and Ministry of Health in this country, and the period and deadlines of payment is about two years, two or three years, actually."
LA-007	"Most of them know that in this region, the payment terms and credit limit are quite different."
LA-007	"A credit limit, which is going to be a bit high and the payment terms which is flexible."
LA-007	"And capital investment, there is not that much capital investment happening if we're talking about funding or raising any capital from the multinational to the distributor, now, doesn't work that way"
LA-008	"So this is I think the main thing I'll try and communicate is the cost of capital, and an understanding of the expectations of distributors in terms of return on capital, and maybe some insight into why that cost of capital is so high"
LA-008	"Help offset some of the cost of that risk, for example, through longer credit terms, or through some sort of protection, in the case of some specific accounts if they don't pay."
LA-009	"Capital investment is something that the supplier has to invest in. It's not only on the distributor to do everything and to risk everything and only place orders and comply supplements. So, capital investment is very important that it's a part that the supplier should take responsibility or adapt."
LA-009	"Credit facility also, this is something to understand because the payment or the reimbursement system, in emerging countries, or I would say my country is a little bit slow. So basically, there should be payment facilities for credit facilities for the distributor to be able to have a healthy financial situation."
LA-011	"If you're willing to give us extended payment terms, we're willing to reduce our margins"

In the above table, the Business Model expectations from Local Agents are clearly defined. The investment model features strongly, as per the results on RQ1a.

Considering the interaction between the Local Agent and the end-user or the market, the evidence also shows that the business model needs supplementary solutions to strengthen the capacity of the Local Agent to generate demand and grow the MedTech firm business in the host country. This includes robust marketing campaigns, products that suit the market instead of standard products across all markets, competitive pricing, education of physicians and training in business knowledge for Local Agent representatives. Table 36 shows illustrative quotations from Local Agents demonstrating this:

Table 36: Local Agent advice on Business Model – MedTech solutions for host market end-users

Document	Quotation Content - Marketing
LA-001	"... do some marketing in the local country, they have to do some marketing for the product to be known"
LA-004	"So, there is no way we are going to use their marketing strategy, where we just want to go to the doctors and try to campaign because they don't have the purchasing power"
LA-006	"They have to deal more with marketing and marketing business plan"
LA-007	"They should provide us with the marketing materials"
Document	Quotation Content - Pricing
LA-001	"They need to understand why they change the prices, why they need to change the prices, what they think about this particular change in prices, the distributor has to give his own advice or opinion about it."
LA-006	"I'm not sure if, in couple of years, they will be present. Because when we have China company, India Company, they are pressing very, very hard on pricing strategy. I'm not sure if this multinational can be aligned and accept in a couple of years to be to be active in this country."
LA-009	"No drastic changes in prices, unless for force majeure"
LA-010	"They must bring a product in that is correctly priced for the market or the market will absorb it, they should have a competitive price"
LA-011	"And they need to understand where the selling price comes from, and understand why in some instances, the margins seem high. But they need to understand why we are invoicing at such prices because of the services that are required in order to be able to sell the device in the market."
Document	Quotation Content - Product
LA-005	"And even if they are willing that technology manufacturer should compromise a little bit with technology with some of the specifications just to bring something that is affordable for these countries."
LA-007	"And it ended up after a while because the product was so good. So innovative, that we dominate the whole market, and took out every single competitor while we were so much for better in features and benefits than them. And we had a great, great, great business, why that's happened because they listen to us, they follow our steps"
Document	Quotation Content - Education and Training
LA-001	"I mentioned as well the training, again, that's been provided, that's fantastic. It has to be continuous, because new technology comes in medical sector. So each time a new product comes in, there has to be some training. And it has to be training for a product that can be used in the local market"
LA-009	"My staff, they need to go on yearly basis to be trained and educated on new releases on new technologies"
LA-010	"And the first thing you must do is to help the distributor train the doctors. They should invest in education"
LA-011	"We will sell for example, with this price, we need this amount of training."

The above evidence shows that Local Agents have specific and directed opinions on ways to improve the MedTech firm's business model to strengthen its position in the market. MedTech firms that wish to be more successful in these markets should consider implementing these reforms.

5.9.3.2 Relationship

The findings from RQ1c in Section 5.8.3 exposed a strained relationship between Local Agents and MedTech firms. It is evident from the data that Local Agents struggle to maintain a good relationship with MedTech firms. The very concise opinion from LA-010 summarizes this relationship:

"The relationship is very one sided." 10:5 ¶ 27 in LA-010

It is therefore prudent and applicable to petition the opinions of Local Agents to advise MedTech firms on the subject. Local Agents have specific opinions on how MedTech firms can improve their interaction and thus their relationship with Local Agents. It starts with the inclusion of Local Agents in basic decision-making of all aspects that impact the Local Agent market. There are also requirements to have single channels of communication, try to develop trust in the Local Agent, have faith in the Local Agent's knowledge of the host market and travel into the market regularly to understand the people, the culture and the market. Table 37 shows illustrative quotations from Local Agents demonstrating this:

Table 37: Local Agent advice on Business Model – Building Relationship

Document	Quotation Content - Inclusion
LA-001	<i>"If decisions are to be made, in one particular local market, this is were distributors should be included somehow. I'm not saying the very top anywhere, but we are aware of what's going on, whatever decisions be made in the market, they are to be included."</i>
LA-002	<i>"Being involved in all the aspects, it's not just about the market itself, but being actively involved visible as giving total support to the distributor. Not trying to bypass the distributor."</i>
Document	Quotation Content - Relationships
LA-002	<i>"...your personal relationship is having one person that can be of communication, that communication channels are routed through to the person that they are dealing with."</i>
LA-003	<i>"At the end of the day, a distributor principle relationship is a partnership, there has to be an intrinsic trust, and an intrinsic belief that you've chosen the right principle from your side and the principles chosen the right distribution partner from their side."</i>
LA-004	<i>"They should be led by the distributor. They should rely on the distributor. Because he's the local person, he understands everything from the regulations and systems"</i>
LA-005	<i>"But if they were interested to develop these markets, one of the most important things it is really, to have an open person to listen and to see what markets really need."</i>
LA-006	<i>"There have to deal with a distributor as a unique distributor"</i>
LA-007	<i>"I will tell them to visit the market often. Don't sit on your chairs and work things from the top. You need to come to the market, you need to see people, you need to see doctors end users. Get involved and in touch with the culture itself of the country you're dealing with, then you understand how these people think"</i>
LA-008	<i>"There's been a strong assumption that everything can be managed remotely. And the need to visit the market in person is not so important. But the reality is that it is quite important to understand the ground realities of the business, to face the HCPs and the KOL's and understand the challenges in the market firsthand."</i>
LA-009	<i>"The distributor here has a major role. I mean, he represents the market, he knows the market better than the supplier and they should trust the distributor in his role."</i>
LA-010	<i>"They must come to see me every two, two times per year and if there is an opportunity or business, they must come in to go with me to see the client."</i>
LA-011	<i>"The only way that anything works these days, is that there has to be a true partnership where the one investing more gets more out of it. And the one getting his money and has less risk involved, should get less to a certain extent of course. It has to be fair."</i>

The above evidence shows that Local Agents have specific and directed opinions on ways to improve the relationship between MedTech firms and themselves. MedTech firms that wish to be more successful in these markets should consider implementing these reforms.

5.9.3.3 Strategy

In the Internationalization process, the main motive for acquiring knowledge of the host market through a Local Agent is to utilize that knowledge to develop a strategy to successfully enter that market. As discussed earlier, this is the development of a Dynamic Capability. The current research aims to show the effectiveness of Multinational MedTech firms in developing these Dynamic Capabilities. Additionally, through the answers to RQ2, a Multinational MedTech firm can learn this information through the advice from the Local Agents who participated in this study, thus applying passive learning.

Firstly, Local Agents have clear advice on the characteristics of their Emerging Market countries and how Multinational MedTech firms should understand and appreciate these characteristics to adapt their strategic focus accordingly. Mention is made of the importance of building a relationship and there has to be a realization that building a business in these countries takes longer than in other regions. Table 38 shows illustrative quotations from Local Agents demonstrating this:

Table 38: Local Agent advice on Strategy – Emerging Market Characteristics

Document	Quotation Content - EM Characteristics
LA-003	"But they also need to understand the expectation that you can't expect the kind of numbers out of the market like Ethiopia that you get out of South Africa. Even though Ethiopia is a country with double the population, it has no Forex as an example, the most rudimentary thing to do business outside of your country is to be able to trade in foreign currency, they don't have the money."
LA-004	"Look, we are not the same as the Middle East. So, I don't know why we are grouped together. It can never be the same. There's a big difference."
LA-005	"And it takes time, more time than usually it should take but nevertheless, it is accomplished with time."
LA-005	"So it's the long term relationship that we are working with a manufacturer is not a short term relationship. So that's why it doesn't matter if it will take a little bit of more time."
LA-007	"I'm not saying there is no business, of course there is business, but our business comparable with them, other parts of the world is different. So we make sure they understand that even the selling process will take much more time, because it will talk about the Middle East region where and the culture and the habits, we don't change a lot."
LA-007	"When we talk about the Gulf region, we talk about six countries, okay, these six countries all in all, maximum, we'll find something around 50 to 60 million in six countries. So you cannot compare it with India, can't compare to China and can't compare with the South America, with the population is too high."
LA-007	"...when you compare the other emerging markets, as I said, the China, Pakistan, Indian, all of these, there is one huge difference between this region in the Middle East."
LA-007	"...in this part of the world, we don't innovate. We don't create new things, especially when it comes to the MedTech. So we always import the technology from overseas."
LA-008	"...an understanding of the cost of capital in our markets because as a distributor, there is a requirement to generate an appropriate return to make the business sustainable."
LA-008	"So if you don't have a strategy for Africa, it means that you're going to leave a business that will be serving 1/4 of the world's population in a few years, which is probably not a good thing for the multinational long term."
LA-008	"But Africa is 54 countries and every market has its own unique situation. And so they will obviously be able to consider not just which markets are more attractive and which markets are not so attractive today."
LA-010	"And of course, when it comes to capital, as you say, there is difference of product from Germany or from America compared with China or India, but to see most of the times they buy cheaper ones."
LA-010	"A small return every two years, but to build a strong foundation or plan for five years. To build a relationship with this to build a relationship with clients."
LA-011	"...we will handle the payment delays, we will handle everything when it comes to the local market, even the payment delays of two years. But you need to build this, you need to understand that this has to be handled by someone, and someone has to cover the expenses for it."

The above table confirms the origin of the initial disconnect from RQ1 regarding understanding of the characteristics of these markets. It is clear to see these countries should be treated individually from a strategic aspect.

Secondly, Local Agents have advice on general strategic actions for Multinational MedTech firms to consider. This advice is generated through learning from other projects and regular interactions with Multinational firms. The advice includes participation in the development of infrastructure, situational awareness, dedicated strategies and phased entries. Table 39 shows illustrative quotations from Local Agents demonstrating this:

Table 39: Local Agent advice on Strategy – General

Document	Quotation Content - General Strategy
LA-001	"And then from there, we earn some share of the market, then we can start thinking about growing, increasing the price in some way down the line, but we entered the market with a price level already higher than the competition. It will be a little difficult to actually reach."
LA-001	"But in my opinion, in a new market, whether small or large, you have to go by the competition price, even lower than competition to start with."
LA-002	"Yes, even if the product and the facility may be there, it is still gearing up to reach that level, to accept the product. So, it has to be certain areas of high-end technology, you need to take it a step at a time. Start with introducing the technology, sensitizing the market towards the technology before trying to say the product can be put into market."
LA-002	"But they need to come with the total awareness that they are committing to going into this market in the right way and not just because they feel that it's the only market to conquer and get the numbers from."
LA-004	"Some products cannot be used this side. They are very expensive. Sometimes, you can use stainless steel for implants instead of using titanium."
LA-006	"If multinationals do not change the strategy, they will not be able to compete in these markets and therefore the markets will not be attractive."
LA-007	"It's important to understand our market, every market dynamic I mean, every market is different from the other and you cannot go with a global strategy, that works in North America and come and implement it in let's say in Lebanon or any other territory."
LA-008	"And you cannot look at medical devices and pharmaceuticals or FMCG in the same way, the return on capital that you generate on medical devices in emerging markets like ours requires, the amount of capital you require per dollar of sales is significantly higher."
LA-009	"So basically, there should be a dedicated strategy for each country."

The above table shows some interesting comments on the pricing strategy required. This confirms that Local Agents are aware of their competitors, but not necessarily whether this awareness takes place before or after product introduction. Either way, the need for focused MedTech strategies are clear.

Thirdly, Local Agents were questioned as to the future and attractiveness of the MedTech industry in their countries. This could serve to reveal the opportunity to Multinational MedTech firms who are considering entering these markets. Table 40 shows illustrative quotations from Local Agents demonstrating the attractiveness of the Emerging Markets in MEA:

Table 40: Local Agent comments on Emerging Market attractiveness

Document	Quotation Content - Emerging Market Attractiveness
LA-001	"So definitely multinational should continue of focusing in our markets. Definitely."
LA-002	"...on the medical side, the development is happening rapidly as well. Countries are gearing up to say we need to be a lot up with other countries in terms of medical facilities available or provided to our citizens."
LA-003	"So yes, I do believe that there's definitely value in it."
LA-004	"Yes, they should. It's still underserved."
LA-005	"I think it's very, very attractive, they should continue to target those markets. Because those markets are more stable nowadays. And are growing every day. We can see that growth that's why we are working in those markets. And they are the top markets for us."
LA-007	"Of course, of course, I don't recommend any company that they put their face away from the Middle East. Middle East is so important."
LA-008	"We believe very strongly in the opportunity in Africa. And we would certainly encourage multinationals to have a presence and make their products widely available in Africa."
LA-009	"Definitely, definitely because medical care is something that will never stop. Medical care is something that people will still spend for medical care, something that government to spend for so, definitely I advise every supplier to consider investing in emerging markets."
LA-011	"I believe that every market has its own dynamics and every emerging market has an opportunity for everyone. I think that the growth at the moment in Europe and the US is single digit and even less sometimes, even negative growth. The growth is in the emerging markets today. We have potential."

From the table above, it is encouraging to see that all Local Agents have a very positive outlook on their markets. This might be a biased opinion, based on their need to validate their existence, but comparing these comments to MedTech Rep (Section 5.9.4.3) opinions confirms the truth of the matter.

Lastly, Local Agents were asked a question about where they perceive there will be changes in the industry in their region over the next five years. Table 41 shows illustrative quotations from Local Agents commenting on the future of the MedTech industry in the Emerging Markets of MEA:

Table 41: Local Agent comments on the future of the MedTech industry in MEA

Document	Quotation Content - Future of MedTech in MEA
LA-003	"I think as there's more access to cash, there's going to be a bigger push into trying to get these newer technologies into markets that generally didn't have access to the technology."
LA-004	"More MedTech's, especially upcoming ones, will try to penetrate the market, because some are pulling out right now so to speak. Because they feel that it's tedious to manage every single country. So new companies will come in."
LA-005	"But nowadays we see that interest and they are more willing to support us and to come to see what is really the markets."
LA-006	"Honestly, I do not think that it will change."
LA-007	"So nowadays, the products been innovative, innovated in a certain company overseas, you will find it within (after it's all paperwork is being done and the certificates and all of that) been introduced in the Middle East and within three to six months."
LA-008	"The first is that you have a lot of low-cost entrants from Asia, entering the space in Africa, which didn't exist before. And the impact of that price competition on a market that is not yet reached scale will make many multinationals question whether or not they need to be present in these markets or not."
LA-009	"In the artificial intelligence, basically, this is the uprising segment now, artificial intelligence."
LA-011	"In medical devices, especially the lines that we cover, robotics with AI will play a major role. That's where the market is moving and where the innovations are coming from at the moment."

The table above shows that there will be a measure of innovation in these markets in the near future. Although this will not be driven by local innovation, the adoption of international innovation will take place at a faster pace.

In summary, the evidence shows that Local Agents have specific suggestions and advice on how MedTech firms should approach, enter and develop the Emerging Markets of MEA. The evidence also shows a strong requirement for countries to be treated as unique and different, and that strategy should be tailored individually per country. It is also clear that the Local Agent's perception of Market Attractiveness is positive in all cases.

5.9.4 Evidence from MedTech Reps

The advice from Local Agents in the previous section aimed to provide a proactive approach to allow MedTech firms to obtain market knowledge passively. However, throughout the data-gathering process, it became clear that the interviewed MedTech Reps also felt that there should be a better understanding of these markets internally in their organization. Thus, in RQ2, the MedTech Rep is allowed to advise the MedTech firms they represent on how to successfully Internationalize into these markets. In other words, it potentially serves as a proactive approach to successful Internationalization through internal learning.

The advice from MedTech Reps can generally be grouped into three areas and the network interaction can be seen in Figure 19:

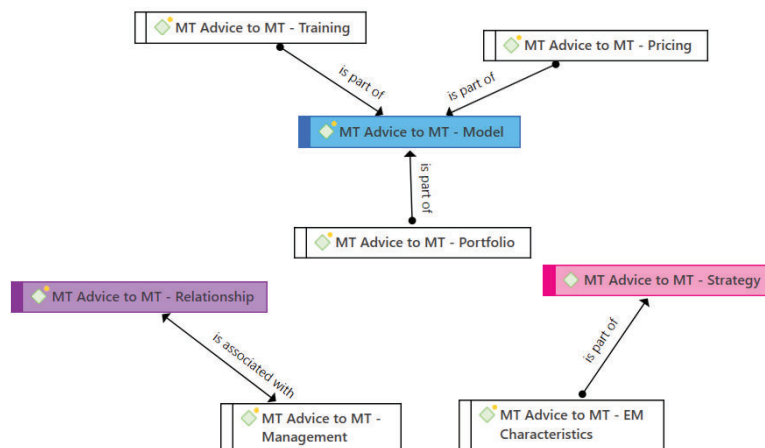


Figure 19: MedTech Rep advice network

The above figure clearly shows the supporting codes feeding the main advice categories. It aligns with the following findings appeared when analysing evidence from MedTech Reps concerning RQ2. This is presented along the above three areas, namely Business Model, Relationships and Strategy.

5.9.4.1 **Business Model**

The general Business Model utilized by Multinational MedTech firms to enter the markets in MEA needs to be improved, according to MedTech Reps themselves. Considering the direct model and contractual interaction between the Local Agent and the MedTech firm, the evidence shows that MedTech Reps would prefer more flexibility in credit limits and payment terms. They also need financial support and investment from their internal organization, even suggesting that these should be sourced from financial institutions to help finance risk and insure against it. Most of them prefer a model where the Local Agent is assisted in-country by a company representative. Table 42 shows illustrative quotations from MedTech Reps demonstrating the proposed changes to their business models:

Table 42: MedTech Rep advice on Business Model – Market interaction

Document	Quotation Content - Business Model
MT-004	<i>"The other area that I've seen it fall down is taking too long to make investment decisions, or fulfillment of demand decisions, or over promoting the product and then not being able to follow through with product because either there's a shortage or they're shipping issues, shipping to destination issues."</i>
MT-005	<i>"There is definitely room for improvement and how we approach partners, how we market our strategy, how we're searching for partners, and how we qualify them to be our channel partners."</i>
MT-006	<i>"Have a combination between a distributor and direct company representative, because then you have also your own eyes and ears in the market, you can feel the market, you can take all these insights to discuss with the distributor to share with your company."</i>
MT-008	<i>"But what is different is obviously payment terms, and sometimes even the pricing structures. And I think that's pretty standard across the board."</i>
MT-009	<i>"That we've done wrong, we've made some assumptions, we weren't willing to make a significant upfront investment."</i>
MT-010	<i>"Firstly, long term vision, share of profits, fair share of expenses."</i>
MT-011	<i>"The company should also show to the distributor that they are willing to invest as well, instead of dumping the stock on them and selling it."</i>
MT-012	<i>"Credit terms is vital in terms of the emerging markets at the end of the day, securing capital within the banking sectors."</i>
MT-013	<i>"There's definitely a challenge with investment and credit limits."</i>
MT-013	<i>"But I do think that multinationals need to be thinking a lot more about maybe working with a smaller number of countries and investing more of their own resources, maybe taking a little bit more risk in terms of credit terms."</i>
MT-015	<i>"For me prepayments don't necessarily work, because in these in these regions it's very difficult for them to get the fresh dollars out, and to do prepayments in order to deliver the service to their customers. So, there should be different business models."</i>

The above table clearly shows the need for Business Model Innovation. The comments are very similar to those of Local Agents, showing an understanding between the two entities on this level.

Considering the interaction between the Local Agent and the end-user or the market, the evidence also shows that the MedTech Reps have identified gaps in their business models based on the portfolio of products they introduce, the pricing strategy in the country, the education of physicians and training in business skills for Local Agent representatives. Table 43 shows illustrative quotations from MedTech Reps demonstrating this:

Table 43: MedTech Rep advice on Business Model – Market interaction

Document	Quotation Content - Portfolio
MT-001	"Do not take the entire basket, take the right appropriate basket to the appropriate country. And identify where the gaps are."
MT-008	"So historically, yet, China and India and Turkey and all those sorts of places and Brazil, are always perceived as lower rate or lower quality manufacture production locations. You know, that's changing, the quality is increasing in some of these regions now, and people are aware of that."
MT-013	"But I do also think that multinationals need to look at their portfolio, because not all multinationals do have products, or there's large segments of their portfolio that may also just not be, not necessarily be relevant or competitive in these markets"
Document	Quotation Content - Pricing
MT-003	"In most markets, especially the public sector, they are price sensitive"
MT-009	"I think the mistake that we often make is to have a blanket pricing approach."
MT-009	"So, you can't really go into the market with a poor-quality product, but because it's so price sensitive, you don't have to have the best quality product necessarily."
MT-010	"And you make sure that you make a fair profit where they also do a fair profit."
MT-012	"You've got to adjust your profitability expectations at multinational level to what is acceptable to both the distributor as well as yourselves as a multinational."
Document	Quotation Content - Training and Education
MT-002	"What I will improve is really training, training of distributors. We tend to hire distributors, and we don't give them proper training. And when I say training, we need to also finance some of these training."
MT-003	"The other thing is beefing them up with the technical knowledge. Making sure we have advantage because we've got in internally we've got webinars where we get to be taught, and I think that training if you ask me, it should also be given to distributors."
MT-003	"I believe that the multinational can close them by assisting them, marketing, technical training, we need to make sure that they are equipped, doing product training."
MT-009	"And then one very critical aspect, is lack of training. I think it has been a big hurdle for us in getting a market properly established, with distribution partners, the more you train, the more you develop them, and the more effort and time and energy and investment you put into them, the more they'll give you back."
MT-009	"I would say: Train, train, train, train, train, train. I would say invest almost as much in your distribution partners as you do in your own resources."
MT-010	"One more big challenge, which is training centers, how can you develop HCP capacity, it can be visiting surgeons and so on."
MT-011	"On the other side companies should really look internally, much better. How can I support my distributors in the sense of really training because you know what it is with training, you do it once?"
MT-012	"I think first and foremost, education and training is paramount. If you look at the skill set that is available at the respective end user level."
MT-013	"Particularly for medical devices, it's going to be very hard to build a successful business if you don't have really well-trained people interfacing with your customers."
MT-014	"We should educate the distributors very well, that it is for your future that you have to be transparent with us, it is for your future that you have to invest more with us."

The above evidence shows that MedTech Rep's opinions on the preferred business models for Emerging Markets align to a great extent with the advice from Local Agents. Therefore, there seems to exist a measure of parity between these decision-making individuals in the MedTech firm and the Local Agents when it comes to their view of the business models that should be employed in these markets.

5.9.4.2 Relationship

In Section 5.8.3, the findings from RQ1c showed a strained relationship between MedTech firms and the Local Agent. Although RQ1c was only directed to the Local Agent, the issue of the interrelationship between MedTech firms and Local Agents featured strongly when MedTech Reps were asked for advice on how to improve their businesses in these countries. Therefore, it is evident that this is an area of concern for these individuals as well. A very concise quote from MT-002, referring to their organization, summarizes this relationship:

"They must drop their ego" 13:45 ¶ 132 in MT-002

It is therefore prudent and applicable to petition the opinions of MedTech Reps to advise their firms on the subject. Firstly, this is going to be explored from the management perspective, in terms of how to manage Local Agents as well as the internal structure of the firm. Table 44 shows illustrative quotations from MedTech Reps referring to management styles and techniques:

Table 44: MedTech Rep advice on managing Local Agents

Document	Quotation Content - Management of Local Agents
MT-002	"Have proper distributor managers, or an executive who's doing that."
MT-003	"No, you put distributors in one room, they share experiences of when they were given a different market. These were the challenges or these were the wins, and how did they get to win, and all those. So that they can share the knowledge. That will also help."
MT-003	"Trust me about the information, empower me as much as you can, but you need to trust the information that I'm giving you."
MT-004	"So, the advice is, listen, tease out answers, investigate, and then act when needed."
MT-005	"And sometimes the expectation from a channel partner or an agent is too high in terms of how they're managing the business."
MT-006	"That sometimes, if not all the times, we need to be more flexible with them."
MT-007	"There is no ideal distributor and that's something they have to understand. There is no ideal distributor, the best distributor would be a distributor who we could trust, and is transparent to us. And, and cooperative as well, as I said, those are important elements."
MT-009	"So make sure that you have your distribution partner meetings, it's not to say that they need to be entertained, but they need to feel that you value them and you look after them, and incentivize, incentivize, that's something that I also want to put emphasis on."
MT-009	"I think if it's more an opportunistic kind of approach, then I don't think there's longevity in it."
MT-010	"You cannot cover Africa from Egypt or from South Africa only. That doesn't work."
MT-011	"The company can, should be able to invest in a local headcount, who's on their payroll in whatever form, in order to say that guy is on our side, but he's with you, he's helping you."
MT-012	"Drive growth, education, planning, training, making sure that the distributor is really up to speed with what they need to be doing and how they need to be doing it, emphasizing that partnership, and that return on investment will come tenfold."
MT-014	"The person responsible for this discussion from the multinational company, along with the distributors, has to be someone who is planning to spend the rest of his life in Africa. Because if I'm someone from any outside Africa country, coming to spend one year or two years in Africa, just to add it to my CV and then jumping into another position within the organization, then definitely my eyesight will be very short sighted."
MT-015	"We're dealing a marketing team or operations team, our even senior leadership team or financial team, all these guys are based in Europe or the UK, and they have to be honest, they have very little knowledge of Middle East market dynamics, Middle East customer, Middle East culture."

The above evidence shows that there are some organisational questions to address in terms of how the team that deals with Local Agents are structured. These opinions include the appointment of dedicated top-level leadership like distribution managers, and local representatives in-country and focus on the correct location of headcounts. It also strongly focuses on developing partnerships through inclusion, the commitment of resources and connecting the right culture.

Secondly, this aspect going to be explored from the relational perspective, in terms of how to engender faith and trust between the MedTech firm and the Local Agent. Table 45 shows illustrative quotations from MedTech Reps on how to develop and strengthen this relationship:

Table 45: MedTech Rep advice on building relationships

Document	Quotation Content - Building Relationships
MT-002	<i>"Let the person feel that this person cares for me, cares about our country, cares about improving this country, improving my business. And once you have the relationship, everything else is easy in Sub Saharan Africa."</i>
MT-004	<i>"The advice to the multinationals is listen hard, respond to everything, at least the minimum is to say, what does that mean?"</i>
MT-005	<i>"There has to be full transparency, but to the level of bringing value to the business and not to the level of just sharing information. We have to find that balance when it comes to how we drive the business with the channel partners, we cannot ask them the world."</i>
MT-006	<i>"If we stick on their contractual obligations without hearing the voice from the real market, then unfortunately, the only thing that we achieve there is just to demotivate and to demoralize them, because they perceive that we are the big company that we don't care about them."</i>
MT-010	<i>"So, you need to make sure that transparency and growth is a win-win situation."</i>
MT-011	<i>"Sharing success could be setting up a kind of bonus scheme for the reps where you as a company, pay the reps once they're doing well."</i>
MT-012	<i>"And I think one of the things that is essential to the development and success and sustainability of any business partnership within that distribution model is engagement, firstly, and taking into consideration an individualized strategy you can draw on international marketing plans, international strategies, but that integration of that third-party distributor in the strategic development of the plan, is paramount"</i>
MT-014	<i>"The mindset of the multinational company should be attentive and listening enough, not focused only on quarter ending or on short term objectives."</i>
MT-015	<i>"I think our biggest success comes down to the relationships we have with our partners, especially our established partners, our partners, where we have those long-term relationships, we have the open communication, the free flow of information, the transparency is also something that we really value with our partners."</i>

The above evidence shows that good relationships are a critical aspect of success in these markets. It can be developed by showing interest and communicating effectively. It is also important to make the Local Agent part of success and to include them in strategy formulation.

5.9.4.3 Strategy

Earlier in this Chapter, in Section 5.6, the utilization of Local Agent knowledge by MedTech firms was studied from the Local Agent and the MedTech Rep perspective. This informed RQ1a and the conclusion was that MedTech firms fail to successfully Sense the dynamics of the markets through knowledge internalization and that they then fail to Seize the opportunities in these markets due to ineffective knowledge utilization. In this last section, in answer to RQ2, the MedTech Rep is allowed to advise their firms on how to overcome these organizational shortcomings and how to develop successful strategies through the use of Local Agent knowledge.

Firstly, the MedTech Reps have a good understanding of Emerging Market characteristics due to their close relationships with Local Agents in these regions. They want to convey this knowledge to their internal organization to improve their firms' understanding of these markets, thereby improving their

Sensing capacity. Table 46 shows illustrative quotations from MedTech Reps on the characteristics of these markets:

Table 46: MedTech Rep advice on understanding Emerging Markets

Document	Quotation Content - EM Characteristics
MT-001	<i>"Communicate that very clearly that the markets aren't homogenous, but then that your strategies are very clearly about market penetration and market development"</i>
MT-001	<i>"What the distributor is trying to do, then to say, well we understand you culturally, we understand what you represent us, what we stand for, but we can't actually implement it the way that you're looking for us to commit locally because that infrastructure just doesn't exist."</i>
MT-002	<i>"The second reason why they fail is that they don't give enough time to build the business in Africa. Africa is so complex that you cannot, you can just go to Africa, and in the first meeting sign an MOU and next meeting the deal is done."</i>
MT-003	<i>"Some of them do not have the muscles to do the marketing, some don't even have marketing people within them, because they don't want to have a large headcount."</i>
MT-004	<i>"It's just the way emerging markets work, they are relatively informal. Now, that is, of course, one of the reasons why multinationals use agents so that they're relatively immune or ring fenced from some of these things."</i>
MT-004	<i>"Multinationals really should spend a little bit more time trying to understand payment culture, and the sorts of ways in which transactions complete the gestation periods."</i>
MT-007	<i>"We need to make sure we invest in those specific markets are stuff that would work there. Because they don't have reimbursement. They don't have private insurance. So, it's out of out-of-pocket money. So those are key elements in terms of what we look and which country we should look at, when we start incubating."</i>
MT-008	<i>"You've got geographical financial pressures going on at the moment in certain regions as well that are demanding local manufactured product in certain sectors over imported product."</i>
MT-008	<i>"What's important for them to understand is culture that there are cultural differences, that you're going into different regions where things don't necessarily work as they work in the mother or the founding regions."</i>
MT-009	<i>"The economy's different vastly, and the landscape differs vastly the, the population differs vastly, so you have to be very, very specific in your approach and Africa in each market."</i>
MT-012	<i>"It is going to take a little bit longer to reap the benefits and to show a return on investment than it would be, let's say, within a Western market."</i>
MT-013	<i>"A lot of these distributor partners are not, particularly in Africa and speaking most of Africa right now, are not going to have necessarily the expertise or the financial ability to do all of the things that they need to do in the market"</i>
MT-015	<i>"There's so many things so many different dynamics in Middle East that happens, that I think a lot of the big firms just don't take all of that into consideration."</i>

It is clear from the above evidence MedTech Reps believe their organizations do not have a clear grasp of the conditions in these markets. It is evident from the requirement to individualize strategies per country and not per continent. Also, there is an impact from the culture of the country on how you approach that country. But mostly, the requirement is to understand that these markets differ vastly from developed markets and that they also differ vastly from each other.

Secondly, MedTech Reps have some advice on general strategic actions for their firms to consider. Table 47 shows illustrative quotations from MedTech Reps' advice on strategy.

Table 47: MedTech Rep advice on general strategy

Document	Quotation Content - General Strategy
MT-001	"I think the important thing is to have a very clear strategy in terms of what the corporation is trying to do in their approach. Corporations running on a three-month P&L and making three-month short-term horizon decisions, short term decisions, whereas approach to these distributor markets has to be a much longer approach, you have to invest over years."
MT-002	"You like when you start looking at a city, not as a country, you'll be able to find more business. There is business, but I think we should be looking at it like the potential of a city."
MT-003	"I believe that it leaves it needs to be flexible. We need to do to adopt new styles as we go along."
MT-004	"It really just depends on how flexible the multinational is, and that's down to leadership in the multinational and it's also down to their nimbleness and their preparedness to sort of adapt and adopt new ways. Have absolute clarity about where they want to go, what is the actual objective, absolute clarity around what the business drivers are, whether there's joint ownership or social contract of sorts"
MT-006	"You can make a very nice segmentation which are the markets to enter now, which are the markets that they need to be in your radar screen for the next three years in some others in four or five years strategy."
MT-007	"You really need to revisit that strategy every three months, to see what's going well, what's not going well, and then adapt, change, and then refine."
MT-008	"Being a bigger multinational entity is understanding the risk, I think it's also very important is going into any emerging market is there's a certain percentage of risk, what you need to explain to them as what the risks are and how to mitigate the risk."
MT-010	"But then you need to localize markets, they are very volatile, distributors are limited. There are always good positive points to use. But if you don't localize the experience locally, it doesn't work. Copy-paste doesn't work."
MT-011	"So that's where I think many times things fail because the principle, is impatient in terms of when they want to see results."
MT-012	"A lot of the time and effort that's associated to real success within the African continent is finding, ideally, skilled people to go into market, do the job, interact with the end user, and simply use the distributor as a vessel to import product."
MT-013	"It's better to focus on a smaller number of countries and invest the company's money in developing the market alongside their partner."
MT-014	"The best business model from a distribution perspective, is through distributors, never direct."
MT-015	"I think at the end of the day we should be more focused on our customers and service delivery to our customers and customer satisfaction."

The above evidence shows that the general strategic aspects required for these markets echo the characteristics of the markets themselves. Multinational MedTech firms need to lift their horizon of expectation to a longer timeframe, allowing the local teams to make strategy work. Opportunities should also be assessed concerning the market, aligning with what the market and the Local Agent can deliver. The Multinational MedTech firm should also have a dedicated long-term vision of where they want to compete in this market and their expectations should be focused on the longer term, rather than short-term three-month cycles.

Thirdly, MedTech Reps were questioned as to the future and attractiveness of the MedTech industry in their countries. This could serve to reveal the opportunity to Multinational MedTech firms who are considering entering these markets. Table 48 shows illustrative quotations from MedTech Reps demonstrating the attractiveness of the Emerging Markets in MEA:

Table 48: MedTech Rep comments on Emerging Market attractiveness

Document	Quotation Content - EM Attractiveness
MT-001	"So these things have to be developed. But in our experience, once they are developed, they spin money."
MT-002	"Invest in the market. Because Africa within 20 years will have the sickest continent, or sickest people as people age."
MT-003	"I think the emerging markets, they will grow, they're here to stay."
MT-004	"But yes, the emerging markets continue to be growth markets, you're always going to get bigger growth. I think Sub Saharan Africa represents an opportunity for multinationals to leapfrog into a new world and get real growth from that."
MT-005	"No, definitely, definitely. I think they are a big chunk of the business when we talk about all these MedTech companies, and we can see there's a lot of focus on these emerging markets. When we talk about Middle East or Africa, the CIS states. Definitely this will continue to be a focus."
MT-007	"No, absolutely. They should proactively pursue that."
MT-008	"If you look at some of the projections of what the emerging markets are going to be doing in the next five to 10 years, I think anyone that didn't take notice of them and take the emerging market seriously, I think it's going to be in a lot of trouble."
MT-010	"Yeah, of course, but you need to set the right expectations and do it step by step, I advise to have a proper mapping of the region, establish hubs and grow from those hubs."
MT-012	"I would say yes, a lot of the growth, if you look at the multinationals is going to come from emerging markets."
MT-013	"But I do think some multinationals have gone in and tried to work in countries where I don't think that the direction of where the country is going and with particularly competition from Asian countries, that there's going to be a lot of long-term potential for more premium products."

The table above shows some encouraging evidence regarding the attractiveness of these markets and serve to sense-check the potentially biased opinions of the Local Agents on this matter. This proves the market has potential and that it could serve as a growth engine to Multinational MedTech firms.

Lastly, MedTech Reps were asked a question about where they perceive there will be changes in the industry in their region over the next five years. Table 49 shows illustrative quotations from MedTech Reps commenting on the future of the MedTech industry in the Emerging Markets of MEA:

Table 49: MedTech Rep comments on the future of the MedTech industry in MEA

Document	Quotation Content - MedTech future in MEA
MT-003	"So, they will emerge and they will make contact with the countries that they want to help them to develop. They will have collaborations with those countries. And there'll be a lot of a lot of growth."
MT-004	"So, things like telemedicine begin to take more of a frontal position in Sub Saharan Africa, because the environment is resource starved, all the doctors have gone, all the nurses that going almost on a daily basis to places where they can be paid more, so telemedicine becomes more important."
MT-005	"Embracing this connectivity journey, where they want all the hospitals, clinics, medical centers to be connected with the ministry or with an organization where they can share information, share patient, diagnostic information back and forth and make the process sort of seamless."
MT-006	"If you consider that we are operating in the healthcare sector, where there is a big scarcity of employees, either they are doctors, or they are lab users, or even people that they are qualified to enter our companies, you can understand that the biggest opportunity is exactly to train educate and develop people in order to enter this industry."
MT-007	"Artificial intelligence is playing an important role."
MT-008	"I think you're going to see quite a big shift. Especially from Sub Saharan Africa, with growth that's going to be deferred into other regions, like the Middle East will take over from a revenue point of view."
MT-010	"I think the biggest thing would be the reimbursement model and the purchasing model. So, I don't think people will continue to be driven by technology only. So, the price and that obsession, people will have more say."
MT-011	"Innovation perspective, for example, on the access to innovation, which is always, of course, delayed into emerging markets."
MT-012	"The competitive landscape is going to become a lot more condensed. And there's going to be a lot more pricing pressures brought to bear specifically in in the Middle East."
MT-013	"I think multinationals are going to struggle to figure out how to compete with Chinese manufacturers, particularly in African markets, they have different ways of doing business that isn't always compatible with how multinationals work. And they're going to have a huge advantage, in many cases, on pricing."

The above table shows that MedTech Reps feel the expected changes are more on the commercial side than in innovation. There are practicable opinions here, which does not rely on external factors alone, but can be internalized by a MedTech firm.

In summary, the evidence shows that MedTech Reps have specific suggestions and advice on how their firms should approach, enter and develop the Emerging Markets of MEA. The evidence also shows a strong requirement for countries to be treated as unique and different, and that strategy should be tailored individually per country. It is also clear that the MedTech Reps' perception of Market Attractiveness is positive in all cases.

5.9.5 Interpretation and Conclusion

The advice from Local Agents which directly informs RQ2 is for Multinational MedTech firms to pay more attention to understanding the dynamics in their markets. This can be seen in their responses regarding the required business models, the development of a closer relationship with their partners and the alignment of strategy with local conditions. Therefore, it can be concluded that

Local Agents perceive that the knowledge they have shared has not been acted upon correctly. This would confirm the earlier conclusion that MedTech firms fail to Sense and Seize. It is, however, encouraging to note that Local Agents have faith in their markets for the future and they are willing to engage with Multinational MedTech firms to succeed in these markets.

On the other hand, it seems that the convictions of Local Agents are shared by the MedTech Reps who manage them. This is shown by the almost exact parity of advice between the two groups of interviewees. It is thus evident that MedTech firms already have this knowledge inside their organizations, as these managers in the middle are aware of the requirements to enter these markets. It seems the MedTech Reps are more aligned in their perspective with Local Agents than to their firms internally. Therefore, since the knowledge is present in the Multinational MedTech firms, there must be an internal disconnect when this knowledge is utilized. In Section 5.6.4.4 we investigated the impact of decision-making authority between localized and centralized individuals in the MedTech firm. Since it was shown that the split is almost even, it would mean that at least half of the MedTech Reps that were interviewed would have the authority to implement these changes they are suggesting. It could then only be concluded that there is some other internal process that is preventing them from introducing these changes in their markets.

5.10 SUMMARY

The need to develop Dynamic Capabilities to successfully enter volatile and uncertain markets like the MEA region was identified in Chapter 2. The building blocks for such Dynamic Capabilities were also clearly defined. The current chapter detailed the results from the data collected in this research study. The data was presented by Research Question, allowing for the investigation of the utilization of Local Agent knowledge by Multinational MedTech firms. Each sub-question was analysed according to the themes identified through the perspective of Dynamic Capabilities, namely Sensing, Seizing and Transforming.

The evidence presented in this chapter seems to confirm that Multinational MedTech firms fail to successfully Sense the dynamics of the markets in MEA. Local Agent opinions certify this disconnect and suggest more understanding from Multinational MedTech firms in these markets. However, the opinion of MedTech Reps is that the quality of knowledge shared by Local Agents to facilitate the development of this understanding is very low. Also, the Local Agents might be negatively impacting this

process by withholding knowledge, essentially working against their own opinions. Local Agents also consider this process to be a negative one and that impacts the level of trust undesirably between the two entities.

The evidence presented in this chapter also seems to confirm that Multinational MedTech firms fail to successfully Seize the opportunities of the markets in MEA. The utilization of Local Agent knowledge by these firms is flawed, according to Local Agents and most MedTech Reps. There is a need to internalize the knowledge shared by Local Agents and use it to develop more effective strategies. Generally, the MedTech firm's expected outcomes from these markets do not match the shared knowledge of market potential, creating a disconnect and an increased perception of risk. This leads to lower levels of investment and risk sharing between the two partners.

Finally, the evidence shows that there is an opportunity to improve this process by cultivating the relationship between the two partners, leading to the Transforming of the MedTech firm approach. This should start with complete transparency from Local Agents on the knowledge they share, they should not withhold any information. MedTech firms should believe and trust this information and apply it to the strategies they develop. If this is the case, the attractive opportunities in these markets will be Sensed in time by the MedTech firm and the correct Internationalization strategies can be put in place to Seize these opportunities.

5.11 NEW INSIGHTS

The interviews with MedTech Reps led to two other insights that potentially impacts the utilization of Local Agent knowledge as well as the development of the relationship with Local Agents. These are mentioned below, but they are out of scope of the current study and could form part of future research into this topic.

5.11.1 MEDTECH FIRM INTERNAL DISCONNECT

Throughout the interview process targeted at MedTech Reps, there was evidence of an amount of frustration from a certain level of management in these organizations when they commented on the challenges they face internally in their firms. There seems to be a level of management within MedTech firms, who are in direct contact with Local Agents, who aligns themselves more to the Local Agents than the MedTech firm in terms of their frustration with failed Internationalization strategies. Whether these MedTech Reps was classified as Senior Management or Middle Management (according to Section 4.8), they always referred to superiors in their organization impacting their strategy formulation for Internationalization. For the sake of this argument, we shall call

these managers “Intermediaries”, whether they are Senior Manager or Middle Managers.

Firstly, when asked whether their superiors attempt to enforce strategies from other regions onto their markets, there was evidence of such attempts. Figure 20 shows the frequency of the tendency of MedTech firm superiors pushing strategies from other regions onto Intermediaries:



Figure 20: Sankey Diagram of Tendency of MedTech superiors to push other region strategies.

From the above figure it is clear that superiors do in fact push strategies from other regions and that most Intermediaries have a negative perception of this. Most of these negative perceptions are driven from the sense that these strategies will not work in MEA markets as the characteristics are so different. Table 50 shows some illustrative quotes on this matter:

Table 50: Intermediary Illustrative Quotes – MedTech superiors pushing strategies from other regions.

Document	Quotation Content - MedTech Superior enforce strategy from other region
MT-002	"They tend to force their strategy on the distributors. So, you tend to find that they will force this strategy on the distributor, regardless whether it worked or not. They will say, Okay, this worked in Turkey or it work in Indonesia, you should try."
MT-003	"Sometimes they think what worked in Europe or what worked in Asia or worked in the US, it will work in Africa, and that's not the case."
MT-004	"...others will say, 'it works like this in Kenya. So, it must work like this in Tanzania. So, it must work like this in, in Pakistan. So, it must work like this in Bangladesh'"
MT-005	"Yes, yes. So under our group, we have several operating companies and it's a lot of best practice sharing where we can take another existing business plan from another company, and try to execute it at least on a high level and the details we tweak."
MT-007	"Absolutely. The organization that I used to work for, had its own strategy. And yes, there were lots of pressures, put together to kind of follow a certain strategy."
MT-010	"But then you need to localize markets, they are very volatile, distributors are limited. There are always good positive points to use. But if you don't localize the experience locally, it doesn't work. Copy-paste doesn't work."
MT-011	"So I think I had leaders in the past who were like that indeed, pushing through or continuously benchmarking what they learned in other markets. And instead of taking into account local, really local dynamics, so I think that's what you see."
MT-013	"A lot of business leaders and certainly our distributor management team, their perceptions of how we should be working with our strategy, and how we should be working with our local partners was often based on their experience, mostly in North Africa and other Middle Eastern countries."

As can be seen in Table 50, the negative opinions on the pushing of strategies from other regions focus on the lack of local adaptation. It seems that Intermediaries does not mind sharing best practice or benchmarking, but that the local adaptation of these strategies are lacking or not allowed.

Secondly, often there was a decision from a superior to enforce a top-down strategy, regardless of the knowledge shared by the Local Agent or even indeed the opinion and information shared by the Intermediary. This top-down strategy was introduced regardless of local conditions and the Intermediary did not have a choice in the matter. Figure 21 shows the sense of the type of impact these strategies had on their regions:



Figure 21: Sankey Diagram of top-down strategy impacts in MEA

From the above figure, which was coded as Good/Neutral/Bad, it is clear that the majority of Intermediaries experienced top-down strategies in a negative way, impacting their market harmfully. Thus, there seems to be interference in the development of Internationalization strategies at this level. In Section 5.6.4.4, we detailed the findings of internal firm disconnect versus local decision-making authority. That data showed that even those Intermediaries with localized decision-making authority suffer from internal disconnects in their firms where strategy development is concerned. This might be evidence that the interference from superiors are challenged by Intermediaries with localized decision-making authority, causing the disconnect.

Furthermore, there was many comments on the impact of resource allocation and revenue expectation. In all cases it seems that the inability of the MedTech firm to successfully internally allocate resources and demand fair revenue expectations, in addition to the tendency of superiors to negatively interfere with the local strategy formulation, caused large concerns to the Intermediaries and was a major source of frustration for them. A selection of quotations exhibiting this frustration and disconnect can be seen in Table 51:

Table 51: Intermediary Illustrative Quotes – MedTech internal disconnect

Document	Quotation Content - MedTech firm internal disconnects
MT-001	"One of the fundamental issues with multinationals, is that you have this group think that emanates from head office and it brooks no debate."
MT-004	"And then internal politics to internal multinational politics are two areas that I would perhaps say, have been the greatest pain in terms of strategy failure, and market entry strategy failure."
MT-007	"And then we come up with a strategy that we think at the end of the day would fit the certain country, then the same kind of battle will happen between, my team, myself and my superior in that organization."
MT-009	"I think the one thing that's really hampered us as well is internal processes, a lack of agility, lack of quick decision-making, I think that's very important, you've got to be very quick in your decision-making process, if you decide to enter a new market, you've got to be quick in getting the right partner on board and then supporting that partner, effectively with the right resources and investment, to really build the business."
MT-010	"I think the bigger you go, the more processes are in place, and then things go a little bit slower."
MT-011	"So, because of those boundaries, that's why you could not execute your strategies or really create a strong cooperation with your distributor. So yes, there were cases where you really felt this is limiting me so much."

As can be seen from Table 51, Intermediaries commented on the fact that these internal disconnects are a large source of frustration and causes strategic failures. According to the evidence, there was a large variety of differences which created this disconnect and frustration, but in general they can loosely be grouped into the four categories mentioned earlier: Top-down strategy, Strategies from other markets, Lack of resource allocation, Incorrect revenue expectation. Figure 22 shows the impact of these internal disconnect on strategic failures (more detailed in Appendix K):

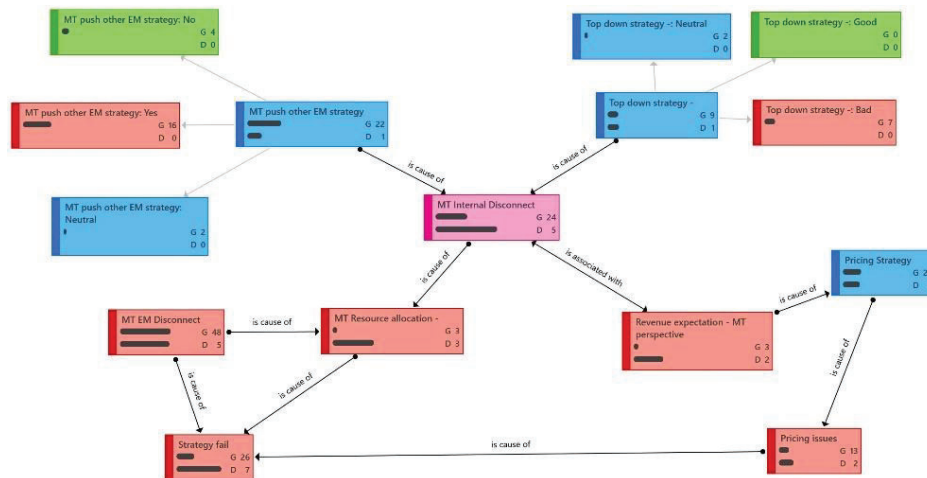


Figure 22: Sources of MedTech internal disconnect with impact on strategy

As can be seen in Figure 22, the internal disconnects Intermediaries face have eventual impact on variables effecting in-market success. For example, in cases like pricing this disconnect have direct impact on the creation of pricing strategies that cause strategy failure.

This section serves as a glimpse into the evidence that informed this new insight. There is a need to investigate this further, as the exploration of the internal processes of the MedTech firm was not in the scope of this study. There will be an attempt to apply the impact of this new insight into the causality of the research questions in Chapter 6.

5.11.2 ADVICE TO LOCAL AGENTS

Research Question 2 (RQ2) addresses the internal dynamic subsequent to the core research problem. In other words, it allows us to consider how a Multinational MedTech firm could renew itself continually to be more effective in Sensing and Seizing, thus delivering on the last building block of Dynamic Capabilities, namely Transforming. In order to achieve this, Intermediaries and Local Agents was given the opportunity to provide feedback to the MedTech firm on how to improve their Sensing and Seizing capacity. This was addressed in Section 5.9.

The New Insight provided in this section concerns the external dynamic. This insight serves to inform the external partner on how to assist the MedTech firm to succeed in Transforming. To achieve this, MedTech Reps was given the opportunity to provide feedback to the Local Agent on how to improve their knowledge gathering and general interaction with MedTech firms. The findings of this investigation should give Local Agents valuable insights into the internal workings of a MedTech firm, so as to be more successful in realizing their own market mandates and to improve relationships with Multinational MedTech firms. The advice from MedTech Reps can generally be grouped into three areas and the network interaction can be seen in Figure 23:

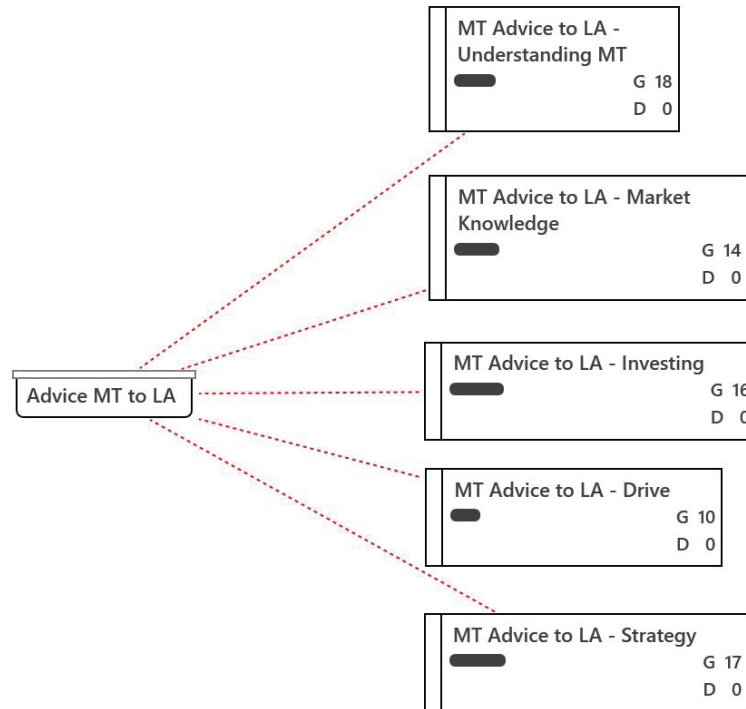


Figure 23: Components of MedTech Advice to Local Agents

The components seen in Figure 23, shows that the MedTech reps generally advised Local Agents on the following aspects: Understanding MedTech firms, Market Knowledge, Investing, Drive and Strategy. Each of these will be discussed individually.

5.11.2.1 Understanding MedTech Firms

The evidence shown earlier in this chapter (RQ1b and RQ1c) points strongly towards the fact that the relationship between MedTech firms and Local Agents are strained. Since the earlier advice (RQ2) was aimed at assisting MedTech firms to improve, this section serves to advise Local Agents how they can assist in that improvement.

Advice from MedTech Reps to Local Agents on this subject makes mention of the need to understand the entity they are dealing with, there is a large difference between a Multinational MedTech firm and a Local Agent, even if that Local Agent has responsibilities across countries. Table 52 shows illustrative quotations from MedTech Reps demonstrating how Local Agent should understand MedTech firms:

Table 52: MedTech Rep advice on understanding MedTech firms

Document	Quotation Content - MT Advice to LA - Understanding MedTech Firms
MT-002	"I will say knowledge of the company they're working for. Sometimes they work for you, all these major companies, but they don't know what we do, they don't exactly know what you do. So, they're not able to sell what you do properly."
MT-003	"Make sure that you know the product of the multinational that you want to represent. And you do your homework of the other products that are competing with that product. You need to know what the what's being used and why it's being used."
MT-004	"What gets measured gets done."
MT-005	"So, this is where a lot of these CRM tools come in. Where you're able to jointly with the MedTech companies manage your commercial opportunities as well, your service growth as well as service delivery as well."
MT-006	"They should realize that they are the face of the company, and none of our companies is willing to compromise our reputation because of a distributor that is not eager, or is not willing to follow these kinds of directives."
MT-007	"The more you cooperate with them on these things, the more they trust you, the more they support you the more they feel that you work with them as a partner. So, partnering with multinational is key elements in terms of trust, transparency, and collaboration."
MT-008	"Know and understand who you are potentially getting into partnership with, does the company ethos, or the culture match yours, because culture is a huge thing. And that's something I've seen over and over is, is if you match company cultures are similar, they don't have to be exactly the same."
MT-009	"If your strategy is to do a placement model, then come to me with a specific placement plan, don't just ask me how can we do this, come with a specific plan, and then we can see how that works and if it's a fit for us."
MT-010	"So actually, it's in your best interest to do well, because it makes it for me much more difficult to drop you."
MT-015	"It would be nice to see more interaction, more engagement and involvement from their side into our business. And not have it so top heavy down, us telling them what to do."

From the table above, it is clear that the internal structure of the MedTech firm differs greatly from the Local Agent, especially in terms of culture. There is a request to be more specific in measuring actions, which is natural in a large organization where it cannot be managed by impression. But mostly there is an appeal to really get to know the organization you are partnering with and to spend time understanding their culture, products and processes.

5.11.2.2 **Market Knowledge**

The evidence shown earlier in this chapter (RQ1a) points strongly towards the fact that the MedTech Reps have little faith in the knowledge shared by Local Agents and that they are aware of the strategy of restricting knowledge. Since the earlier advice (RQ2) was aimed at assisting MedTech firms to improve, this section serves to advise Local Agents how they can assist in that improvement.

Advice from MedTech Reps to Local Agents on this subject makes mention of understanding the market and being transparent with information. Table 53

shows illustrative quotations from MedTech Reps demonstrating how Local Agent should approach Market Knowledge gathering and sharing:

Table 53: MedTech Rep advice on improving Market Knowledge

Document	Quotation Content - Market Knowledge
MT-003	<i>"You need to know the legislation, things like the acts governing, pathology testing, acts governing, how to do business in the country."</i>
MT-004	<i>"...in terms of knowledge sharing, you would obviously want to have regular meetings, regular reports."</i>
MT-008	<i>"It's to be 100% prepared and planned that they've done market research that they know what they're getting into, and that they've upskilled, or educated themselves on potentially a market that maybe they're not familiar with, if it was devices, do they actually know what devices are."</i>
MT-009	<i>"I think it's to be forthcoming, to not be too guarded in sharing the information, if you really value the product and you understand and you value the company that you're representing, to be forthcoming with the information that you have."</i>
MT-010	<i>"...it's the sharing of information engaging us, there are major problems within that as well."</i>
MT-011	<i>"I think the more transparent they are, the better the relation. Things will be at a higher chance it will be successful, because the only reason why they are not transparent is because either they think they're underperforming, or they think that they're doing well."</i>
MT-012	<i>"And the more information that they share, the more successful the partnership will be, the easier it is for them to really reap the benefits of that partnership."</i>
MT-013	<i>"They need to understand the market and the size of the market, so that they're able to be able to really speak to what they need and make sure that they're getting the right stock."</i>
MT-015	<i>"It needs to come more from you what you think is going to work and what's not going to work."</i>

From the above table it is clear that MedTech Reps want to encourage Local Agents to be transparent in sharing knowledge and to build a level of trust with it. Local Agent should also improve communications with MedTech firms in order to share this knowledge and to prove that they understand their markets.

5.11.2.3 Investing

The evidence shown earlier in this chapter (RQ1b) points strongly towards the fact that there are disconnects between the MedTech Reps and Local Agents when it comes to investment. Since the earlier advice (RQ2) was aimed at assisting MedTech firms to improve this investment, this section serves to advise Local Agents how they can assist in that improvement.

Advice from MedTech Reps to Local Agents on this subject confirms that MedTech firms expect some type of investment, some skin in the game. This forms part of the previous evidence on the need to share risk. Table 54 shows illustrative quotations from MedTech Reps demonstrating how Local Agent should conduct prudent and effective investment:

Table 54: MedTech Rep advice on Investment

Document	Quotation Content - Investing
MT-001	<i>"Remember medical devices are hard, but pharma is easy. Pharma has got an established supply chain, you import it, you whip it through the supply chain, no problem, medical devices, you're going to go find your customer, you got to go and make the investment."</i>
MT-002	<i>"We do understand that some of the distributors don't have money, but they need to invest in their business in order for these businesses to grow. I cannot be sitting there and the distributor is asking me for a loan."</i>
MT-005	<i>"The team wellbeing and the team management has to be really effective, and really good in terms of how we are rewarding them, how we are compensating, how we are managing the team, it has to be really at the level of how usually the MedTech companies have."</i>
MT-006	<i>"When it is coming to the financials, it is a different story. It is something that always is part of our negotiations and the business plan."</i>
MT-007	<i>"You really need to make sure that proper investment is put. And when I say proper investment, it's not only buying stocks, because we've witnessed that some big companies, they just say they signed the agreement with you, they buy the stock, and then the stock stays there for ages without being moved. So, buying stock is one element in terms of investment. But the most important thing is that investing in people, in the right people, to be in the field, people who are knowledgeable about what they're trying to sell, people who would give feedback to the local agent, that this is the market, this is what we need in the market."</i>
MT-010	<i>"...if they invest, they'll be rewarded."</i>
MT-013	<i>"Be very careful that when they're initially investing in stock, that they're really investing in stock that's going to move in their particular market, and investing in a reasonable amount of stock that's going to be both sufficient to meet the market needs and not be stocked out regularly, but not going to be overstocked."</i>

From the above table it is clear that MedTech Reps want to encourage Local Agents to not only put investment into this business, but to do so smartly. To come forward with their own business cases and motivations. To invest in stock smartly, so it moves to the customer at the right pace in order to generate a timeous return on that investment. But most importantly, Local Agents should invest in their people. Making sure the right people are on board, to ensure they are trained effectively and to incentivise and reward them for driving the business forward.

5.11.2.4 Drive

The evidence shown earlier in this chapter (RQ1b) points strongly towards the fact that MedTech Reps consider Local Agents to generally be of low quality and that they constantly have to intervene to get things done. This section serves to advise Local Agents how they can improve in this regard, the ability to show initiative and to drive the business forward proactively.

Advice form MedTech Reps to Local Agents on this subject requests Local Agents to take the lead in the business. To drive actions forward and to be accountable for their success. Table 55 shows illustrative quotations from MedTech Reps demonstrating how Local Agent should drive the business:

Table 55: MedTech Rep advice on Drive

Document	Quotation Content - Drive
MT-002	<i>"The first thing that the distributor need to do, is they need to be proactive. A lot of distributors are passive. They just sit there and rely on me picking up my phone."</i>
MT-004	<i>"Action points that absolutely address the gaps, because you will always have gaps, you will always have things that have fallen through the cracks, and somebody needs to pick them up and put them back on the table."</i>
MT-008	<i>"You've got to be excited about what you're selling, or what you're getting involved in is. Don't, don't just get into a business relationship, because you think there's money to be made in it, that's when it's gonna go horribly wrong. You've got to ensure that those guys have a proper passion for what they're about to invest in, in what they're about to embark in."</i>
MT-009	<i>"To really be willing to go the extra mile, not to keep looking for handouts, because it's a large multinational."</i>
MT-010	<i>"They need also to know that if they're doing a good job, the reward is bigger, and the chances of dropping them is way smaller."</i>
MT-013	<i>"You wanted this to be exciting enough of a new opportunity for them that they put in that management time and really put the effort in to grow the business."</i>
MT-014	<i>"The successful ones are going beyond the normal to build."</i>
MT-015	<i>"I think I find a lot of our distributors are lazy. They see us as this big multinational. They see us as the drivers."</i>

From the above table it is clear that MedTech Reps want to encourage Local Agents to be proactive. Not to expect the MedTech Rep to come into the market to drive the business, but to put their own efforts in beyond the normal. It would be important for Local Agents to overcome this perception of them being lethargic, since it might not be the case, but perhaps the perception is created through lack of communication. But mostly, there is a requirement form MedTech Reps to see this internal drive in Local Agents through initiative and excitement.

5.11.2.5 Strategy

The evidence shown earlier in this chapter (RQ1) points strongly towards the fact that there are disconnects between the MedTech Reps and Local Agents when it comes to the development of Internationalization strategies through the utilization of Local Agent knowledge. Since the earlier advice (RQ2) was aimed at assisting MedTech firms to improve the strategies they employ in these markets, this section serves to advise Local Agents how they can assist MedTech firms or indeed develop their own strategies. As expected, this topic showed the most opinions of the five aspects advised on.

Advice form MedTech Reps to Local Agents on this subject makes mention of the need for Local Agents to initiate the strategic process by showing their initiative and they all agree that the Local Agent is the one with the most knowledge to inform strategy formulation. Table 56 shows illustrative

quotations from MedTech Reps demonstrating how Local Agent could improve their strategy formulation:

Table 56: MedTech Rep advice on Strategy

Document	Quotation Content - Strategy
MT-001	"Have a very granular plan, to be ordered like a business plan. Have your top 20 Customers top to five accounts and say, this is how we need to approach this account. These are the doctors and you have a plan by doctor in terms of what's required in order for them to start to start moving that therapy or driving that therapy. Who's going to become a key opinion leader locally, all the rest of all that like basic sort of marketing stuff. And I think if they're able to communicate it like that makes it very easy then for people like myself to be able to communicate those plans forward."
MT-003	"Don't over-promise. Don't try to take the whole country at once, you will fail. Especially when you don't have, you're still new, you don't have the footprint and you don't have the expertise."
MT-004	"And if you're driving strategy, then you've got to take strategy and break it down into its individual components."
MT-006	"So when you have these kinds of openminded people that partners that they don't approach the business with this short term vision and with a very opportunistic mindset, then definitely, they can be very successful."
MT-009	"I would advise you show us some skin in the game, invest in some demo devices, for example, and show us how quick you can actually implement a specific strategy."
MT-011	"You can hide a lot. But in the end in the negotiation, if they [MedTech firm] wants to go direct, you don't have so much a strong footing because you don't have arguments."
MT-012	"If you're going to become a medical device distributor, select the respective market channel that you really want to get involved in, specialize that hone that, really become the go-to partner in country and refine that, that what that does is it brings credibility and integrity to the process."
MT-013	"It's important for them to have their own strategy and to communicate that. That it's important not to just depend on the international company."
MT-015	"I think it should actually be a two-way street, that should be more coming from their side, because they're the ones established in their markets. They're the ones who know the customer base, they know the markets, they know the economic and financial and political situation in their region. It would be nice to see all our local agents bringing more strategies to us."

From the above table it is clear that MedTech Reps expect Local Agents to be the primary drivers of strategy formulation through their local expertise. There is also mention of granular plans, which confirms the MedTech firm understanding expected in Section 5.11.2.1, relating to measurable actions. Mostly, MedTech Reps want to see more interaction and more initiative from Local Agents, expecting the Local Agent to have a pro-active approach to strategy formulation.

5.11.2.6 Summary

This section serves as a glimpse into the evidence that informed this new insight. There is a need to investigate this further, so as to increase the pool of knowledge advising Local Agents and increasing their potential learning. Therefore, further research into this subject is advised.

CHAPTER 6: ANALYSIS OF STUDY FINDINGS

6.1 INTRODUCTION

This chapter discusses the results from Chapter 5, as it pertains to the literature presented in Chapter 2. The structure of this chapter will follow the same sequence as in Chapter 5, in that the Research Questions will drive the discussion. Therefore, the aim of the academic discourse in this chapter is to explore a deeper understanding of the conceptual framework of Dynamic Capabilities (Teece, 2014) as it pertains to Multinational MedTech firms, in relation to the findings of the previous chapter.

The Research Questions were detailed in Chapter 3 and the discussion in this chapter follows along those lines. Firstly, the Sub-Research Questions 1a (RQ1a), 1b (RQ1b) and 1c (RQ1c) will be discussed in order. Then the discussions and conclusions from these sub-questions will inform the discussion and conclusion of the Main Research Question (RQ1). Lastly, the Secondary Research Question (RQ2) will be discussed and concluded.

Each Research Question will be analysed and discussed through the lens of the themes informing the conceptual framework. RQ1 will be discussed in relation to the Sensing and Seizing building blocks of Dynamic Capabilities. Whereas RQ2 will be discussed in relation to Transforming, the third building block of Dynamic Capabilities. Figure 24 shows the relation of these themes to each other and to the first order categories.

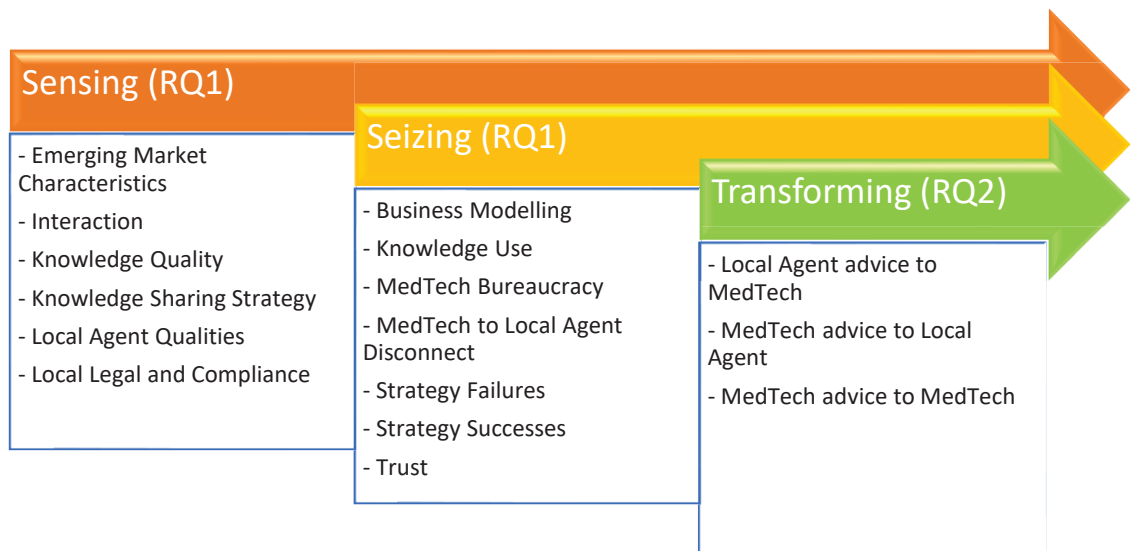


Figure 24: Themes and Categories in the Dynamic Capabilities conceptual framework as applied to the current study

Towards the end of this chapter, an attempt will also be made to discuss the new insights identified in Chapter 5. Although these did not form part of the scope of this study, the researcher will try to connect these insights within the context of the literature prepared in Chapter 2. Thus, clarifying the boundaries within which these new insights can be illuminated in future research.

6.2 DISCUSSION OF RESULTS FOR SUB-RESEARCH QUESTION 1a (RQ1a)

How do multinational MedTech firms develop and action knowledge from Local Agents?

Research Question 1a (RQ1a) was aimed at gaining an understanding of the utilization of the knowledge MedTech firms acquire from Local Agents. This understanding was approached from the perspective of Local Agents as well as MedTech Reps. The key findings are walked through specific steps along the process of acquiring and utilizing knowledge. Firstly, we need to discuss the type of knowledge which MedTech Firms find necessary to create effective Internationalization strategies. Secondly, an aspect arose from the current research showing that Local Agents have their own mandates when it comes to knowledge sharing, which needs to be explored. Thirdly, MedTech Reps show little faith in the quality of knowledge they receive. Lastly, the way Multinational MedTech firms utilize the knowledge acquired from Local Agents, is examined in detail.

Referring back to the call for research validating RQ1a (Section 3.2.1), the evidence from the current study sheds further light on the network collaboration between Multinational firms and domestic companies in the Internationalization process, by identifying key variables which impact the acquisition and utilization of knowledge by MedTech firms in MEA. A recent study by Nikolchenko validates RQ1a, specifically in reference to the successes of these Local Agent networks in challenging markets as a future direction to study, stating “More multinational companies should be involved in the research for better understanding and explanation how collaboration in networks involving Internationalized and domestic companies impact on the operational and firm performance” (Nikolchenko et al., 2018, p. 363).

6.2.1 KNOWLEDGE NEEDED BY MEDTECH FIRMS

The evidence presented in Chapter 5 shows that both Local Agents and MedTech Reps have a clear indication on what knowledge needs to be shared between

them. The Local Agent primarily shares knowledge about the regulatory landscape, local culture, market dynamics, customer details, competitor information and applicable legal frameworks. MedTech Reps further request knowledge about competitive pricing and reimbursement pathways. Both parties also agree on what the targetable market size is in terms of revenue, this is an important fact to agree on. Therefore, both parties are aligned on the type of knowledge needed by MedTech firms to drive their Internationalization strategies.

This secure understanding between Local Agents and Multinational firms are clearly defined in the literature. Firstly, all the Internationalization strategies of Multinational firms covered in the literature refer to some type of advantage created by acquiring host market knowledge pre-entry. The Uppsala model refers to it from its inception (Johanson & Vahlne, 1977), referring to the need to acquire host-market knowledge to decrease psychic distance. The Born-Global approach also referred to it from inception, referring to network relations as an "...invaluable source of knowledge..." (Knight, 1997b, p. 12). All of the other strategies mentioned in Chapter 2 (Section 2.3.3) makes the same conclusions. Secondly, in Emerging Markets, Hoskisson considered this to be even more important than in Developed Markets, as there is less information available through other channels and institutions from Emerging Markets (Hoskisson et al., 2000b). Therefore, the act of acquiring knowledge through Local Agent sharing is well grounded in the literature.

Regarding the type of knowledge required, many studies confirm the list mentioned above (regulatory landscape, local culture, market dynamics, customer details, competitor information, applicable legal frameworks, competitive pricing and reimbursement pathways) and it seems that this is also similar across industries (Knight & Cavusgil, 2004; London & Hart, 2004b; Paul & Rosado-Serrano, 2019). There is also literature supporting this for Emerging Markets (Nikolchenko et al., 2018), specifically in MEA (Falahat et al., 2018b). The type of knowledge required by MedTech firms in Emerging Markets are also supported by literature. Hadjikhani studied the acquisition of knowledge in Iran by Swedish MedTech firms early in the Internationalization literature (Hadjikhani, 1997b), whereas Heiss studied the Internationalization of German MedTech firms into various Emerging Markets more recently (Heiss, 2017).

In summary, it can be accepted that there is ample literature defining the need for knowledge sharing between Local Agents and MedTech firms. It is also clear

that this need for knowledge, as well as the type of knowledge required, is well supported and transcends different industries and different markets when it relates to the Internationalization of firms. The evidence from the current study is therefore aligned with the literature. It also follows that, for this aspect of RQ1a, the MedTech firm is positioning itself correctly to Sense and Seize the opportunities in their markets.

6.2.2 LOCAL AGENT KNOWLEDGE SHARING STRATEGIES

The findings presented in Chapter 5 identified an interesting aspect of knowledge sharing. Almost half of the Local Agents interviewed admitted to having a specific knowledge sharing strategy. Mostly, this strategy entailed restricting the amount of knowledge shared with MedTech Reps. Some Local Agents feel that their market knowledge is proprietary and should be protected, others feel that sharing too much knowledge creates the risk that MedTech firms will utilize this knowledge to enter their market directly and compete against them. Regardless of the reasoning behind this mandate of restricting knowledge sharing, it impacts the level of clarity with which the MedTech firm understands these markets. The perspective of MedTech Reps and firms concerning this, is that they are aware of this strategy from Local Agents. In fact, all MedTech Reps interviewed indicated that they will utilize other sources of knowledge for the markets they intend to enter, as they do not trust Local Agents to share knowledge fully. These other sources include market reports, in-person visits and market information from embassy trade envoys. Some MedTech firms compare knowledge sourced from different potential partners before entering markets, in order to determine which Local Agent shares the most knowledge. Therefore, it is clear that some Local Agents restrict knowledge when in the sharing process. It is also clear that MedTech Reps are aware of this practice and that they employ contingencies to augment the knowledge they receive from Local Agents.

There is very little evidence of this dynamic in the literature. Teece alluded to the lack of available knowledge due to underdeveloped pathways accessing knowledge (Teece, 2014), but this did not refer to Local Agents withholding knowledge specifically. A recent call to study the Internationalization failures of firms mentions this, where a request is made to explore "...underutilized sources of knowledge and learning" (Amankwah-Amoah & Wang, 2019b, p. 368), which could explain the lack of literature on the subject. Nikolchenko found that the highest indicator of success of Internationalization supply chains in Emerging Markets is collaborative knowledge sharing, which could indicate that the

opposite is also true, if there is no collaboration in sharing knowledge it would be an indicator of failure (Nicolchenko et al., 2018). There is also evidence of potential deficiency of knowledge sharing by Jie, where findings indicate that Multinational firms should explore other sources of knowledge where networks fail to provide it (Jie et al., 2021). The literature, however, is lacking with regards to Local Agents withholding knowledge on purpose as a strategic mandate.

In summary, it is clear that there is a lack of trust from the Local Agent to the MedTech firm and that this impacts the amount of knowledge shared by the Local Agent. However, because the MedTech Rep is aware of this strategy, it causes the MedTech Rep and firm to pursue other sources of knowledge to augment their understanding of the market. Therefore, the proactive sourcing of additional knowledge resources positions the MedTech firm to Sense the market correctly. Also, if all these sources of knowledge (including the restricted knowledge shared by Local Agents) are utilized correctly, it should allow the MedTech firm to have enough information to shape the correct Internationalization strategy, thus leading to effective Seizing of host market opportunities.

6.2.3 QUALITY OF LOCAL AGENT KNOWLEDGE

A potential barrier to the Multinational firm developing a Dynamic Capability in knowledge utilization, is the perspective of the MedTech Rep regarding the quality of the knowledge they receive from Local Agents. The previous section showed that there is already an initial disconnect, where Local Agents withhold knowledge from MedTech Reps. In the current study, half of the Local Agents interviewed admitted to this. Therefore, the process starts off unsteady. Now it is necessary to discuss the quality of the knowledge that is eventually shared by Local Agents. The data collected and presented in Chapter 5, shows that the overwhelming number of MedTech Reps consider the knowledge shared by Local Agents as low in quality. Most of them mention the fact that they have to constantly return to the Local Agent for clarity or that they have to delve deeper into other sources for more data on the market. The majority of MedTech Reps have the opinion that Local Agents downplay the size of the market to decrease revenue expectation, while simultaneously exaggerating their cost to leverage a lower selling price. This perception of low-quality knowledge, combined with the extra effort required to gain greater transparency on the market, will naturally cause an increased perception of risk from the part of the MedTech firm and result in a lack of trust (the role and impact of Trust is discussed in Section 6.4.4). The perceived lack of knowledge quality will certainly slow down the

Internationalization process, as Multinational firms revert to a conservative phased approach.

The literature regarding knowledge quality from Local Agents show a similar scarcity as the previous section. A case study of a MedTech firms' failure to Internationalize into an Emerging Market mentioned "...their existing local partners did not have the necessary knowledge and capabilities to reach the targeted low-income market." (London & Hart, 2004). Knight mentions that "high-quality market data" (Knight, 1997b, p. 3) is essential for successful Internationalization by Born-Global firms. This is confirmed by Chetty, who states that due to the high speed of Internationalization of Born-Global firms, the knowledge they source from Local Agents needs to be more extensive than the knowledge required in the phased approach (Chetty & Campbell-Hunt, 2004). There is also evidence showing that if a greater variety of knowledge is available for the firm to consider, the firm is more effective in choosing an Internationalization strategy (Cuervo-Cazurra, 2011). Recently, it was determined that the quality of strategic decisions improve with enhanced knowledge received from local networks (Falahat et al., 2018b). There was a recent call to study how stronger inter-firm relationships can influence Internationalization strategy decisions (Paul & Rosado-Serrano, 2019), perhaps alluding to the need to expand theory on this subject. Most recently, there was evidence concerning the MedTech sector in Emerging Markets specifically, stating that "...the high level of complexity in health-care markets places additional pressure on internationalizing firms as they need to acquire business market knowledge from a diverse and dispersed set of actors and thus must develop relationships with these actors." (Lagerström & Lindholm, 2021, p. 2033). There is therefore adequate evidence for the need of high-quality knowledge from a variety of sources, but very little evidence on the quality of actual knowledge shared, nor how it impacts Internationalization. No supporting literature could be found on knowledge quality shared by Local Agents in the MedTech industry in MEA.

The previous section feeds into the current section due to the fact that both result in MedTech Reps pursuing other sources of information. Through the process of deduction, we can determine whether low quality knowledge impacts the Multinational MedTech firm negatively. From Section 6.2.1, it is clear that both parties know *what* knowledge is necessary for the MedTech firm to develop an effective entry strategy. From the previous section, it is clear that Local Agent

limit the amount of information shared. However, from the current section the perception of MedTech Reps is that the knowledge that *is* shared is of low quality. Therefore, the lack of quality knowledge (whether perceived or actual), could prevent the MedTech firm from effectively Sensing and Seizing. However, from the previous section, under these conditions the MedTech Rep and firm pursues other sources of knowledge to augment their understanding of the market. This is supported by Cuervo-Cazurra, who states that "... internationalization also requires the firm to manage a variety of sources of knowledge and deal with the challenge of operating at a distance." (Cuervo-Cazurra, 2011, p. 428). Therefore, lack of quality could be overcome in the same way as restricted knowledge sharing could, so it should not prevent the MedTech firm from effective Sensing of host market opportunities, resulting in Seizing them through the correct Internationalization strategy.

6.2.4 MEDTECH KNOWLEDGE UTILIZATION

The results presented in Chapter 5 regarding the utilization of Local Agent knowledge by MedTech firms is complex in nature and needs to be unpacked gradually. Firstly, the Local Agents interviewed believes that MedTech firms do not fully comprehend the complexities of Emerging Markets, indicated by the high degree of disconnect in grounded codes between the MedTech firm and the Emerging Market. Secondly, both Local Agents and MedTech Reps agree on the preferred utilization of knowledge, which is that it should inform and drive entry strategies. Thirdly, both Local Agents and MedTech Reps agree that MedTech firms do not effectively utilize knowledge and this results in more failed strategies than successful ones. For the sake of this argument, we should exclude external sources of failure, as these volatile markets cause ventures to fail even if knowledge is utilized effectively (George et al., 2016). We should also exclude planned de-internationalization (Martins et al., 2022), as we are considering the initial market entry, not the resilience after failure.

6.2.4.1 *MedTech Firm To Emerging Market Disconnect*

The previous two sections lead straight into this argument. If the Local Agents restrict the amount of knowledge they share and the quality of shared knowledge is low, then the MedTech firm will have difficulty comprehending the challenges of the market. This is especially true if the MedTech firm fails to gain additional knowledge from other sources to augment their information. It would appear that this disconnect is either the making of the Local Agent themselves or that the MedTech firm is not utilizing the knowledge correctly.

It has been identified as an inherent problem for Multinational firms who enter Emerging Markets, where existing biases in managers from developed markets blind them to realities in Emerging Markets (London & Hart, 2004b). This concept is also one identified by the wider body of literature for further study, Martins worded a potential RQ for future research on this matter as follows: “Future research should also focus on identifying the main challenges companies face when entering constantly evolving international markets.” (Martins et al., 2022, p. 14). Regardless of the available literature on the subject, both Local Agents and MedTech Reps in the current study believe that MedTech firms fail to understand the complexities of the markets in MEA.

6.2.4.2 Preferred Knowledge Utilization

Local Agents and MedTech Reps agree on the preferred utilization of knowledge: It should be used to inform and develop the correct market entry strategies from MedTech firms. These strategies would include the investment needed, the correct portfolio of products, a competitive pricing model, etc. Mention is made by MedTech Reps that they cannot build these strategies without the knowledge shared by the Local Agent. Therefore, there is parity between the two parties on how knowledge should be utilized. London identified this co-invention of custom strategies as a key to successful Internationalization (London & Hart, 2004b).

6.2.4.3 Actual Knowledge Utilization

According to the evidence shared in Chapter 5, both Local Agents and MedTech Reps believe that market knowledge is not utilized effectively by MedTech firms. Both parties also indicate that this is the cause of strategy failure and this is supported by the evidence of the current study, where the majority of strategies employed by MedTech firms has failed. In Section 6.2.2, the other sources of knowledge utilized by MedTech firms are mentioned as a counter to the restrictive knowledge sharing strategies of Local Agents. Therefore, the question has to be asked: If a Multinational MedTech firm can acquire knowledge from so many sources, why is it still failing to effectively utilize this knowledge to develop successful Internationalization strategies? The cause of this must lie somewhere between the quality of the knowledge received (whether from Local Agents or from additional sources) and the internal strategy development process of MedTech firms. The reasons for failed Internationalization strategies have been studied in limited case studies, but according to a recent detailed literature review on the

subject, there is a deficit in the literature clarifying the barriers/stimuli associated with failures (Martins et al., 2022).

The quality of knowledge shared as well as the restriction of knowledge shared by Local Agents, certainly play a role in causing a manner of disconnect in the MedTech firms' understanding of the Emerging Market. Even if additional sources of knowledge are pursued this might still not be enough to overcome the Liability of Foreignness of the MedTech firms in these markets. Especially since Multinational MedTech firms have increased psychic distance to the markets of MEA.

Conversely, should the knowledge be sufficient and strategies still fail, the inability to internalize and utilize this knowledge effectively would lie with the MedTech firm. In support of this, MedTech Reps comment on their inability to leverage their internal organizations to support the strategies they think would be successful in these markets. The current study mentions failure of MedTech firms to provide competitive pricing in their strategy, this is in line with the denial trap mentioned by Kachaner, where Multinational firms consider low-cost competitors inferior due to the perception of their lower quality (Kachaner et al., 2011), resulting in a refusal to negotiate on price. This is well documented in the pharmaceutical industry when competing against generic drugs, but no examples are found in the literature on MedTech. The evidence is there for knowledge utilization leading to innovation in the example of the General Electric (GE) case. The knowledge GE gained in the local market in China allowed them to develop a product that suited the market effectively (Govindarajan & Ramamurti, 2011). GE is often raised as an example in the literature of successful knowledge utilization (Immelt et al., 2009), but it stands alone as a case study. The literature also supports the probability of MedTech firms falling into the complacency trap, causing organizational inertia to reduce agility in the development of Internationalization strategies (Govindarajan & Ramamurti, 2011). However, there still is a paucity of research on the subject of firm Internationalization failure, particularly in the MedTech field and specifically concerning the MEA markets. Lee recently made an interesting observation on the lack of research on the subject, stating that firms who fail refuse to be studied and therefore block access to the information on internal processes that caused these failures (Lee et al., 2020a).

Based on the documented opinions of MedTech Reps, the conclusion can be made that knowledge enters the MedTech firm correctly, but that it is then incorrectly applied to the Internationalization strategy. This is referred to as the voluntaristic school of business failure, where "...failure is attributed to firm-specific factors such as mismanagement, corrupt management practices, poor leadership and decision-making processes." (Amankwah-Amoah & Wang, 2019b, p. 368), the next section deals with the potential occurrence of this in MedTech firms that could explain this phenomenon.

6.2.4.4 *MedTech firm Internal Challenges*

The internal disconnect mentioned in the above section needs to be examined further. There is evidence described in Chapter 5 as a New Insight (Section 5.11.1) that MedTech firms attempt to enforce standardized strategies on their Reps who manage these markets directly. There seems to be a level of management within MedTech firms, who are in direct contact with Local Agents, who aligns themselves more to the opinion of Local Agents than to the MedTech firm. This is supported by their frustration with failed Internationalization strategies. Whether these MedTech Reps was classified as Senior Management or Middle Management (according to Section 4.8), they always referred to superiors in their organization impacting their strategy formulation for Internationalization. For the sake of this argument, we shall call these managers "Intermediaries", whether they are Senior Manager or Middle Managers. From the evidence in Chapter 5 (Section 5.11.1), Intermediaries experience challenges in developing Internationalization strategies within their firms. Even those with localized decision-making authority suffer from internal disconnects in their firms where strategy development is concerned. This goes against some of the Internationalization literature, which shows that local level managers are more effective at making local decisions due to their deeper insights into the market (Park & Chung, 2019). This was also seen in the GE case study, where local management "...does not feel empowered to develop strategy." (Govindarajan & Ramamurti, 2011), and it was only overcome when GE invested in establishing separate growth teams to drive innovation. Most of the Intermediaries in the current study comment on the fact that their organizations do not understand Emerging Markets, nor do they allocate resources to drive their Internationalization strategies into these markets.

Therefore, there is an inflection point (see Section 2.2) according to the research anchor. In this study, there are thus two possible inflection points. The first is the barrier between the MedTech firm and the Local Agent. It concerns how this barrier can be overcome by using Local Agent knowledge, thus allowing the MedTech firm to develop a Dynamic Capability. However, based on the above argument regarding the internal disconnect in MedTech firms, it would seem that there is a second inflection point, between the Senior Leadership of the MedTech firm and the Intermediary Leadership. An attempt to explain this dynamic, showing the two inflection points, is represented in Figure 25:

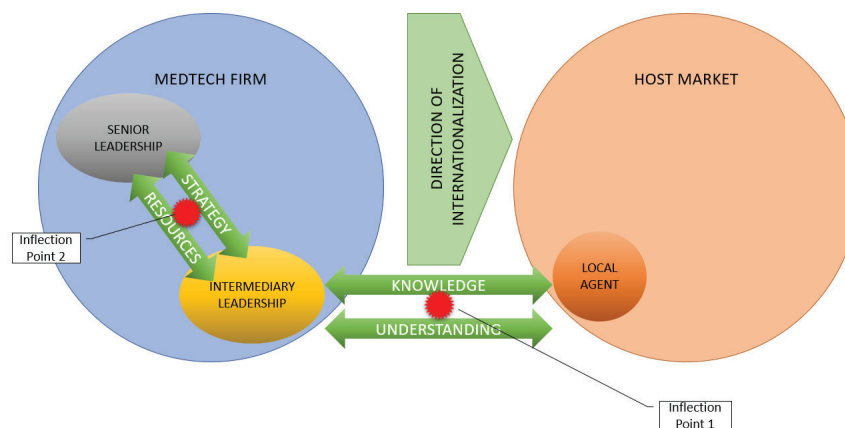


Figure 25: Representation of MedTech firm internal disconnect

The current study was aimed at Inflection Point 1. The study of the internal processes of Multinational MedTech firms to develop Internationalization strategies, which would be Inflection Point 2, is out of scope of this study. However, it seems to play an important role in the strategic failures seen in the MedTech industry in these Emerging Markets. The impact of learning from failed ventures, a well-documented process in the literature, is also out of scope of this study. Incidentally, a recent call for future studies concerns the lack of research on the role of decision-makers in firm survival from failed Internationalization strategies (Martins et al., 2022), which could help enlighten this internal MedTech firm disconnect.

6.2.4.5 Conclusion on Knowledge Utilization

In summary, both Local Agents and MedTech Reps agree on how knowledge should be utilized. Knowledge should be utilized to inform and develop Internationalization strategies. Both Local Agents and MedTech Reps also agree that Multinational MedTech firms do not utilize knowledge effectively

and that this leads to strategic failures in most cases of Internationalization. Although the restricting of knowledge (Section 6.2.2) and the low quality of knowledge (Section 6.2.3) certainly plays a role in this failure, the evidence suggests that the internal challenges within MedTech firms also play a large role (Section 6.2.4.4). Therefore, even though there are ways to overcome a shortage of knowledge, the MedTech firm still fails to Sense the dynamics of the markets correctly. Furthermore, this Sensing failure is compounded by MedTech internal bureaucratic processes in the development of Internationalization strategies, leading to the failure to Seize the opportunities in the markets.

6.2.5 SUMMARY AND CONCLUSION ON RQ1a

In response to RQ1a, Sensing and Seizing capabilities of the MedTech firm should be approached in a chronological order. Firstly, there is clear agreement between the respondents on what knowledge is needed by Multinational MedTech firms. Therefore, the MedTech firm is correctly positioned to Sense and Seize effectively.

Secondly, there is a concern regarding the knowledge that enters the MedTech firm. On the one side, Local Agents often restrict the knowledge they share. Conversely, MedTech Reps consider the knowledge they receive as low in quality in any case. This could lead to a failure to Sense and Seize. However, it is also clear that there are various other sources of information pursued by MedTech firms. In fact, through pursuing additional sources of knowledge, the MedTech Rep and firm is effectively showing agility and therefore a Dynamic Capability. Also, these firms have entered Emerging Markets in other regions (China, India and South America), which results in institutionalized knowledge within the firm. The effectiveness of institutionalized learning is well supported in the literature (Lee et al., 2020a; Park & Chung, 2019). Park refers to this as Competence-exploiting learning (Park & Chung, 2019). This is confirmed in the current study where MedTech Reps comment on best practices shared with them from other regions, showing that this vicarious learning is available to them. Therefore, it can be theorized that the restriction of knowledge and low quality of knowledge could be overcome by the MedTech firm through using other sources of information and leveraging internal learning vicariously. The negative impact can thus be nullified and the MedTech firm should be positioned to Sense and Seize effectively.

Thirdly, all respondents agree on how this knowledge should be utilized, but they mostly state that the MedTech firm fails to utilize knowledge effectively. Even MedTech Reps point out that their firms fail. Based on the arguments in Sections 6.2.4.3 and 6.2.4.4, as well as evidence from the data, we can thus conclude that MedTech firms fail to effectively utilize knowledge to Sense opportunities in these markets and they also fail to Seize these opportunities through the Internationalization strategies they develop. Table 57 shows this performance against the building blocks of Dynamic Capabilities:

Table 57: RQ1a performance against Dynamic Capability building blocks.

RQ1a	Sensing	Seizing	Transforming
KNOWLEDGE NEEDED BY MEDTECH FIRMS	✓	✓	n/a
LOCAL AGENT KNOWLEDGE SHARING STRATEGIES	-	-	n/a
QUALITY OF LOCAL AGENT KNOWLEDGE	-	-	n/a
MEDTECH KNOWLEDGE UTILIZATION	x	x	n/a

According to the above table, MedTech firms correctly Sense and Seize when determining what knowledge they need to develop Internationalization strategies. The challenges of restricted knowledge and low-quality knowledge can be nullified by the pursuit of additional sources of information as well as internal vicarious learning. However, ultimately MedTech firms fail to utilize knowledge effectively to succeed in Sensing and Seizing in the market.

6.3 DISCUSSION OF RESULTS FOR SUB-RESEARCH QUESTION 1b (RQ1b)

What is the role of Local Agents in driving Multinational MedTech firm internationalization strategies?

Research Question 1b (RQ1b) was aimed at gaining an understanding of the role Local Agents should play in the Internationalization strategies of Multinational MedTech firms.

It was approached from the perspective of Local Agents as well as MedTech Reps. The key findings showed that there were two main Local Agent roles, namely as strategic and/or commercial partners. These require further discussion in relation to the literature. These roles were also strongly influenced by the quality of the Local Agent, from the perspective of the MedTech Rep, which also necessitates analysis.

Referring back to the call for research validating RQ1b (Section 3.2.2), the evidence from the current study sheds further light on the role of Local Agents in the Internationalization process of Multinational MedTech firms, by identifying the main roles of Local Agents in the MedTech industry in MEA and also sharing a perspective on their quality.

Academics have specifically identified this as an avenue for future research, "Future studies may investigate whether the knowledge was gained through acquisition or internal development" (Park & Chung, 2019, p. 694). Thus, validating RQ1b.

6.3.1 LOCAL AGENT STRATEGIC ROLE

The evidence presented in Chapter 5 shows that there are specific requirements for a Local Agent to fulfil in order to satisfy the strategic demand essential from a Multinational MedTech firm perspective. On this strategic role and capacity in the market, the evidence shows that there is parity and understanding between the Local Agent and the MedTech Reps. There is agreement that the Local Agent role includes aligning with the MedTech firm values, so as to present a united front to customers in the market. Other requirements both parties agree on is the need for compliant business practices, adherence to global quality control and policies, ability to provide qualified technical support, respect of local regulatory requirements and other capabilities. In summary, the Local Agents believe they are a unique partner that acts as a proxy and the MedTech Reps believe the role of the Local Agent is critical in their strategies for this region.

This strategic role is echoed very early in the literature as it features in the original Uppsala model (Johanson & Vahlne, 1977), where it was found that a strategic Local Agent usually precedes a sales subsidiary in the Phased Internationalization approach. Incidentally, this first reference in the research was based on the healthcare sector, in pharmaceuticals. More recently, it was shown that Local Agents need to act as middlemen, to handle on-site relationships with customers in Africa specifically (Ferrucci et al., 2018). These critical organizational capabilities inherent in Local Agents are key contributors to the success of the Internationalization strategies of Born Global firms (Falahat et al.,

2018b) and firms following the Uppsala model (Paul & Rosado-Serrano, 2019). There is reference in the literature to the role of the Local Agent in supply chains (Tang et al., 2020), knowledge of local market requirements like legal (Paul & Rosado-Serrano, 2019) and regulatory frameworks (Lagerström & Lindholm, 2021), as well as the need to confirm Local Agent skills for technical support (Heiss, 2017).

In summary, the literature is therefore supportive of this understanding of the strategic role of the Local Agent. The findings of the current study also reflect and confirm this understanding from both the Local Agent and the MedTech Rep perspective. There is no disconnect between the two entities on the strategic role of the Local Agent. Therefore, due to effective Sensing, the MedTech firm should successfully be able to Seize the opportunities in the market through this shared understanding of responsibility.

6.3.2 LOCAL AGENT COMMERCIAL ROLE

The evidence presented in Chapter 5 shows that there are specific requirements for a Local Agent to fulfil in order to satisfy the commercial demand essential from a Multinational MedTech firm perspective. The evidence shows that these commercial requirements centre around two aspects: the necessity for the Local Agent to invest in the venture and the requirement to share risk between the Local Agent and the Multinational MedTech firm. In the first case, the data from the current study confirms that both Local Agents and MedTech Reps agree that there should be an investment into the business venture from the Local Agent. It also seemed that the Local Agent perceives the MedTech firm as unaware of the complexities of such investments, for example the lack of access to forex. In the second case, the data seems to indicate that both parties agree on the need to share risk between them. However, the Local Agent perceives the MedTech firms' contribution to risk sharing as unequal to their own, showing frustration towards MedTech firms in their opinions.

This requirement for a Local Agent to fulfil a commercial role is supported by literature. Soon after the development of the Uppsala model, Johanson identified the size of the investment from both the Local Agent and the Multinational firm as an indication of their commitment to the market (Johanson & Vahlne, 1990b), although this early iteration was focused on acquisitions and joint ventures in the host market. More recently, research has shown that sharing of costs, risks and

benefits should be distributed fairly among the members of a distribution network in an Emerging Market (Nikolchenko et al., 2018). The same researcher also found unequal sharing of risk between manufacturers and distributors in the distribution network of an Emerging Market, where "...the seller (manufacturers) has minimum obligations, and the buyer (distributor) has to bear all costs and risks involved..." (Nikolchenko et al., 2018, p. 357). There is also evidence from other industries relating to the challenges Local Agents face when attempting to invest, such as lack of access to capital and high interest rates (Omotilewa & Baributsa, 2022). Thus, there is some precedence for this perception of inequality in the commercial model from the viewpoint of Local Agents.

If we consider this unequal sharing of investment and risk between the Local Agent and the Multinational MedTech firm as fact, it bears analysis to understand whether there is an explanation for this in Internationalization literature. There is evidence that Internationalizing firms fail in this if they are unable or negligent to contract risk away as an organizational agility (Teece et al., 2016). Also, the perceived risk in these volatile markets could increase the apprehension of MedTech firms to invest in them (Augier & Teece, 2007). Literature has also shown the need for increased investment for African markets specifically (Ferrucci et al., 2018). However, there is evidence that the Internationalization strategy of a Multinational firm should include drivers for foreign direct investment into subsidiaries and Local Agents (Teece, 2014a), which is considered a Dynamic Capability. These investments are then usually driven by the firm having complete information about competitors and consumer needs (Teece, 2014a). It could therefore be a natural consequence of the disconnect between Local Agents and MedTech Reps regarding the Local Agent knowledge sharing strategies (Section 6.2.2). In other words, since MedTech Reps perceive their level of investment as adequate and their sharing of risk as equal to that of the Local Agent, it might be a consequence of the Local Agent withholding knowledge from the market. This will increase the perception of risk from the perspective of the MedTech firm and lead to lower levels of investment and risk sharing.

On the other hand, this does not consider the fact that the Local Agents who claim to share all knowledge have the same complaints about the lack of investment and the unequal sharing of risk. The answer here perhaps lies in the Internationalization approach Multinational MedTech firms practice. In Chapter 2 (Section 2.9), the literature showed that most Multinational MedTech firms Internationalize using the modern Uppsala model, through increased

commitments over time. Therefore, the limited investment and risk sharing could be the result of a phased approach to the market, where these investments grow from later in the process (Lee et al., 2020a). Also, as mentioned in Section 6.2.2, the lack of knowledge causes the firm to revert to the phased approach of entry and the risk associated with this lack of knowledge causes a decrease in investment (Millington & Bayliss, 1997b). This is confirmed by opinions from MedTech Reps in the current study vocalizing a step-by-step approach, which is almost identical to the notion of increased commitments over time. Therefore, the disconnect here, which is felt more from the Local Agent perspective, could be due to the difference in outlook on the maturity of the market between the two entities.

In summary, the literature is supportive of this understanding of the commercial role of the Local Agent. The findings of the current study also reflect and confirm this understanding from both the Local Agent and the MedTech Rep perspective. There is however a concern from Local Agents that their level of investment and risk sharing is higher than that of the MedTech firm. This could be due to the withholding of knowledge from the Local Agent or the phase of Internationalization in which the MedTech firm finds itself. Either way, it leads to a failure of Sensing from the MedTech Rep perspective, which in turn leads to ineffective Seizing on the part of the MedTech firm.

6.3.3 LOCAL AGENT QUALITY

The evidence presented in Chapter 5 shows that the perception of Local Agent quality, from the perspective of MedTech Reps, is overwhelmingly negative. MedTech Reps speculated that only 20% of the Local Agents they work with is effective in fulfilling their strategic and commercial roles for the Multinational MedTech firm. The data also showed that the larger portion of negative perceptions are applicable to agents in the SSA region.

There is limited literature on the effectiveness of Local Agents in the MedTech industry in MEA. Early in the literature on Internationalization, the importance of Local Agents is well described, as well as the decoupling between performance and satisfaction as perceived by manufacturers (Nevins & Money, 2008). This study stated that performance is often wholly separate from the perceived effectiveness of Local Agents from the Multinational firms' perspective, which complicates the search for the true source of dissatisfaction. Some other industries have identified the challenges associated with Local Agent

effectiveness, which is usually born from their inability to manage commercial activities like inventory control and pricing (Omotilewa & Baributsa, 2022). In Emerging Markets, early research claimed that "...customers in base-of-the-pyramid markets are poorly served by low-quality vendors..." (London & Hart, 2004b, p. 352). In the MedTech industry, evidence showed that finding the right partner is the primary barrier to Internationalization (Heiss, 2017). A relevant recent example from the pharmaceutical industry in Africa, cited the ineffectiveness of Local Agents from the perspective of the end-user, stating that the Local Agent is inaccessible and difficult to communicate with (Bogart et al., 2022).

Perhaps the measure MedTech Reps use is the pivotal point in this perception of effectiveness. The clarification on the measure was not delved into in detail during the current study, but RQ1c (Section 6.4.3) reveals a common source of disconnect between the two entities, which is the expected outcome from the MedTech firm and the level of trust between the two entities. If this expectation of outcome is perceived by the Local Agent to be misaligned to the capabilities of the market, the venture is doomed to fail and the result will be a negative perception of Local Agent quality on the side of the MedTech Rep. Whether this is a fair assessment of the quality of Local Agents are neither here nor there, as the knowledge feeding it is either incompletely shared by the Local Agent or misconstrued by the MedTech Rep. Either way, this results in a self-fulfilling prophecy that is stuck in a loop.

In summary, the literature is elusive on the effectiveness of Local Agents in the MedTech sector in MEA. Other industries and regions seem to support the lack of quality distributors in Emerging Markets. It is also possible that the measure used by MedTech Reps to establish Local Agent quality is potentially decoupled from performance, making it a matter of individual observation. Either way, whether the Local Agents are truly of low quality, or whether the MedTech Rep is applying a biased measure of quality, the result is a disconnect between the two entities. This leads to a failure of Sensing from the MedTech Rep perspective, which in turn leads to ineffective Seizing on the part of the MedTech firm.

6.3.4 SUMMARY AND CONCLUSION OF RQ1b

The current study shows that the evidence informing RQ1b is aligned to the Internationalization literature to some extent. Firstly, the strategic role of the Local Agent is well defined and understood by both the Local Agent and the MedTech

Rep, this is also well supported by literature. Secondly, the commercial role of the Local Agent is well defined and understood by both the Local Agent and the MedTech Rep, this is also well supported by literature. Thirdly, the general perception of the Local Agents is that their commitment (investment and risk-sharing) to the commercial role exceeds that of the MedTech firm. The reason for this, stemming from Internationalization literature, could either be that the MedTech firms consider the markets too volatile or that the MedTech firm is not far enough advanced along the phased approach of Internationalization to make this commitment. Another possibility is that the Local Agent is not sharing all knowledge, as was seen in Section 6.2.2. Lastly, MedTech Reps consider their Local Agents to be of very low quality in general. This could be due to a warped measurement of effectiveness, or a misalignment on the sharing of market knowledge, as per other Internationalization studies.

Comparing these arguments to the building blocks of Dynamic Capabilities, results in a mixed outcome. Both entities are aligned on the strategic role of Local Agents, causing the MedTech firm to successfully Sense and Seize. However, there is a disconnect on the application of the commercial role and potentially also the knowledge informing it, causing the MedTech firm to fail to Sense and Seize. The perception of Local Agent quality, whether grounded or biased, also results in a disconnect between the two entities, causing the MedTech firm to fail to Sense and Seize. Therefore, the conclusion on RQ1b is that the role of Local Agents in driving Multinational MedTech firm Internationalization strategies are well defined and agreed on, but that the execution of the commercial aspect is not successful. Thus, the MedTech firm fails to develop the Sensing and Seizing building blocks of Dynamic Capabilities. Table 58 shows these alignments:

Table 58: RQ1b performance against Dynamic Capability building blocks

RQ1b	Sensing	Seizing	Transforming
LOCAL AGENT STRATEGIC ROLE	✓	✓	n/a
LOCAL AGENT COMMERCIAL ROLE	x	x	n/a
LOCAL AGENT QUALITY	x	x	n/a

According to the above table, the initial strategic positioning of the two partners are aligned and sets the scene for successful Sensing and Seizing. However subsequent disconnects with regards to the commercial role of Local Agents and their perceived quality prevents the MedTech firm from Sensing and Seizing effectively.

6.4 DISCUSSION OF RESULTS FOR SUB-RESEARCH QUESTION 1c (RQ1c)

What are the experiences of Local Agents in this process?

Research Question 1c (RQ1c) was aimed at gaining an understanding on the knowledge utilization and Internationalization process of Multinational MedTech firms from the perspective of the Local Agent. This gives us a glimpse into the network relationship experiences from the Local Agent perspective, delivering insights that have not been documented before. As mentioned in Chapters 4 and 5, the focus of RQ1c was solely directed at the Local Agent, no opinions from MedTech Reps were added (except a couple of cross-references). The evidence shows that Local Agents considers four aspects as influential in their experience of this relationship.

Firstly, there seems to be a difference in cultural understanding between MedTech firms depending on where they originate from. Secondly, the manner in which Local Agents are managed on a daily basis impact the relationship. Thirdly, the Local Agent expects that the knowledge they share should be utilized by the MedTech firm effectively, so that their expected outcome is in line with what the market can deliver. Lastly, the evidence shows a large bearing of the level of trust between the two entities on the relationship.

There are calls for research to explore this relationship between the Multinational firm and the Local Agent more effectively (Lagerström & Lindholm, 2021). Thus, validating RQ1c.

6.4.1 MEDTECH FIRM ORIGIN COUNTRY

The impact of MedTech firm origin country was not a planned direction of investigation, but developed spontaneously from the interviews through unsolicited comments from the respondents. It seems though, that this is an important aspect to consider, as it impacts the relationship between MedTech firms and Local Agents. Specifically, Local Agents commented on the fact that depending on the origin country, some MedTech firms will be more open to

received knowledge and will utilize it more effectively. It was not defined whether the country of origin is determined by the location of the legal entity of the firm or the regional headquarters responsible for the MEA region, nor whether it is a perception regarding the original culture of the firm. Local Agents have overwhelmingly negative experiences with MedTech firms from the United States, stating that they are inflexible and that they enforce their strategy without considering local knowledge. There is a much more positive relationship between Local Agents and MedTech firms from Europe, specifically the German, French and UK firms. MedTech firms from Eastern origin (China, India, Japan, etc.) seem to generate ambivalent responses, possibly from the fact that there are few of them directly active in the market, as they apparently follow an arms-length opportunistic approach to the market.

The notion of psychic distance may be applicable to these findings. This was initially explained through the developing of target market knowledge and increasing foreign commitments (Johanson & Vahlne, 1977) and eventually into a theory of phased approach (Buckley & Casson, 1998; Johanson & Vahlne, 1990), which is an incremental method of moving from countries with the least psychic distance to the most. The notion of psychic distance “attempts to conceptualise and, to some degree, measure the cultural distance between countries and markets” (Buckley & Casson, 1998, p. 541). It therefore makes sense that MedTech firms originating from countries further away geographically and psychically (US and Far East) from MEA should perceive these markets differently than countries with closer geographical and psychic ties. However, the original Born-Global model stated that “...foreign origin contributes relatively little to the international orientation of these firms.” (Knight, 1997b, p. 56). Besides psychic distance, there is evidence that parent entities strongly influence the subsidiaries’ ability to interpret and incorporate new knowledge (Park & Chung, 2019). This importance of culture is echoed by Nevins, “Culture has been cited as a key determinant of international relationship outcomes” (Nevins & Money, 2008, p. 48). Incidentally, there are strong indications that the country of origin affects the market entry mode based on acquisition (Joint Venture or Multinational enterprise) (Meyer et al., 2009b), but that discussion is not in the scope of this study.

The role of historical colonization probably plays a role here too, as most of the countries in MEA was colonized by either the UK, France or another European

nation (Germany, Portugal, Belgium, etc.) (Ferrucci et al., 2018). This can be seen in many countries in Africa where the lingua franca is still English or French. Similarly, most Multinational MedTech firms operate across the globe and certainly in other Emerging Markets. For example, the US based firms would operate and have closer psychic ties to South America and the Eastern based firms would operate and have closer psychic ties to a variety of Emerging Markets throughout their region. However, it is not clear whether the MEA business contacts for these firms would be natives from the psychically distant countries or indeed whether they would adopt that culture if they were from countries closer to MEA. Therefore, there needs to be a distinction between the MedTech Rep in contact with the Local Agent and the influence of the broader firm origin on that MedTech Rep. This was not part of the scope of the current study, but bears analysis for future research. From the evidence of the current study, Local Agents commented that if MedTech firms employ managers locally, which understands the culture, relationships are much better.

In summary, the origin country of the MedTech firm may prejudice their perception of the Emerging Markets in MEA and thus impact their internationalization strategies and utilization of knowledge. However, based on the Local Agent's understanding of the origin country of the firm versus the origin and cultural alignment of the first line MedTech firm manager they deal with, it is difficult to draw a conclusion on the tangible impact of this variable. Therefore, it is not possible to determine the impact of MedTech firm country of origin on the ability of the MedTech firm to Sense and Seize in the market.

6.4.2 RELATIONSHIP MANAGEMENT

The evidence presented in Chapter 5 regarding the Local Agent perception on how they are managed by MedTech Reps is ambivalent. Firstly, the data shows that the number of negative comments on this aspect outweighs the positive ones, showing that Local Agents consider this experience mostly negatively. However, when this was cross-checked by individual agent, the patterns showed that a few Local Agents largely made negative comments and that this skewed the perception slightly. It is difficult to draw a conclusion from this evidence, but in all probably the relationship theory and development should follow the basic management academic literature.

The function of a Local Agent is it to act as a proxy for the MedTech firm, therefore they are expected to contribute value to the relationship (Nevins & Money, 2008). In the first revision of the Uppsala model, mention was made that the establishing of strong relationships with local networks are critical for successful Internationalization (Johanson & Vahlne, 1990b). From the Born-Global perspective, the Internationalization trigger is primarily associated with the strength of these relationships (Knight, 1997b; Knight & Cavusgil, 2004). Thus, there is an expectation that Local Agents should bring something unique to the table. Conversely, Multinational firms should also use their inherent capabilities developed across emerging economies to educate and develop Local Agents further (Meyer et al., 2009b). In Emerging Markets, Nikolchenko has shown that the size of the firm also impacts this relationship. Smaller firms seem to get more out of the relationship with Local Agents than larger firms, as they are more motivated to interact, stating "...there is an inverse relationship between firm size and collaborative advantage." (Nikolchenko et al., 2018, p. 359). This is echoed by Lagerström, who found that maintaining these relationships is "...costly, time-consuming and uncertain..." (Lagerström & Lindholm, 2021, p. 2027), which is potentially why Multinational firms do not put enough effort into it. It would therefore seem that the development of this relationship is a bilateral responsibility.

In summary, the assumption can be made that this variable is inconclusive in impacting the sharing and utilization of knowledge between Local Agents and MedTech firms. However, the veracity of negative comments across the board, seems to point to the fact that the general perception of the way MedTech Reps manage Local Agents is more negative than positive. This can definitely impact the relationship between the two entities and thus negatively influence the liberty with which knowledge is shared. Yet, due to the ambivalence and inconsistency of the evidence, it is not possible to determine the impact of MedTech firm management of Local Agents on the ability of the MedTech firm to Sense and Seize in the market. This variable also seems to play a much smaller role than, for example, the restricting of knowledge by Local Agents.

6.4.3 EXPECTED OUTCOMES

The outcomes which MedTech firms expect a Local Agent to deliver could be an important source of disconnect between the two entities, especially where this concerns the expected revenue the market should deliver. This avenue of

investigation was also unsolicited, but emerged from Local Agent responses to queries relating to in-market disconnects between them and the MedTech Rep. The evidence shows that, without exception, every Local Agent considers the revenue expectation for their market to be out of touch with what the market can actually provide, or at least what the market can provide if all investments and education requirements are agreed upon and delivered by the MedTech firm. This is an important disconnect which can influence the Local Agent's perception of the knowledge-sharing process. Both parties agreed (from Section 6.2.1) that the market knowledge to be shared should include the monetary size of the market. If Local Agents perceive their revenue expectations to be out of line with what the market can provide, it might result in a negative experience of knowledge sharing. In other words, it proves to Local Agents that MedTech firms do not utilize their knowledge effectively.

Literature has shown that Local Agent effectiveness is mostly driven by their ability to hit revenue targets (Nevins & Money, 2008), perhaps unfairly if the above argument is considered. For the Born-Global firm, which expects the bulk of its revenue to be derived from Internationalization (Knight, 1997b), there is a good chance that their market expectation will also be aggressive. This view was eventually extended to all Multinational Enterprises (Hoskisson et al., 2000b), showing that there might be a higher expectation from these markets than what is sensible. Some firms have publicly committed to generate sizeable portions of their revenue from Emerging Markets, adding additional pressure (London & Hart, 2004b). The impact of lack of regulation for some MedTech products in Emerging Markets have led to members of the value chain adding significant margins at each step, resulting in a warped sense of possible revenue in these markets (Pandey & Thombal, 2018). Therefore, there are many signals influencing the MedTech firm's expectation of the revenue potential of the market. Based on the knowledge sharing risks identified in RQ1a, this is an understandable miss on the part of the MedTech firm. It would require well supported convincing from the Local Agent to prevent a disconnect.

In summary, it seems that if the market expectation is not aligned with the size of the market as shared by the Local Agent, the discernment of the knowledge sharing process from Local Agent perspective would be negative. However, it should be noted here that most MedTech Reps comment that they expect Local Agents to provide them with lower figures in terms of market revenue size, so as

to temper the MedTech firm expectation and thus to lower the pressure on the Local Agent (explained in Section 6.2.3). Therefore, there seems to be a clear disconnect here, that is probably driven by lack of trust (next section). Yet, while all Local Agents agree that the revenue expectation for their market is of touch with what the market can provide, a majority still considered the process as positive (from the previous two sections). So, there must still be instances where the relationship is strong enough for the knowledge to be shared honestly by the Local Agent and still interpreted incorrectly by the MedTech firm. Therefore, if that is the case, the misaligned expected outcomes for these markets show that the MedTech firm is not effectively Sensing the true size of the market through the knowledge they receive. Forthcoming from that, when the MedTech firm issues a revenue expectation that is out of line with what the market can provide, it will also fail to Seize the market opportunity.

6.4.4 TRUST

The level of trust between Local Agents and MedTech firms surfaced very early in the data collection process. It was evident that both parties consider a high level of trust as critical to build and maintain a successful relationship. The evidence was approached from the perspective of the Local Agent as well as the MedTech Rep, since both parties made unsolicited comments on the matter. From the data, it was apparent that the Local Agents are almost equally divided on the matter, four of them having a positive perception and five of them having a negative perception. Conversely, MedTech Reps was of the opinion that most relationships with Local Agents are not trustworthy (six versus three). It is probably not possible for a unilateral negative perception of trust not to have an impact on the relationship as a whole, therefore it is possible to conclude that in general there is very little trust in the relationships between Local Agents and MedTech Reps, whether it is unilateral or bilateral. We have already discussed the disconnects between the two parties with regards to knowledge sharing strategies (Section 6.2.2), so it is fair to draw this conclusion.

According to Nevins, "Trust is one of the most widely recognized mechanisms for governing exchange relationships" (Nevins & Money, 2008, p. 48). In the first revision of the Uppsala model, mention was made that mutual trust builds strong relationships with local networks (Johanson & Vahlne, 1990b). In the Born-Global perspective, there is a greater need to entrust the Local Agent with most of the market tasks, as the firm expands more rapidly. Thus, confirming trust as a

significant antecedent to Internationalization (Knight, 1997b). London identified the need for the Multinational firm to socially embed itself into the culture by developing this trust (London & Hart, 2004b). The academic literature is strong with evidence supporting the importance of trust, but as with earlier sections, there is a paucity of evidence gathered from the Local Agent perspective. This is certainly confirmed concerning the Local Agents in the MedTech industry.

In summary, although the evidence is ambivalent from the Local Agent side, the strong evidence from the MedTech Rep's side will skew the trustworthiness of their relationships. This will result in one of two outcomes: either the Local Agent will not trust the MedTech Rep enough to share sufficient knowledge, or the MedTech Rep will not trust the Local Agent enough to accept this knowledge. We have already seen evidence of this in Section 6.2.2 and 6.2.3, which supports the low levels of trust. Therefore, the impact of trust on the ability of the MedTech firm to Sense the market effectively is probably negative. Furthermore, if Sensing fails here, then Seizing will as well, as was confirmed in Section 6.2.4.5.

6.4.5 SUMMARY AND CONCLUSION OF RQ1c

The current study shows that the evidence informing RQ1c is aligned to the Internationalization literature to some extent, but that the context in which it is evaluated is very important. Since there is a lack of literature petitioning Local Agent knowledge, extrapolations must be made from generalized Internationalization literature and management theory.

Considering the evidence from the study, Local Agents were of the opinion that the origin country of the MedTech firm plays a role in their experience of the knowledge sharing process. Although the literature only partly supports this and only does so with a couple of assumptions. Therefore, this might be a unique finding either in this region or in this industry.

The second variable, relationship management, is also softly supported by Internationalization literature, but falls strongly within the theory of general inter-firm relationships, which are out of scope for this study but has a logical core application to the relationship between the two entities in the current study.

The third variable, expected outcomes, does seem to be well supported by Internationalization literature and could serve as evidence that Multinational firms consistently expect the impossible. However, this is tempered by the previous argument in RQ1a regarding the restricting and quality of knowledge.

Lastly, the variable of trust is also strongly supported in both Internationalization literature as well as the theory of general inter-firm relationships, even if literature is lacking for this industry and region. This seems to be the driving factor of this RQ. Nevins summarized it as follows “...lack of trust is at the heart of many channel conflicts that engender dissatisfaction with the buyer–seller relationship” (Nevins & Money, 2008, p. 48).

Therefore, in the current study, the lack of trust between Local Agents and MedTech Reps is probably the biggest disconnect as perceived by the Local Agent. Even if the experience of the Local Agents in this study is equally good and bad, the general trust of the relationship is affected by the large negative perception of trust from MedTech Reps.

Comparing these variables and arguments to the building blocks of Dynamic Capabilities, results in a clearer outcome than in the case of RQ1a. The MedTech Firm origin country impact is vague as it is understood by the Local Agent and could be easily overcome by the MedTech firm if the appetite is there. It also did not seem to have a big influence on Internationalization success in the current study. Relationship management is very general in nature and is not specifically responsible for inter-firm disconnects in the current study. For these two variables, the impact on Dynamic Capability building blocks are at worst neutral. However, the disconnect in the expected outcome as well as the lack of trust weighs heavily against MedTech firms in the current study as well as in the literature. Therefore, in summary, Local Agent perception of the process of sharing knowledge and building relationships with MedTech firms are mostly negative, leading to the failure of the MedTech firm to Sense and Seize opportunities in the market. Table 59 shows this alignment in Dynamic Capability building blocks:

Table 59: RQ1c performance against Dynamic Capability building blocks.

RQ1c	Sensing	Seizing	Transforming
MEDTECH FIRM ORIGIN COUNTRY	-	-	n/a
RELATIONSHIP MANAGEMENT	-	-	n/a
EXPECTED OUTCOMES	x	x	n/a

TRUST	x	x	n/a
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Referring back to the call for research validating RQ1c (Section 3.2.3), the evidence from the current study sheds further light the experience of Local Agents regarding the Internationalization process of Multinational MedTech firms, by adding to the gap in literature concerning their direct opinions.

6.5 DISCUSSION OF RESULTS FOR MAIN RESEARCH QUESTION 1 (RQ1)

How are Multinational MedTech firms developing Dynamic Capabilities to address their market through the knowledge they acquire from Local Agents?

Research Question 1 (RQ1) was aimed at gaining an understanding on whether Multinational MedTech firms are developing Dynamic Capabilities through the knowledge they acquire from Local Agents. The need for the development of Dynamic Capabilities to address market opportunities are well established in the literature (Khan et al., 2020). RQ1 was also aimed at discovering how this process works and what the key variables are which is affecting it. Lagerström identified this as a key future research direction, specifically in the healthcare sector, stating “how to recognize and exploit business opportunity in relation to the business network for these firms is a promising topic for future research” (Lagerström & Lindholm, 2021, p. 2033). Thus, validating RQ1.

The results and discussions informing the three Sub-Research Questions (RQ1a, RQ1b and RQ1c), brings us much closer to understanding the dynamics of this process in the Emerging Markets of MEA. The next step is to consolidate the results from the Sub-Research Questions to answer the Main Research Question (RQ1). This will be discussed by Theme.

6.5.1 SENSING

The results from the Sub-Research Questions shows a general failure on the part of Multinational MedTech firms to successfully develop the Sensing building block of Dynamic Capabilities. According to the literature, Sensing is the “...identification and assessment of opportunities at home and abroad.” (Teece, 2014a, p. 18). In the current study, there are many variables impacting this ability and some of them are out of the sphere of influence of the MedTech firm.

It seems that the relationship between the MedTech firm and the Local Agent in the initial stages of knowledge sharing, paves the way for a successful interaction. Both entities understand and agree on the kind of knowledge that should be shared between them and both entities understand and agree on the role of the Local Agent in this process. Therefore, the precedent for successful Sensing is established.

Thereafter, the relationship deteriorates into a variety of misconceptions, prejudice and mistrust. The reasons for this do not solely lie with the MedTech firm, the culpability is bilateral. The tendency of Local Agents to withhold knowledge from MedTech firms or to provide them with low quality knowledge intensifies the perceptions of MedTech Reps that Local Agents are unreliable or unskilled. This results in a disconnect between the two entities on the commercial role of the Local agent, worsened by the perception of lack of investment from both entities towards the other. This, in turn, causes strain on the relationship through increased micro-management and biased outcome expectations on the part of the MedTech firm. The end result throughout this process is a lack of trust between the two entities, which leads to a tense relationship. There are actions both entities can take to remedy the situation, which will be discussed in Section 6.6. Table 60 shows a summary of the Sub-Research Questions' impact on the Sensing building block:

Table 60: Sub-Research Question impact on Sensing

Variable	RQ1a	Sensing
1	KNOWLEDGE NEEDED BY MEDTECH FIRMS	✓
2	LOCAL AGENT KNOWLEDGE SHARING STRATEGIES	-
3	QUALITY OF LOCAL AGENT KNOWLEDGE	-
4	MEDTECH KNOWLEDGE UTILIZATION	×
Variable	RQ1b	Sensing
5	LOCAL AGENT STRATEGIC ROLE	✓
6	LOCAL AGENT COMMERCIAL ROLE	×
7	LOCAL AGENT QUALITY	×
Variable	RQ1c	Sensing

8	MEDTECH FIRM ORIGIN COUNTRY	-
9	RELATIONSHIP MANAGEMENT	-
10	EXPECTED OUTCOMES	x
11	TRUST	x

From the above table, the failure of Sensing is clearly shown as a consolidation of Sub-Research Question variables. Local Agents cause some of these variables (2,3,8,9) to impact the process negatively, but these can be nullified or overcome by the MedTech firm through other avenues as mentioned earlier. However, ultimately the consolidated impact of the number of dependencies causes a Sensing failure on the part of the MedTech Firm.

6.5.2 SEIZING

The results from the Sub-Research Questions shows a general failure on the part of Multinational MedTech firms to successfully develop the Seizing building block of Dynamic Capabilities. According to the literature, Seizing is the "...mobilization of resources globally to address opportunities, and to capture value from doing so." (Teece, 2014a, p. 18). Teece also mentions that the one building block generally follows on the other, but that there are ways to leapfrog some of these steps.

In the current study, the failure of the MedTech firm in Seizing the opportunities in the market is not solely due to their failure to Sense against each variable, it is also due to their inability to overcome some of the Sensing challenges. It is clear from the discussions on the Sub-Research Questions that there are methods of overcoming some of the challenges to Sensing in the market, which would present a platform from which to effectively Seize going forward. The evidence exists that some MedTech firms indeed apply some of these methods (pursuing additional sources of knowledge, vicarious internal learning, etc.), but most of them still fail to effectively Seize the opportunities in the market. Therefore, the general failure to Seize the market opportunities from the MedTech firm perspective is not solely a product of a failure to stack upon the Sensing building block, but also a failure to overcome their Sensing shortcomings. Table 61 shows a summary of the Sub-Research Questions' impact on the Seizing building block:

Table 61: Sub-Research Question impact on Seizing

Variable	RQ1a	Seizing
1	KNOWLEDGE NEEDED BY MEDTECH FIRMS	✓
2	LOCAL AGENT KNOWLEDGE SHARING STRATEGIES	-
3	QUALITY OF LOCAL AGENT KNOWLEDGE	-
4	MEDTECH KNOWLEDGE UTILIZATION	×
Variable	RQ1b	Seizing
5	LOCAL AGENT STRATEGIC ROLE	✓
6	LOCAL AGENT COMMERCIAL ROLE	×
7	LOCAL AGENT QUALITY	×
Variable	RQ1c	Seizing
8	MEDTECH FIRM ORIGIN COUNTRY	-
9	RELATIONSHIP MANAGEMENT	-
10	EXPECTED OUTCOMES	×
11	TRUST	×

From the above table, the failure of Seizing is clearly shown as a consolidation of Sub-Research Question variables. The MedTech firm could effectively Seize the market opportunities if they successfully overcame the challenging Sensing variables (2,3,6,7,8,9), but the reality is that the MedTech firm also fails to utilize the knowledge they do receive effectively, as confirmed in Section 6.2.4.3. Therefore, as mentioned in Section 6.2.4.4, there might be internal challenges within the Multinational MedTech firm driving this Seizing failure.

6.5.3 SUMMARY AND CONCLUSION OF RQ1

In summary, referring back to the call for research validating RQ1 (Section 3.2.1), the evidence from the current study sheds further light on whether Multinational MedTech firms effectively develop Dynamic Capabilities address the markets of MEA through the knowledge they acquire from Local Agents. Lagerström identified this as a key future research direction, specifically in the healthcare sector, stating "...how to recognize and exploit business opportunity in relation to

the business network for these firms is a promising topic for future research” (Lagerström & Lindholm, 2021, p. 2033). Thus, validating RQ1.

The consolidation of results from the Sub-Research Questions (RQ1a, RQ1b and RQ1c) allows us to reach a conclusion on the Main Research Question (RQ1). The conclusion is that, in the current study, Multinational MedTech firms do not effectively develop Dynamic Capabilities to address the market opportunities in these countries through the utilization of the knowledge they acquire from Local Agents.

6.6 DISCUSSION OF RESULTS FOR SECONDARY RESEARCH QUESTION 2 (RQ2)

What would Local Agents advise Multinational MedTech firms to implement or consider when internationalizing into their home countries?

Research Question 2 (RQ2) was aimed at allowing Local Agents to provide advice to MedTech firms who considers entering their markets. Therefore, the purpose was to establish methods to improve the relationships between these two entities. This requirement to explore these relationships in more detail to further the understanding of the importance of host country networks was recently encouraged by Lee (Lee et al., 2020a). Thus, validating RQ2.

The evidence from this section should form the bulk of the requirement for the Multinational MedTech firm to address the last building block of Dynamic Capabilities which is Transforming. According to the literature, Transforming is the continuous renewal, protection of value and enhancement of the firm through “...guiding policy and coherent action.” (Teece, 2014a, p. 18). Therefore, should a Multinational succeed in overcoming the Sensing and Seizing challenges mentioned under RQ1, they can vicariously learn and adopt the advice from this section to continuously Transform their Internationalization strategy into the Emerging Markets of MEA.

6.6.1 ADVICE FROM LOCAL AGENTS TO MEDTECH FIRMS

The evidence presented in Chapter 5 relating to the advice Local Agents would offer to MedTech firms are generally classified into three categories. Firstly, there is advice on the Business Model, looking into the contractual structure between the entities and the business principles. Secondly, there is advice on the general

management of the relationship between the two entities, especially how Local Agents expect MedTech Reps to act towards them. Lastly, there is advice on how to develop general strategy, specifically what strategic actions could be successful in these markets.

6.6.1.1 Business Model

The views presented in Chapter 5 pertaining to potential business modelling shows a variety of potential activities as proposed by Local Agents. Firstly, the business model driving the interaction between the Local Agent and the MedTech firm could be improved by flexibility in payment terms and credit limits. There also needs to be some measure of financial support and a risk sharing model for the acquisition and placement of capital equipment. Secondly, the business model driving the interaction between the Local Agent and the customer could be improved by strengthening the Local Agents' ability to generate demand, grow the size of the market and compete effectively with opponents. This can be achieved by assisting the Local Agent to launch marketing campaigns, educating end-users, compiling a product portfolio that suits the market and training Local Agent representatives. Most importantly though, was the need to enter the market with a competitive price.

Business models to address Emerging Markets, specifically competitive pricing and market acceptable products, are well established in the literature. Literature targeting the populations at the Base of the Pyramid (BoP) is especially applicable (Chliova & Ringov, 2017; Prahalad et al., 2012b). This is perhaps best explained by the Four A framework proposed by Anderson, where business model innovation in Emerging Markets should be based on product affordability, acceptability, availability and awareness (Anderson & Markides, 2007). This encompasses the advice from Local Agents above. The importance of resource allocation to support business models in Emerging Markets was demonstrated by London (London & Hart, 2004b) very early in the research into business strategies to unlock Emerging Markets.

Therefore, the advice from Local Agents in MEA is aligned with previous research generated regarding business model innovation in other Emerging Markets. This confirms the validity of these opinions.

6.6.1.2 Relationship

The evidence presented in Chapter 5 pertaining to relationship building shows a variety of potential actions as proposed by Local Agents. MedTech firms should include Local Agents in the formulation of strategy and some of the decision-making actions of the firm. This inclusion can serve to overcome the strained relationship identified under RQ1. Furthermore, the understanding of local market conditions and cultures can be improved by traveling into Local Agent markets regularly. Local Agents also request to be given a single channel of access into the MedTech firm. An individual manager that can be trusted and can interact with the MedTech firm successfully on behalf of the Local Agent. This manager should preferably be from the specific country or at least from the region.

In the literature it seems there is evidence that Multinational firm leadership does not pay attention to relationship workflows in BoP markets, which could be evidence of this disconnect (Prahalad & Hammond, 2002). It is known that the characteristics of these markets poses significant challenges in leadership for Multinationals to overcome (Benito-Sarriá & Villar, 2019). Going further, Benito-Sarriá goes into specific detail, urging Multinationals to "...develop a global capability in social embeddedness, establishing these relationships with non-conventional partners, co-inventing custom solutions and building local capacities." (Benito-Sarriá & Villar, 2019, p. 2). This clearly defines the need for Multinational firms to put effort into developing the relationship with Local Agents. This was confirmed by London, who stated that Multinationals entering Emerging Markets should "...develop relationships with local partners that could provide an awareness of the actual needs and desires of base-of-the-pyramid custom." (London & Hart, 2004b, p. 362).

Therefore, the advice from Local Agents in MEA is aligned with previous research generated regarding relationship development in other Emerging Markets. This confirms the validity of these opinions.

6.6.1.3 Strategy

The data presented in Chapter 5 pertaining to strategy formulation shows a variety of potential strategic directions as proposed by Local Agents. Firstly, building a business in MEA takes longer than in other regions due to the

complexities in the markets, requiring the MedTech firm to plan over multiple years. Secondly, if possible, the MedTech firm should assist the country in developing infrastructure to serve the MedTech field. This can be achieved through large scale Public Private Partnerships, creating opportunities for Local Agents to offset their product. Thirdly, Local Agents propose a phased approach to entering and developing the markets. This requires an increased commitment over time, which can drive the expected return on investment. This last point is perhaps in contrast with Local Agent frustration on the inequality between them and MedTech firms mentioned in RQ1a and requires further clarification in future studies.

Literature regarding strategy formulation for Emerging Markets are well established. One of the first aspects to consider is that populations at the BoP can satisfy a for-profit strategy and that these markets do not necessarily belong to the realm of Corporate Social Responsibility (CSR) philanthropic realm (Jones Christensen et al., 2015). The advice from Local Agents to adopt a phased approach is directly comparable to the Uppsala model of Internationalization (Vahlne & Johanson, 2017) and is in alignment with the Multinational MedTech firm orientation toward the Uppsala model as opposed to the Born-Global model, due to the high cost of innovation in this industry. London mentioned the fact that Multinational firms should explore relationships with non-profit organizations to assist in developing infrastructure (London & Hart, 2004b).

Therefore, the advice from Local Agents in MEA is aligned with previous research generated regarding strategy formulation in other Emerging Markets. This confirms the validity of these opinions.

6.6.2 ADVICE FROM MEDTECH REPS TO MEDTECH FIRMS

The advice offered by MedTech Reps (the Intermediaries) to their MedTech firm leadership in Chapter 5, was compared and presented in the same three categories as the advice from Local Agents, so as to be able to compare similarities. In this way MedTech firm leadership can determine whether there are parallels between the two entities which acts as confirmation of advice. In this section, applicable literature is only added if it differs from the literature informing Section 6.6.1.

6.6.2.1 Business Model

The views presented in Chapter 5 pertaining to potential business modelling shows a variety of potential activities as proposed by MedTech Reps (the Intermediaries). Firstly, the business model driving the interaction between the Local Agent and the MedTech firm could be improved by flexibility in payment terms and credit limits, confirming the advice from Local Agents. Intermediaries also advised on some financial support and investing, but their suggestion was to fund this through financial institutions and to utilize insurance against defaulting to minimize risk. Secondly, the business model driving the interaction between the Local Agent and the customer could be improved by introducing the correct product portfolio, providing education to physicians and developing the business skills of Local Agents. This advice is in complete alignment with the advice from Local Agents in Section 6.6.1.1.

In addition to the literature mentioned on this subject in Section 6.6.1.1, different financing options should be explored. The third-party finance model to improve infrastructure has been proposed under the Mission Focus Model of business innovation, showing that it is a valid alternative financing option (Benito-Sarriá & Villar, 2019).

Therefore, the advice from the Intermediaries in MEA in terms of business model innovation is aligned with the advice from Local Agents, as well as research generated regarding other Emerging Markets. This confirms the validity of these opinions. It also confirms that this market knowledge is available to the MedTech firm internally through the Intermediaries.

6.6.2.2 Relationship

The evidence presented in Chapter 5 pertaining to relationship building shows a variety of potential actions as proposed by MedTech Reps (the Intermediaries). Firstly, there is a need to have a dedicated internal structure serving these markets. Specifically, the appointment of a Distribution Channel Manager to handle general relationship issues and to avoid commercial bias, but also the appointment of in-country headcounts that serve to understand the market as a member of the MedTech firm and to manage in-country Local Agents. Secondly, the general management of relationships by active inclusion, honest interest, informed understanding and clear communication

is critical. These requirements are not much different than general relationship management principles applicable across industries and cultures.

The need to develop this relationship to further inform Internationalization strategy was defined by Hart as follows: “At the base of the pyramid, MNCs [Multinational Corporations] must develop relationships that enable them to better understand the social context of an environment that is local, diverse, dynamic, complex, and unpredictable.” (London & Hart, 2004b, p. 365).

Therefore, the advice from the Intermediaries in MEA in terms of relationship development is aligned with the advice from Local Agents, as well as research generated regarding other Emerging Markets. This confirms the validity of these opinions. It also confirms that this market knowledge is available to the MedTech firm internally through the Intermediaries.

6.6.2.3 Strategy

The data presented in Chapter 5 pertaining to strategy formulation shows a variety of potential strategic directions as proposed by MedTech Reps (the Intermediaries). Firstly, there is a need to understand and grasp the complexities of these Emerging Markets. The Intermediaries advise that strategy should be formulated down to country level if possible and that the local culture should be considered. Secondly, the MedTech firm should have a long-term vision for the region as well as a long-term mindset. The vision requires a phased approach with increased investment and commitment over time. The mindset requires a realization that these markets take longer to develop and success should not be measured on the same cycles as developed markets.

Literature shows that the focus on strategy formulation should avoid the need to just “...overcome the lack of a Western-style business environment.” (London & Hart, 2004b), confirming the request by the Intermediaries to formulate strategy down to country level with adherence to local culture. This is confirmed by the seminal work of Hart, stating that general global strategies “...ignores within-country differences in business environments and implicitly assumes that capabilities developed at the top of the pyramid will be viable across all prospective markets.” (London & Hart, 2004b, p. 354). Instead of building strategies down to country level, Hart proposed strategy formulation

by class (wealthy, middle-class and BoP). In general, the localization strategy is preferred as being most effective in Emerging Markets. This is also applicable in the medical field, as shown by Agarwal (Agarwal et al., 2018).

Therefore, the advice from the Intermediaries in MEA in terms of strategy formulation is aligned with the advice from Local Agents, as well as research generated regarding other Emerging Markets. This confirms the validity of these opinions. It also confirms that this market knowledge is available to the MedTech firm internally through the Intermediaries.

6.6.3 SUMMARY AND CONCLUSION OF RQ2

The advice from Local Agents which directly informs RQ2 is for Multinational MedTech firms to pay more attention to understanding the dynamics in their markets. Therefore, it can be concluded that Local Agents perceive that the knowledge they have shared has not been acted upon correctly. This would confirm the conclusion reached from RQ1 that MedTech firms fail to Sense. There is also almost exact parity of advice between the two groups of interviewees, confirming the validity of the findings. It is thus evident that MedTech firms already have this knowledge inside their organizations, as the Intermediaries are aware of the requirements to enter these markets and they have shown frustration at not being able to translate this knowledge to strategy inside their organizations. This would confirm the conclusion reached from RQ1 that MedTech firms fail to Seize.

Local Agents and MedTech Reps (the Intermediaries) were both requested to comment on the attractiveness of their markets and the future of the MedTech industry as a whole. The results here are encouraging. Local Agents are shown to have faith in their markets for the future and they are willing to engage with Multinational MedTech firms to succeed in these markets. Similarly, Intermediaries are very positive regarding the attractiveness of these markets, but they also comment on the fact that these markets could serve as growth engines to the future revenue streams of Multinational MedTech firms. This confirms their understanding of the commercial requirements of MedTech firms as well as foresight for strategy formulation.

In summary, the evidence shows that there are ample opportunities to improve this process by cultivating the relationship between the two partners, leading to

the Transforming of the MedTech firm approach and ultimately to the development of a Dynamic Capability. This should start with complete transparency from Local Agents on the knowledge they share, they should not withhold any information. MedTech firms should believe and trust this information and apply it to the strategies they develop.

6.7 NEW INSIGHTS

The evidence analysed in Chapter 5 (Section 5.11), identified two new insights forthcoming from the current study. Firstly, there was an indication that Intermediary managers in MedTech firms show a disconnect with their superiors which impacts Internationalization strategy formulation. Secondly, there was a request from MedTech Reps to give advice to Local Agents, so as to assist them to provide knowledge in a way that could strengthen the hand of Intermediaries when dealing with Superiors inside the MedTech firm.

6.7.1 MEDTECH FIRM INTERNAL DISCONNECT

The evidence from Chapter 5 showed a potential internal disconnect within MedTech firms, between the Intermediaries and their superiors, when it comes to strategy formulation for Internationalization. Since this has an impact on knowledge utilization in the MedTech firm, and therefore informs RQ1, it was discussed briefly in Section 6.2.4.4 as part of RQ1a. Although it was outside the scope of the current study, a connection was made to support this from literature, as well as aligning it to the research anchor. Therefore, this New Insight was classified as a second inflection point and it should be studied further in future research.

6.7.2 ADVICE TO LOCAL AGENTS

Research Question 2 (RQ2) addresses the internal dynamic subsequent to the core research problem. In other words, it allowed us to consider how a Multinational MedTech firm could renew itself continually to be more effective in Sensing and Seizing, thus delivering on the last building block of Dynamic Capabilities, namely Transforming. In order to achieve this, Intermediaries and Local Agents was given the opportunity to provide feedback to the MedTech firm on how to improve their Sensing and Seizing capacity. This was addressed in Section 6.6.

The New Insight provided in this section concerns the external dynamic. This insight serves to inform the external partner on how to assist the MedTech firm to succeed in Transforming. To achieve this, MedTech Reps was given the

opportunity to provide feedback to the Local Agent on how to improve their knowledge gathering and general interaction with MedTech firms. The findings of this investigation should give Local Agents valuable insights into the internal workings of a MedTech firm, so as to be more successful in realizing their own market mandates and to improve relationships with Multinational MedTech firms.

The evidence is detailed in Chapter 5 (Section 5.11) and consists of advice on the following aspects: Understanding MedTech firms, Market Knowledge, Investing, Drive and Strategy. In short, the advice from MedTech Reps are that Local Agents should take more responsibility for their success by engaging more effectively with the MedTech firm.

Relating to Local Agents developing a better understanding of MedTech firms, there is a request to be more specific in measuring actions, which is natural in a large organization where it cannot be managed by impression. But mostly there is an appeal to really get to know the organization you are partnering with and to spend time understanding their culture, products and processes.

Regarding Market Knowledge, MedTech Reps want to encourage Local Agents to be transparent in sharing knowledge and to build a level of trust between them. Local Agents should also improve communications with MedTech firms in order to share this knowledge and to prove that they understand their markets.

When it comes to investment, MedTech Reps expect Local Agents to not only put investment into this business, but to do so smartly. To come forward with their own business cases and motivations. To invest in stock thoughtfully, so it moves to the customer at the right pace in order to generate a timeous return on that investment. But most importantly, Local Agents should invest in their people, making sure the right people are on board, to ensure they are trained effectively and to incentivise and reward them for driving the business forward.

Relating to drive, MedTech Reps want to encourage Local Agents to be proactive. Not to expect the MedTech Rep to come into the market to drive the business, but to put their own efforts in beyond the normal. It would be important for Local Agents to overcome this perception of them being lethargic, since it might not be the case, but perhaps the perception is created through lack of communication. But mostly, there is a requirement form MedTech Reps to see this internal drive in Local Agents through initiative and excitement.

Lastly, with strategy, MedTech Reps expect Local Agents to be the primary drivers of strategy formulation through their local expertise. There is also mention of granular plans, which connects to Local Agents' understanding on how MedTech firms expect measurable actions. Mostly, MedTech Reps want to see more interaction and more initiative from Local Agents, expecting the Local Agent to have a pro-active approach to strategy formulation.

In summary, MedTech Reps expect Local Agents to develop new understandings of their markets and their interactions with MedTech firms. But there is also confirmation that the Local Agent is the expert in the market and that their strengths lie in the things that made them successful, such as developing local networks and understanding country complexities. Therefore, the request from MedTech Reps to Local Agents fall firmly in the sphere of current business theory. Local Agents should lean on their core competencies, built over time and with effort in their respective markets. But they should add to these core competencies the development of their own Dynamic Capabilities, in order to successfully resist the dynamic environment in which they find themselves as well effectively compete against their opponents.

The bilateral sharing of advice through a neutral vessel like a research project would be ideal to further develop this vicarious source of learning for the Local Agent. Therefore, research into the advice from MedTech firms to Local Agents in the MEA markets would be welcomed.

6.8 SUMMARY

Ultimately, the current study succeeds in shedding light on some ambiguous concepts within the realms of the MedTech industry as well as the Emerging Markets of the Middle East and Africa. In summary, the following conclusions can be made.

- Firstly, this study confirms the findings from the broader published literature on the importance of the role of Local Agents in the Internationalization process, as well as the importance of their role as primary source of knowledge that informs Internationalization strategies for Multinational firms.
- Secondly, the current study shows that there is evidence of a strained relationship between most Local Agents and MedTech firms, shown through a bilateral lack of trust. It also posits that this disconnect between Local Agents and MedTech Reps is a contributor to failed Internationalization strategies, which in turn suggests the failure of Multinational MedTech firms to effectively develop

Dynamic Capabilities through the utilization of Local Agent knowledge. However, it also shows that both parties are contributors to this failure in different ways.

The current study advances the understanding of the development of Dynamic Capabilities in the MedTech industry along several avenues. The main finding that Multinational MedTech firms fail to develop Dynamic Capabilities through the effective utilization of Local Agent knowledge, contributes to the understanding of the framework as applied to this industry and region. But the study is not limited to this conclusion alone.

- Firstly, it gives a unique assessment of the Internationalization processes of Multinational MedTech firms as perceived by Local Agents in MEA, a previously unexploited source of evidence.
- Secondly, the current study shows the dynamics of the interrelationships between Local Agents and MedTech Reps, specifically the subtleties regarding the process of knowledge sharing. This has not been well documented in past research in this sector (MedTech industry) and region (MEA).
- Thirdly, it provides the basis for improvement of their Internationalization strategies through vicarious learning to the MedTech firm. The advice from Local Agents as well as the Intermediaries, allow for reflection and analysis for the development of improved entry strategies and relationships.

There is also a clear indication on the path forward forthcoming from this study. The current findings as well as the new insights should be explored further.

- Firstly, the current findings should be extended to a larger scale to determine the applicability of the findings on a larger population.
- Secondly, the second Inflection point identified in Section 6.2.4.4 should be researched further. The study shows that the internal processes and bureaucracy of the MedTech firm is a clear contributor to their failed Internationalization into the markets of MEA. A clearer understanding of the incidence and effect of this internal disconnect would be critical in understanding failed Internationalization strategies.
- Thirdly, the ability to create a repository of advice for MedTech firms is an opportunity to improve the contribution of the MedTech sector to the realization of health system goals for MEA as detailed by the WHO and the African Union. The advancement of knowledge through the petitioning of further detailed opinions from Local Agents and Intermediaries, could drive MedTech firm understanding of these markets and lead to successful Internationalization, which in turn could lead to access to therapies for people at the Bottom of the Pyramid.

CHAPTER 7: CONCLUSION

7.1 INTRODUCTION

The final chapter in this document concludes the contributions made in this study. This includes a summary of the principle conclusions of the research, followed by the perceived research contribution and the implications of these findings for management and other stakeholders. Thereafter, the limitations of the current research are discussed, followed by suggestions for future research informed by the insights of the current study.

7.2 RESEARCH AIM

The aim of this research was to determine whether Multinational MedTech firms effectively use Local Agent knowledge to develop Dynamic Capabilities in Internationalization. The understanding from literature regarding Multinational MedTech firm interaction with Local Agents is very limited and even more so in the Emerging Markets of the Middle East and Africa (MEA), which is the setting for this study. There are numerous studies focusing on the pharmaceutical industry, specifically in Eastern Countries (China, India, etc.). From this literature, as well as general Internationalization literature, we know that there needs to be effective utilization of knowledge from these Local Agents in order to successfully enter their markets. Therefore, due to the paucity of research in this field and in this region, this study followed a qualitative design and collected data through multiple semi-structured interviews.

7.3 MAIN CONCLUSIONS

This section details the conclusion of each Research Question as informed by the study. Firstly, the Sub-Research Questions 1a (RQ1a), 1b (RQ1b) and 1c (RQ1c) will be concluded. Then the conclusions from these sub-questions will inform the conclusion of the Main Research Question (RQ1). Lastly, the Secondary Research Question (RQ2) will be concluded. These Research Questions are compared and analysed against the building blocks of Dynamic Capabilities, namely: Sensing, Seizing and Transforming.

7.3.1 RESEARCH QUESTION 1a

RQ1a	How do multinational MedTech firms develop and action knowledge from Local Agents?
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In response to RQ1a, the current study shows that MedTech firms correctly Sense and Seize when determining what knowledge they need to acquire to

successfully develop Internationalization strategies. The challenges of restricted knowledge and low-quality knowledge forthcoming from Local Agents, can be nullified by the pursuit of additional sources of information as well as internal vicarious learning. However, ultimately, MedTech firms fail to utilize this knowledge effectively to succeed in Sensing and Seizing in the market.

Table 62: RQ1a performance against Dynamic Capability building blocks.

RQ1a	Sensing	Seizing
KNOWLEDGE NEEDED BY MEDTECH FIRMS	✓	✓
LOCAL AGENT KNOWLEDGE SHARING STRATEGIES	-	-
QUALITY OF LOCAL AGENT KNOWLEDGE	-	-
MEDTECH KNOWLEDGE UTILIZATION	x	x

In summary, even though there are ways to overcome a knowledge shortage, the MedTech firm still fails to Sense the dynamics of the markets correctly. Furthermore, this Sensing failure is compounded by MedTech internal bureaucratic processes in the development of Internationalization strategies, leading to the failure to Seize the opportunities in the markets.

7.3.2 RESEARCH QUESTION 1b

RQ1b	What is the role of Local Agents in driving Multinational MedTech firm internationalization strategies?
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In response to RQ1b, the current study shows that the initial strategic positioning of MedTech Reps and Local Agents are aligned and sets the scene for successful Sensing and Seizing. However subsequent disconnects with regards to the commercial role of Local Agents and their perceived quality prevents the MedTech firm from Sensing and Seizing effectively.

Table 63: RQ1b performance against Dynamic Capability building blocks.

RQ1b	Sensing	Seizing
LOCAL AGENT STRATEGIC ROLE	✓	✓
LOCAL AGENT COMMERCIAL ROLE	x	x
LOCAL AGENT QUALITY	x	x

In summary, although both entities agree on the strategic role Local Agents should play in the Internationalization process, there is disagreement on the commercial role they should fulfil. This disconnect is evident with regards to investment and the sharing of risk. The perception of the quality of these Local Agent on the part of the MedTech Rep also causes a lack of trust between the two parties.

7.3.3 RESEARCH QUESTION 1c

RQ1c	What are the experiences of Local Agents in this process?
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In response to RQ1c, the current study shows that The MedTech Firm origin country impact is vague as it is understood by the Local Agent and easily overcome by the MedTech firm. Relationship management is very general in nature and is not specifically responsible for inter-firm disconnects in the current study. For these two variables, the impact on Dynamic Capability building blocks are at worst neutral. However, the disconnect in the expected outcome as well as the lack of trust weighs heavily against MedTech firms in the current study as well as in the literature.

Table 64: RQ1c performance against Dynamic Capability building blocks.

RQ1c	Sensing	Seizing
MEDTECH FIRM ORIGIN COUNTRY	-	-
RELATIONSHIP MANAGEMENT	-	-
EXPECTED OUTCOMES	x	x

TRUST	x	x
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In summary, Local Agent perception of the process of sharing knowledge and building relationships with MedTech firms are mostly negative, leading to the failure of the MedTech firm to Sense and Seize opportunities in the market.

7.3.4 RESEARCH QUESTION 1

RQ1	How do multinational MedTech firms develop and action knowledge from Local Agents?
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The consolidation of results from the Sub-Research Questions (RQ1a, RQ1b and RQ1c) allows us to reach a conclusion on the Main Research Question (RQ1). The conclusion is that, in the current study, Multinational MedTech firms do not effectively develop Dynamic Capabilities to address the market opportunities in these countries through the utilization of the knowledge they acquire from Local Agents.

Table 65: Sub-Research Question impact on Sensing

RQ1a	Sensing	Seizing
KNOWLEDGE NEEDED BY MEDTECH FIRMS	✓	✓
LOCAL AGENT KNOWLEDGE SHARING STRATEGIES	-	-
QUALITY OF LOCAL AGENT KNOWLEDGE	-	-
MEDTECH KNOWLEDGE UTILIZATION	x	x
RQ1b	Sensing	Seizing
LOCAL AGENT STRATEGIC ROLE	✓	✓
LOCAL AGENT COMMERCIAL ROLE	x	x
LOCAL AGENT QUALITY	x	x
RQ1c	Sensing	Seizing
MEDTECH FIRM ORIGIN COUNTRY	-	-
RELATIONSHIP MANAGEMENT	-	-
EXPECTED OUTCOMES	x	x
TRUST	x	x

The above table serves as a summary of the data relating to RQ1a, RQ1b and RQ1c. It shows Sensing and Seizing failures for the studies variables.

7.3.5 RESEARCH QUESTION 2

RQ2	What would Local Agents advise Multinational MedTech firms to implement or consider when internationalizing into their home countries?
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The advice from Local Agents (and the Intermediary MedTech Reps) which directly informs RQ2 is for Multinational MedTech firms to pay more attention to understanding the dynamics in their markets. This is mostly applicable to three fields: Business Model, Relationship and Strategy

7.3.5.1 *Business Model*

Firstly, the business model driving the interaction between the Local Agent and the MedTech firm could be improved by flexibility in payment terms and credit limits. There also needs to be some measure of financial support and a risk sharing model for the acquisition and placement of capital equipment. Secondly, the business model driving the interaction between the Local Agent and the customer could be improved by introducing the correct product portfolio, providing education to physicians and developing the business skills of Local Agents.

7.3.5.2 *Relationship*

MedTech firms should include Local Agents in the formulation of strategy and some of the decision-making actions of the firm. This inclusion can serve to overcome the strained relationship identified under RQ1. Furthermore, the understanding of local market conditions and cultures can be improved by traveling into Local Agent markets regularly. Local Agents also request to be given a single channel of access into the MedTech firm. An individual manager that can be trusted and can interact with the MedTech firm successfully on behalf of the Local Agent. This manager should preferably be from the specific country or at least from the region. The opinion of MedTech Reps is that there is a need to have a dedicated internal structure serving these markets. Specifically, the appointment of a Distribution Channel Manager to handle general relationship issues and to avoid commercial bias, but also the appointment of in-country headcounts that serve to understand

the market as a member of the MedTech firm and to manage in-country Local Agents. Also, the general management of relationships by active inclusion, honest interest, informed understanding and clear communication is critical.

7.3.5.3 Strategy

Firstly, building a business in MEA takes longer than in other regions due to the complexities in the markets, requiring the MedTech firm to plan over multiple years. Thus, the MedTech firm should have a long-term vision for the region as well as a long-term mindset. The vision requires a phased approach with increased investment and commitment over time. The mindset requires a realization that these markets take longer to develop and success should not be measured on the same cycles as developed markets.

Secondly, if possible, the MedTech firm should assist the country in developing infrastructure to serve the MedTech field. This can be achieved through large scale Public Private Partnerships, creating opportunities for Local Agents to offset their product.

Thirdly, Local Agents propose a phased approach to entering and developing the markets. This requires an increased commitment over time, which can drive the expected return on investment.

Fourthly, the Intermediaries advise that strategy should be formulated down to country level if possible and that the local culture should be considered.

In summary, the evidence shows that there are ample opportunities to improve this process by cultivating the relationship between the two partners, leading to the Transforming of the MedTech firm approach and ultimately to the development of a Dynamic Capability. This should start with complete transparency from Local Agents on the knowledge they share, they should not withhold any information. MedTech firms should believe and trust this information and apply it to the strategies they develop.

7.4 RESEARCH CONTRIBUTION

Regarding the call for research validating RQ1a (Section 3.2.1), the evidence from the current study sheds further light on the network collaboration between Multinational firms and domestic companies in the Internationalization process, by identifying key variables which impact the acquisition and utilization of knowledge by MedTech firms in MEA.

In reference to the call for research validating RQ1b (Section 3.2.2), the evidence from the current study sheds further light on the role of Local Agents in the Internationalization

process of Multinational MedTech firms, by identifying the main roles of Local Agents in the MedTech industry in MEA and also sharing a perspective on their quality.

Referring back to the call for research validating RQ1c (Section 3.2.3), the evidence from the current study sheds further light the experience of Local Agents regarding the Internationalization process of Multinational MedTech firms, by adding to the gap in literature concerning their direct opinions.

In summary, reflecting on the call for research validating RQ1 (Section 3.2.1), the evidence from the current study sheds further light on whether Multinational MedTech firms effectively develop Dynamic Capabilities address the markets of MEA through the knowledge they acquire from Local Agents. Lagerström identified this as a key future research direction, specifically in the healthcare sector, stating “how to recognize and exploit business opportunity in relation to the business network for these firms is a promising topic for future research” (Lagerström & Lindholm, 2021, p. 2033).

Finally, since the nature of the relationships within these networks are so critical, the current study offers proactive advice from Local Agents to allow for the Multinational MedTech firm to learn and gain knowledge vicariously. This requirement to explore these relationships in more detail to further the understanding of the importance of host country networks was recently encouraged by Lee (Lee et al., 2020a).

7.5 IMPLICATIONS FOR MANAGEMENT AND OTHER STAKEHOLDERS

The historical practical contributions of research into the Internationalization of firms were to identify best practice and provide options for management to consider when opening foreign avenues of business. The current study complements these contributions as follows:

7.5.1 PRACTICAL CONTRIBUTIONS

Practically, MedTech management needs to become aware of the opinions of Local Agents in the MEA region. The success of MedTech Internationalization is often measured either in revenue growth (Exploit) or the number of countries entered (Explore). Instead, a view into the perceptions/experiences of Local Agents and MedTech Reps will allow them to re-evaluate their performance based on their strategic hits or misses. Also, as most MedTech Reps commented on these markets becoming a growth engine for their firms, the understanding of the complexities of these regions could assist strategic leadership to realize this expected growth contribution. The identification of a second inflection point inside

the MedTech firm also serves to focus leadership attention on the potential internal disconnect that impact their Internationalization strategies into these markets.

7.5.2 THEORETICAL CONTRIBUTIONS

The development of Dynamic Capabilities to overcome Outsidership during Internationalization is well documented, but there is a paucity of research on this in the MedTech field, especially in the Middle East and African (MEA) region. The current theoretical debate on the Internationalization of MedTech firms in Emerging Markets covers process theory (Gammeltoft & Cuervo-Cazurra, 2021), capabilities (Jie et al., 2021), SMEs (Lagerström & Lindholm, 2021) and ambidexterity/innovation (Sharmelly & Ray, 2021). Therefore, theoretical contributions can be made in the field of Dynamic Capabilities of Multinational MedTech firms in the Emerging Markets of the Middle East and Africa.

There is also a call to study the role of intra-firm relationships (networks) in Internationalization in more detail (Paul & Rosado-Serrano, 2019). There is a need for a body of evidence documenting the perceptions of Local Agents in this network. These opinions remain untapped in the body of literature and can contribute to new avenues for future studies. The current study addresses this lack of evidence with an initial insight into the relationships.

The findings of the current study show that Multinational MedTech firms fail to develop Dynamic Capabilities through utilization of Local Agent knowledge when entering the Emerging Markets of the Middle East and Africa. This opens the opportunity to transition this field into quantitative research designs.

7.6 LIMITATIONS OF THE RESEARCH

There were physical restrictions in accessing interviewees. Due to the wide range of countries selected for this study and the remnants of Covid restrictions, in-person interviews were not possible. Therefore, all interviews were conducted via Zoom. This made it challenging for the researcher to establish rapport and act on visible cues in body language and other nuances.

The duration of this study was also of a short nature. Therefore, only one interview per participant was possible, without the privilege of conducting follow-up interviews for clarification of certain concepts and/or opinions.

There was also a limitation in the availability of Local Agents to conduct interviews on. Although the researcher contacted over 220 Local Agents, it was still only possible to

interview 11 Local Agents for this study. While the number of interviews were close to the minimal threshold of 15, more interviews with Local Agents would have been beneficial.

In dealing with interviewees from MEA, it needs to be understood that the majority do not consider English their first language. Therefore, care had to be taken to ensure they understood the questions posed during the interview, in order to solicit a valid response. But it is possible that some questions or concepts were still misunderstood and that responses therefore could be unsuitable. Most of the interviewees also had strong non-English accents, which made transcription very difficult. This also means that coding and quotations, which aligned to the actual words spoken, could reflect incorrect grammar or syntax. Care had to be taken by the researcher not to infer unintended opinions in this way.

There existed a theoretical conflict of interest regarding the position of the researcher in his current employment, which is in a multinational MedTech firm. Therefore, although the interviews were general in nature and the questions revolved around relationship development, some MedTech firms and some Local Agents refused to partake in the study.

7.7 SUGGESTIONS FOR FUTURE RESEARCH

Firstly, the current study needs to be escalated in scale by doing a survey across multiple settings, i.e. a quantitative study. The findings of this study can be used to design a questionnaire. The sub-sections of each individual Research Question (specifically RQ1b and RQ1c) lends itself to the compartmentalization of data into measurable parts, therefore creating a potential questionnaire that can be used to target more respondents and transition this into a quantitative research design. This needs to be structured in such a way that more conclusions can be drawn between variables like the specific region and the segment within the MedTech industry.

Secondly, the internal disconnect, identified as Inflection point 2, within the MedTech firm needs to be investigated. Internal bureaucratic challenges are not new to multinational firms, but it seems that it has a substantial impact on the MedTech industry in this region. Although the Intermediaries show frustration with the inability of the firm to innovate their Internationalization strategies, it is unclear at which level this disconnect lies and what the reason for it is. The fact that every interviewee, from Vice Presidents to Account Managers, complained about the same challenge, seems to indicate that the disconnect is endemic throughout the structures of MedTech firm leadership. This, in turn, can provide an extension of the Dynamic Capabilities framework. The development of

Dynamic Capabilities through the successful integration of the three building blocks (Sensing, Seizing, Transforming) has not been studied as an applied framework within Multinational MedTech firms in detail since the case studies on GE (2009) and Electa (2010). In order to achieve this, detailed case studies of Multinational MedTech firms need to be conducted, in specific relevance to Emerging Markets in MEA. The fact that MedTech firms show growing revenues in other Emerging Markets (China, India, South America, etc.) shows that these firms do not fail everywhere. It could point to the fact that the failure to develop Dynamic Capabilities is a regional issue, born from the leadership within MEA. To understand this, the level of Inflection point 2 needs to be identified within each firm.

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APPENDIX A - DRAFT PERMISSION LETTER: MEDTECH FIRM

[DATE]

Dear [Insert Name]

I am conducting research into "*The utilization of Local Agent knowledge by multinational MedTech firms in emerging markets internationalization*". This research aims to understand how multinational MedTech firms develop and action knowledge from Local Agents (i.e. distributors).

There is very little research articulating the opinion of Local Agents on the internationalization processes of multinational MedTech firms, as well as the understanding of MedTech firms in utilization of knowledge gathered from Local Agents. We feel that an understanding of your viewpoint would contribute to the academic literature in the field and deliver actionable management implications for internationalization, specifically in Emerging Markets.

The research will be conducted through a qualitative approach. We hereby ask whether you or a member of your staff would be available for a 45-minute interview. The interview will consist of about 15 questions developed to assess your experience in dealing with Local Agents. The data gathered will be protected by a standard "non-disclosure of company information" letter issued by GIBS for this purpose. In the final report, your company details and responses will be anonymized, ensuring that no individual or firm name and data is published.

Please let me know whether you agree to this and kindly confirm your assent to contribute (or identify an individual to contact).

If you have any concerns, please contact my supervisor or me. Our details are provided below.

Researcher name:	Jaco Erasmus	Research supervisor name:	Prof Johan Olivier
Email:	21188832@mygibs.co.za	Email:	olivierjo@gibs.co.za
Phone:	+27-66-392-4313	Phone:	+27-83-452-5539

Regards

Jaco Erasmus

APPENDIX B - DRAFT PERMISSION LETTER: LOCAL AGENT

[DATE]

Dear [Insert Name]

I am conducting research into "*The utilization of Local Agent knowledge by multinational MedTech firms in emerging markets internationalization*". This research aims to understand how multinational MedTech firms develop and action knowledge from Local Agents (i.e. distributors).

There is very little research articulating the opinion of Local Agents on the internationalization processes of multinational MedTech firms. We feel that an understanding of your viewpoint would contribute to the academic literature in the field and deliver actionable management implications for internationalization, specifically in Emerging Markets.

The research will be conducted through a qualitative approach. We hereby ask whether you or a member of your staff would be available for a 45-minute interview. The interview will consist of about 15 questions developed to assess your experience in dealing with multinational MedTech firms. The data gathered will be protected by a standard "non-disclosure of company information" letter issued by GIBS for this purpose. In the final report, your company details and responses will be anonymized, ensuring that no individual or firm name and data is published.

Please let me know whether you agree to this and kindly identify an individual to contact.

If you have any concerns, please contact my supervisor or me. Our details are provided below.

Researcher name:	Jaco Erasmus	Research supervisor name	Prof Johan Olivier
Email:	21188832@mygibs.co.za	Email:	olivierjo@gibs.co.za
Phone:	+27-66-392-4313	Phone:	+27-83-452-5539

Regards

Jaco Erasmus

APPENDIX C - DRAFT INFORMED CONSENT FORM



[DATE]

Dear [Insert Name]

I am conducting research into "*The utilization of Local Agent knowledge by multinational MedTech firms in emerging markets internationalization*". Our interview is expected to last 45 minutes and will help us understand how multinational MedTech firms develop and action knowledge from Local Agents. Your participation is voluntary, and you can withdraw at any time without penalty. By signing this letter, you are indicating that you have given permission for:

- the interview to be recorded;
- the recording to be transcribed by a third-party transcriber, who will be subject to a standard non-disclosure agreement;
- verbatim quotations from the interview to be used in the report, provided they are not identified with your name or that of your organisation;
- the data to be used as part of a report that will be publicly available once the examination process has been completed; and
- all data to be reported and stored without identifiers.

If you have any concerns, please contact my supervisor or me. Our details are provided below.

Researcher name:	Jaco Erasmus	Research supervisor name:	Prof Johan Olivier
Email:	21188832@mygibs.co.za	Email:	olivierjo@gibs.co.za
Phone:	+27-66-392-4313	Phone:	+27-83-452-5539

Signature of participant: _____

Date: _____

Signature of researcher: _____

Date: _____

APPENDIX D - DRAFT INTERVIEW GUIDE: MEDTECH REP

Nr	Question	Justification
1	Which countries do you operate in?	Stratification
2	What is your business title and role?	Stratification
3	In which MedTech division do you operate?	Stratification
4	How would you describe the role of local agents in your internationalization process?	RQ1b
5	What do you look for when engaging a local agent?	RQ1b
6	What is your perception of the quality of distributors in general in Emerging Markets?	RQ1b
7	How would you describe the quality of assistance and the sharing of knowledge from distributors?	RQ1b
8	Do you generally follow the advise shared by distributors on how to enter their market or do you prefer to make your own assessment?	RQ1a
9	Do you have the capacity to make decisions on entry strategies on your level or do you need to revert to your superiors?	RQ1a
10	Do you feel pressure from your organization to follow specific strategies to enter markets or do they follow the advice from distributors?	RQ1a
11	Would you agree with the strategies you follow to enter markets in general or do you feel there is room for improvement?	RQ1a
12	If you think there is room for improvement, what would that look like?	RQ1a
13	Where your firm has failed to enter a market effectively, what do you think was the reason for that?	RQ1a
14	Where your firm succeeded in entering a market effectively, what do you think was the reason for that?	RQ1a
15	As local decision-maker, what advice would you give distributors in how to share knowledge and drive strategies for MedTech firms?	RQ1b
16	As downstream manager, what advice would you give upstream management on how to approach internationalization in Emerging Markets?	RQ1a

APPENDIX E - DRAFT INTERVIEW GUIDE: LOCAL AGENT

Nr	Question	Justification
1	What country do you operate in?	Stratification
2	What is your business title and role?	Stratification
3	What business units do you distribute for MedTech firms?	Stratification
4	What is your perception of the main role of a distributor?	RQ1b
5	What is your perception of the role your company plays in assisting MedTech firms with expertise to enter your market?	RQ1b
6	What type of information do you supply to MedTech firms to assist them to enter your market?	RQ1b
7	What do you feel you contribute to MedTech firms' understanding of your market dynamics?	RQ1a
8	How do you think MedTech firms utilize the knowledge you share with them?	RQ1a
9	How do you experience this process of sharing knowledge with MedTech firms?	RQ1c
10	Do you think your knowledge is acted upon in a positive manner? I.e. How could it contribute to successful entry strategies for MedTech firms?	RQ1a
11	Do MedTech firms generally utilize local knowledge effectively or are do they revert to their own internal strategies?	RQ1a
12	Where MedTech firms fail in their strategy, what do you think is the major reason for that?	RQ1c
13	Where MedTech firms succeed in their strategy, what do you think is the major reason for that?	RQ1c
14	What advice would you give potential future MedTech firms who wishes to enter your market in terms of how they deal with local agents?	RQ1d
15	What suggestions can you give MedTech firms to have a more successful business model in Emerging Markets?	RQ1d

APPENDIX F – SIMPLIFIED CODEBOOK

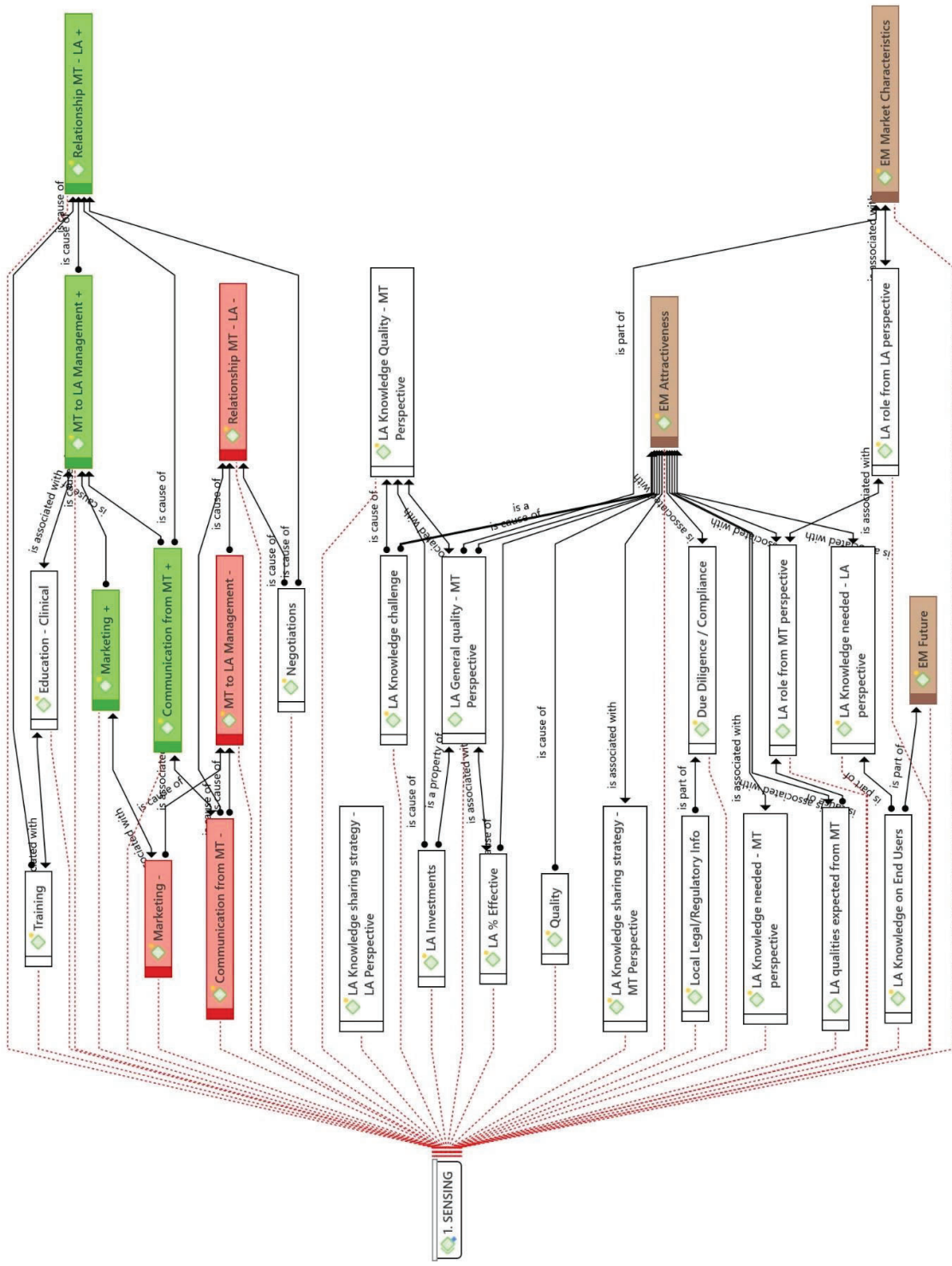
FIRST ORDER CODE	FIRST ORDER CATEGORY	THEME
EM Attractiveness	Emerging Markets	SENSING
EM Future		
EM Market Characteristics		
Due Diligence / Compliance	Legal/Compliance	
Local Legal/Regulatory Info		
Quality		
Communication from MT -	Interaction	
Communication from MT +		
Education - Clinical		
Marketing -		
Marketing +		
MT to LA Management -		
MT to LA Management +		
Negotiations		
Relationship MT - LA -		
Relationship MT - LA +		
Training	Knowledge Quality	
LA Knowledge challenge		
LA Knowledge on End Users		
LA Knowledge Quality - MT Perspective	Knowledge Sharing Strategy	
LA Knowledge needed - LA perspective		
LA Knowledge needed - MT perspective		
LA Knowledge sharing strategy - LA Perspective		
LA Knowledge sharing strategy - MT Perspective		
LA % Effective	LA Qualities	
LA General quality - MT Perspective		
LA Investments		
LA qualities expected from MT		
LA role from LA perspective		
LA role from MT perspective		

FIRST ORDER CODE	FIRST ORDER CATEGORY	THEME
LA risk of MT coming direct	Trust	SEIZING
Trust		
Trust - LA to MT -		
Trust - MT to LA -		
Trust - MT to LA +		
MT Internal authority	MT Bureaucracy	
MT Internal Disconnect		
MT Origin Cultures		
MT Resource allocation -		
MT Resource allocation +	MT/LA Disconnect	
LA Disconnect to MT		
MT EM Disconnect		
MT push other EM strategy		
Revenue expectation - LA perspective		
Revenue expectation - MT perspective	Strategy Fail	
Strategy fail		
Strategy LA -		
Strategy MT -		
Top down strategy -	Strategy Win	
Strategy LA +		
Strategy MT +		
Strategy win	Business Modeling	
Demo units		
Pricing issues		
Pricing Strategy		
Risk sharing	Knowledge Use	
MT Knowledge use -		
MT Knowledge use - LA perspective		
MT Knowledge use - MT perspective		
MT Knowledge use +		

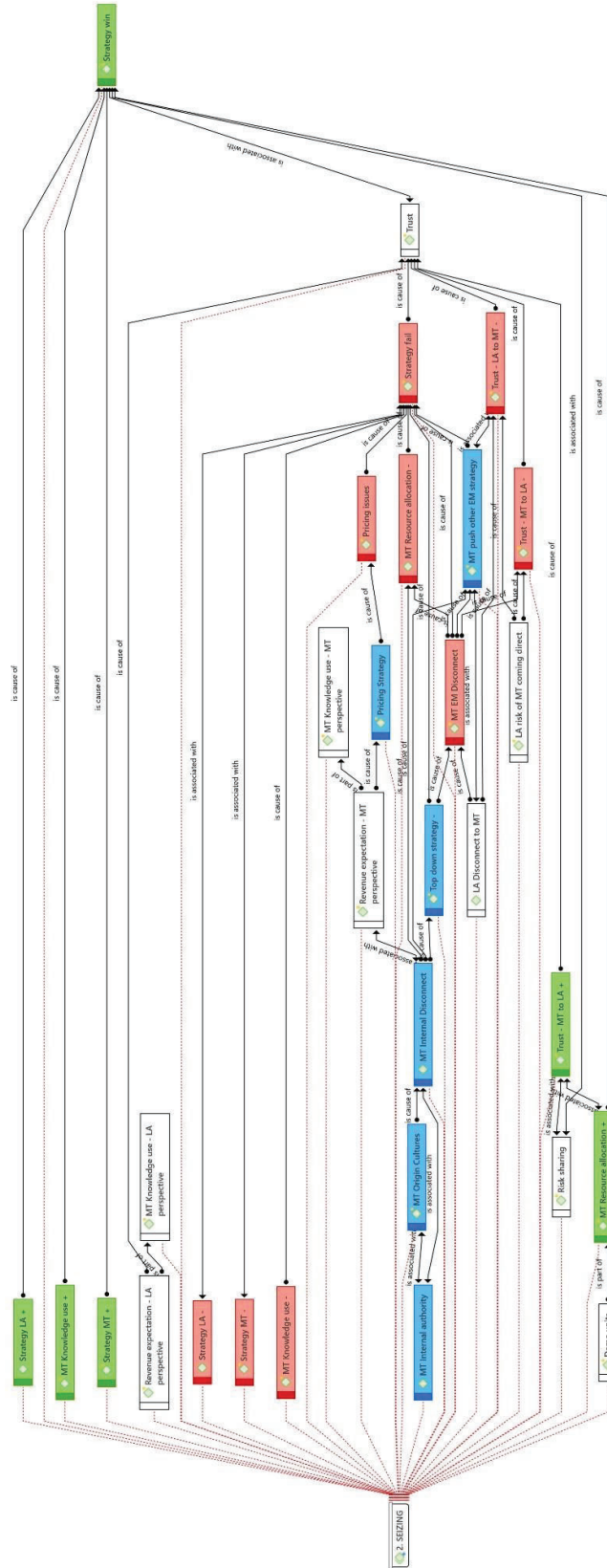
APPENDIX F – SIMPLIFIED CODEBOOK continued

FIRST ORDER CODE	FIRST ORDER CATEGORY	THEME
LA Advice to MT - Business Model	Advice LA to MT	TRANSFORMING
LA Advice to MT - Contractual aspects		
LA Advice to MT - EM Markets		
LA Advice to MT - Inclusivity		
LA Advice to MT - Marketing		
LA Advice to MT - Pricing		
LA Advice to MT - Products		
LA Advice to MT - Relationship		
LA Advice to MT - Strategy Advice		
LA Advice to MT - Training		
MT Advice to MT - EM Characteristics	Advice MT to MT	
MT Advice to MT - Management		
MT Advice to MT - Model		
MT Advice to MT - Portfolio		
MT Advice to MT - Pricing		
MT Advice to MT - Relationship		
MT Advice to MT - Strategy		
MT Advice to MT - Training		
MT Advice to LA - Drive	Advice MT to LA	
MT Advice to LA - Investing		
MT Advice to LA - Market Knowledge		
MT Advice to LA - Strategy		
MT Advice to LA - Understanding MT		

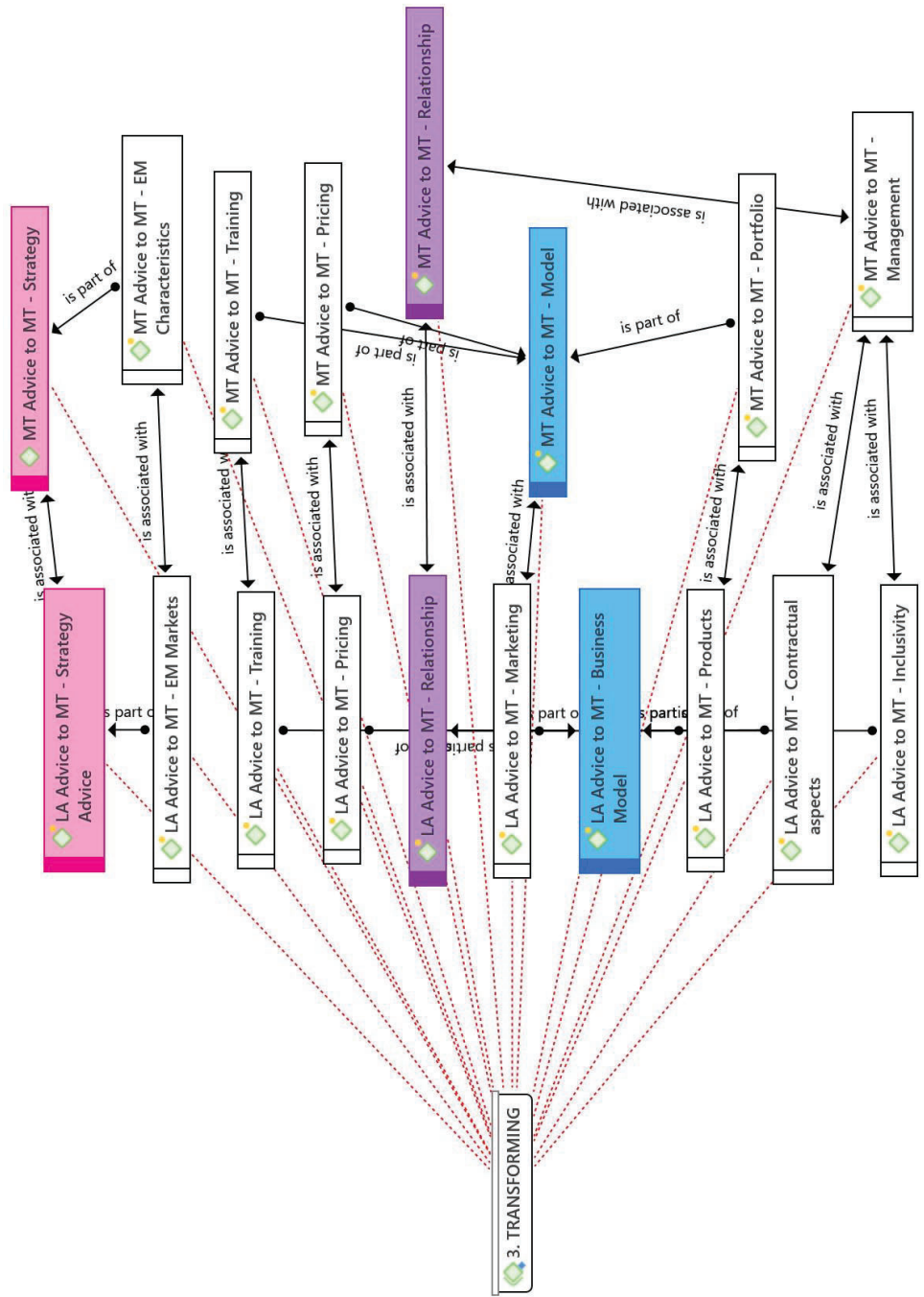
APPENDIX H – SENSING THEME NETWORK



APPENDIX I – SEIZING THEME NETWORK



APPENDIX J – TRANSFORMING THEME NETWORK



APPENDIX K – SOURCES OF MEDTECH INTERNAL DISCONNECT WITH IMPACT ON STRATEGY

