



Main Motivations for Internationalisation of Small High-Tech Businesses

Wilson Freddy Makaya

Horizons University Paris

E-mail: makaya782002@yahoo.fr

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ABSTRACT

The specific emphasis of research on business internationalization has been on its export performance and analysis of technologies within firms or industries. This study will examine how more incredible companies survive as young enterprises with poor income in worldwide marketplaces. The study investigates the idea that various forces are at work at different stages of internationalization and are highly boosted by the available technology and abilities to export. The participants for the interview was from multiple organizations. The study outlines the main motives and the factors that impact firm's internationalization. The motivational drivers' themes for internationalization that arose from the research can be indicated as the following: seek of growth, visibility, increasing the competitiveness and the effects of personal background and personal motivation towards internationalization. Furthermore, as a positive driver for internationalization, partners, arises from the result. The results proved the value of networks in internationalization, the networks were valued and seen as important factor in motivating and preventing obstacles in the process of internationalization. According to the findings, various barriers for internationalization were discovered based on the research, factors such as political instability, war, invasion, ban and restrictions, for example one M18 says, "Political instability, war, invasion, and restrictions, are the main factors facing firms today. It was the case in Afghanistan, Syria, Yemen, Libya, Burma, and now in Ukraine (e.g. high tech business in Russia have been banned and restricted, while in Ukraine firms have been relocated even stopped completely operating)". As factors challenging the international growth, funding and resources were themes that strongly arose in the research. A common need for both could be identified from the results. The lack of resources makes the internationalization operations more demanding for the companies, becoming a barrier for growth. The results indicated that the firms would be able to trade larger if they had more opportunities, for example, to hire more sales force and experts. The literature review mentioned external factors such as globalization of economy, specificity of an industry, localization of clusters, size of domestic market. The internal factors comprise of unique knowledge of managers, innovativeness, specialization of production, and flexibility of operation. In addition to that, there are many reasons why internationalization has not been approachable, and most of the reasons given are resources and management-based. A financial constraint and understanding might be one of the causes behind this (Chalmers, Mannetta & Sensini, 2020).

According to the research results, inbound marketing, revenue streams, environment and distances involved, and market growth are significant elements that impact a high-tech firm's selection of internationalization entry strategy when it moves from an established to developing industry. Furthermore, financial constraints, managerial transfers, and an absence of adequate market intelligence for global expansion are among the critical problems experienced by conceived firms when approaching a new economy. The firm may need to gather details on the latest industry's growth, competitiveness, expenditure incurred, and entry hurdles.

Keywords: Internationalization, motivation, small firms, entrepreneurs, challenges, high-technology businesses.

1. Introduction

Firms that obtain financial returns from industrial areas defined by groundbreaking and debauched technology progression are categorized as high-technology businesses (Rissanen, 2019). Sophistication in technology has led to major changes in organizations (Colbert, Yee, & George, 2016). In authenticity, sophisticated skill is used in several sectors that some corporate industries consider their distinct industrial subgroup, with a wide range of methods for the whole scope of commercial activity (Kahiya, 2020). Food exportation, commercial systems engineering, petroleum refining, and a diversity of other sectors are now subjugated by high-tech corporations. Internationalization influences groundbreaking medium enterprises, especially those built on a new technical foundation. High-tech initiatives are not confined to significant firms (Roberts & Muralidharan, 2020). Technology has disrupted and accelerated change in nearly every industry around the globe. Today, high-technology small and medium-sized enterprises (SMEs) are playing increasingly important roles in global markets. Such firms have been described as "born global" or "international new ventures," have a strong international focus from their inception (Bell et al. 2003; Coviello, 2006; Oviatt and McDougall 1994, 2005). These new international ventures that create new market niches using innovative technologies and new business models are specifically helpful for high-tech firms to use digitalized technologies to collect and analyze data about international markets and client feedback to speed up decision-making processes, because they depend on iterative, incremental product development cycles (Rasmussen & Tanev, 2015; Tanev, 2017). Small businesses have established an excellent niche in the market, and they are projected to be firmly rooted in the slightly elevated world for decades to come (Rissanen, 2019), such small firms are: Better up, Coupa software, UserTesting, etc. Some of these businesses include the small retail businesses that have grown to export their products by using wholesalers as

their intermediaries. A close interdependence distinguishes competitive strategies and increased demand for goods for these organizations. Such is done between internationalization, development, and creativity; activities typically have to be studied separately in separate research bodies.

The Global-Trade-surge Storm's resulted in a plethora of possibilities and problems. As more companies engage in international operations, they show characteristics never seen before. Valuable lessons may be acquired from the scientific investigation of internationalization to determine methodological limitations and create a new framework of inquiry to comprehend business entrance strategies. However, the reasons for crossing the border vary from one company to the next (De, 2021). While some businesses found the local market unsatisfactory, others explored internationalization due to economies of scale and potential (Lahiri, Mukherjee & Peng, 2020). If companies chose to stay at home and be content in the past, there have already been significant adjustments, and modifications in response to the growing organizations in various locations have thrived by adjusting to an interconnected and international economy.

A leadership approach, a favorable investment environment, a dedication to learning, and a culture of cooperation amongst enterprises and local authorities are four significant predictors discovered behind many great successes. Partnering with local executives' mindsets is critical for good growth; consequently, it may be claimed that psychological characteristics separate cosmopolitans with a broader perspective and worldwide relationships from natives trapped in one area (Liu, Kim & Yoo, 2019). There are undoubtedly significant and small businesses run by continental CEOs who are available to foreign contacts. In contrast, others headed by regional "revolutionaries" see areas of cooperation as alien and hazardous (Hagen, Zucchella & Ghauri, 2019). The commander's thinking decides much, and it may seem that whether or not a company's current answers to internationalization depend on whether the director has a universal and globally focused perspective.

Internationalization has indeed been described as a result of a company's key measurements and managerial perspectives. The expansion of transnational corporations into developing nations is a risky venture owing to turbulent economies, both in terms of economic and political volatility (Cahen, 2019). As a result, determining how a company may join the internationalization process becomes much more difficult. As a result, companies take various pathways when they join different sectors for numerous reasons. Some organizations choose to take a more progressive strategy, focusing on one market.

Additionally, unlike all the other emerging industries, high-tech initiatives are not confined to significant firms. Consequently, no satisfactory resolution has been reached on how enterprises internationalized. Also, there is a need to analyze what variables drove businesses' strategic decisions. That spurs growth.

Organizations involved in the high-tech industry include large enterprises and small startups. There are many differences between businesses. Conversely, their representatives, the head of a global semi attracter chips manufacturer or the administrator of a ten person's CAD/CAM well-founded, share one characteristic (Gao et al., 2021). They are aware that technology advancements deliver to the international economy and these possibilities. Pioneers and influential users of technological progress frequently receive welfares that permit them to push boundaries in a business before the modernization becomes more usually utilized and a more mutual representative (Manimala, Wasdani & Vijaygopal, 2019).

Powerful and influential companies are proficient at spotting the opportunities afforded by technical breakthroughs and cultivating organizational cultures that allow them to take advantage of them. Inbound marketing, revenue streams, environment and distances involved, and market growth are significant elements that impact a high-tech firm's selection of internationalization entrance strategy when it moves from an established to developing industry. Furthermore, financial constraints, managerial transfers, and an absence of adequate market intelligence for global expansion are among the critical problems experienced by conceived firms when approaching a new economy. Internationalization has helped high-tech businesses grow into more profitable companies to access more consumers outside the traditional markets.

The following are the study questions:

- What are the potential determinants of internationalization?
- What digital skills are required for small high tech businesses to undertake an internationalization strategy?

Objectives: To explore the internationalization of High-Tech businesses, especially their internationalization motives, challenges, and entry models, and to analyze the High-Tech internationalization process's development is the study's major objective. The study is important because it helps other entrepreneurs who want to internationalize to know the necessary motives, challenges, and entry models. The study chose American firms because America is the country that has led in terms of High tech firms' internationalization so far.

2 - Literature Review.

2.1. *Theoretical framework, or Conceptualizing High Tech business:*

The Uppsala Model was developed in 1977 by Johanson and Vahlne from the study of four Swedish manufacturing firms (Johanson & Jan-Erik, 2009). In their model they made an experiment that firms internationalize by following a series of establishment chain. It has been a prominent model in internationalization theory, however the context and market landscape during the pre-internet era was drastically different (Johanson & Jan Erik, 2009). The original authors offered a revised version in 2009 stating that size of network was now the vital indicator of uncertainty rather than psychic distance. The polished version has concentrated its focus into four main aspects that a firm should follow while going international: The knowledge of the market and commitment; commitment to making decision while entering the foreign market; establishment of a foreign sales subsidiary; and current activities of a firm that are divided into different stages and to adopt verity of change aspects.

The knowledge of the market and commitment assists the management of an emerging firm to succeed in its business enterprise to become internationalized. There are two types of knowledge of commitment: objective knowledge of an organization which can be transferred from one market to another market in the process of doing international business transaction or searching for international market. The second one is the experimental knowledge that one firm can gain through experience according to (Yamin, M., & Kurt, 2018).

A high-tech business can adopt the step-by-step growth of the organization towards the internationalization. This means the firm begins their international transaction in the market that are less psychic distance. Psychic distance represents certain factors which includes cultural difference, language difference, and political systems etc. This theory also explains that the business that do not have any exporting links or business transaction with other foreign market can begin exporting products to the market through an agent or they can enter the market through joint venture or other mode for the internationalization of their firms. In the last four decades, the Uppsala internationalization process model UIPM has been a widely cited and criticized theoretical framework in the literature (Coudounaris, 2018; 13 Gulanowski et al., 2018; Håkanson & Kappen, 2017). Primarily, the UIPM framework has played a fundamental role in describing the initial stages that firms undergo in their internationalization prospects (Neubert, 2015; Santangelo & Meyer, 2017). With the emergence of new business models like international new ventures (INV) (Knight & Liesch, 2016), born global firms (BGF) (Knight & Liesch, 2016), and like lean global startup (LGS) (Neubert, 2018a, 2018b), the literature examines the possibility of applying the UIPM on these new types of technology firms (Coviello et al., 2017; Vahlne & Johanson, 2017). For instance, BGFs are considered to be high-tech start-up firms (HSF)—often domiciled in small and open economies (SMOPEC)—with patent protected “new-to-the-world” products (Kriz & Welch, 2018). Their patent protection applies to the global market, and often, these firms prefer to enter the foreign market fast and early (Johanson & Vahlne, 2009) in efforts to leverage their technology using foreign-market penetration strategy as opposed to increasing their presence in individual foreign markets

2.2. Internationalization and High-Tech business:

Internationalization has been defined as the process through which organizations design products and services to meet consumer expectations in international markets. Sometimes this concept uses websites for easy translations. Organizations increase their productivity and sales by capturing markets out of the country through market branching. Acquiring new international markets is called internationalization (Cahen, 2019). The worldwide idea of internationalization has been aided by globalization. Global enterprises are connected through various networks through advanced finance and economic development. Businesses involved in international activities have good economic growth and general development. Additionally, these businesses use various techniques to reach their target consumer. Some choose to increase their influence domestically and focus their energy on distributing, while others are more active and make investments in international markets. The constructivist management approach has become increasingly important from a repudiation of the presumption that middle managers can help in the process of internationalization. That can be achieved using all these excitable conceptions of sufficient information, well-defined optimization algorithm, and intensively intelligent decision working to make, as hypotheses of bounded rationality and organizational preference come to lead executive education teaching materials (Cahen, 2019).

High-tech businesses are firms that secure revenue and growth from industrial areas characterized by fast and innovative changing technology. High-tech businesses are characterized by the use of high technologies which beat the other businesses, thus creating a competitive advantage. Enterprises tend to compete in many sectors, but the diversity of technology and other factors like supply chain management and information systems determine their success (Gao et al., 2021). High-tech businesses use the advantage of acquiring more advanced developmental strategies. Sophisticated technology is now used in many different businesses to create a growth advantage and enable faster development.

According to The Economics expert, the conviction that the digital revolution promises unbridled wealth and leaves traditional economic laws obsolete has gripped American administrators, entrepreneurs, and legislators with surprising speed (She, Yu & Wu, 2020).

2.3. Motives of Internationalization:

According to Pett et al. (2004), proactive SMEs seemingly view internationalization optimistically as an opportunity mainly as some internal advantages exists. This type of internal advantage might allow an SME to successfully utilize a new international market and enable to operate from a position of strength. The internal advantage might arise from proprietary market knowledge, skills and know-how, technology, or a successfully differentiated and unique product (Pett et al. 2004.) Hollensen (2017), presents a framework for proactive and reactive motives for internationalization. Proactive motives represent stimuli to attempt strategy change, based on the firm’s interest in exploiting unique competences (e.g. a special technological knowledge) or market possibilities. The proactive motives have been classified as profit and growth goals refer to the desire for short-term profit, which is especially important for SMEs that are at the stage of an initial interest in exporting. The desire to grow may also be of importance in a firm’s decision to start exporting. Managerial urge reflects the desire, drive, and enthusiasm of management towards global marketing activities. This enthusiasm can exist simply because managers like to be part of a firm that operates internationally. Technology competence/unique product include the fact that many companies believe that their products or services are unique, even though this may not be the case in the international market. Reactive motives indicate that the firm reacts to pressures or threats in its home market or in foreign markets and adjusts passively to them by changing its activities over time. A prime form of reactive motivation is reaction to competitive pressures. A company may fear losing domestic market share to competing firms that have benefited from economies of scale gained by global marketing activities. Also, a company may be pushed into exporting, because of a small and saturated home market potential. Another motivation for internationalization is overproduction/excess capacity.

2.4. Challenges of internationalization:

According to López González & Sorescu (2019), SMEs face many challenges in internationalization, both internal and external. Internal challenges relate to factors such as the lack of scale or experience, low productivity and lagging adoption of technology. External challenges relate to the environment companies encounter when getting products to foreign markets. (López González & Sorescu 2019.) Leonidou (2004) classified export barriers as internal, barriers associated with organizational resources/capabilities and company approach to export business, and external, barriers stemming from the home and host environment within which the firm operates. (Leonidou 2004.) According to Karagozoglu & Lindell (1998), the main barriers of internationalization keep inside the lack of managerial knowledge and competence, and the importance of personal factors like international business skills and perceptions of the environment (Winch & Bianchi 2006). According to Czinkota & Ronkainen (2010), internationalizing companies need to actively adapt to the changing global environment to succeed. Internationalizing companies must encounter distribution systems, pricing, and address ethical issues such as legal systems related to monitoring pollution, maintaining a safe work environment, copying of technology or trademarks, and dealing with demands for bribes. (Czinkota & Ronkainen 2010). The incremental character of internationalization (according to the Uppsala model) is largely attributed to a lack of market information. This lack of market information will strongly influence the manager's perceived psychic distance from the home country. Political risks result from intervention by home and host country governments. The risks keep inside factors such as foreign government restrictions, national export policy, foreign exchange controls imposed by host governments that limit the opportunities for foreign customers to make payment and lack of governmental assistance in overcoming export barriers. (Hollensen 2017).

3 – Methodology:

Qualitative approach via interviews questions on multiple firms was used to collect data. Qualitative approach asks open ended questions to most participants, open-ended questions, closed-ended questions, and Likert scale questions have been used to help answer the internationalization process of high tech business. This methodology is effective because it will help to gain deeper understanding of internationalization of high-technology businesses and other small businesses trying to enter international market. It also provides accurate data for analysis. The study participants are from 20 firms.

3.1 - Data collection:

Data is collected through interviews, where the discussions are mainly carried out on managers because they tend to have more information about the organizations. Startup businesses are also included in the study to investigate the entry of high-tech companies to internationalization. The interview was conducted online via email address and zoom, and the data were categorized and analyzed using Excel, google drive, and the author used coding process to break the data into segment, and developed a coding structure to simplify the analysis of the data and then assigned the codes for each themes of the study.

The participants were allowed to answer the questions at their free time and where they felt more comfortable. Data was collected through an interview guide. Twenty participants were subjected to the interview process. There are considerable benefits in doing the interview, which include allowing more understanding of that process and how to capture the given context of the research, helping to clarify some terms and the flow of the question. Based on the interview and feedback received from the participants, changes were made to the length and arrangement of the questions. The revised and updated guide to the interview was composed of open-ended questions framed to elicit the participant's understanding of internationalization. The interviews were conducted to remove any hassle for the participants. That involves interviewing in the participants' comfort, although they all agreed to participate in the interviews at their workplaces, and should be willingly. The questions created in the questionnaire will help to gather data related to the main reason for the research and explain the internationalization process of High tech business.

They were also assured that the interviews would be anonymous, not shared with anybody. The collected information would be subjected to confidentiality and solely used in an anonymized format for academic research. The answers to all questions supposed to last between 25 and 45 minutes.

3.2 – Participants:

Twenty (20) organizations were chosen to complete the research, and one manager from each organization were selected for the interviews, making twenty managers, 16 managers received an emails as part of the interview, and 4 managers was interviewed via zoom. Among the twenty organizations, fifteen were already internationalized. Five were in the process of internationalization. The following are some of the questions asked.

1 - What is your name, age, occupation, gender, and marital status?
2 – What was the motivation ?
3 – What entry mode where used?
4 – What kind of challenges faced?
5 – Would you describe the speed of internationalization?
6 – Which kind of strategies was utilized ?
7 – How do you describe the internationalization process?
8 – Is your organization still growing or has growth stalled?

Table 1: Source: Author, December 2021

3.3 - Data analysis:

The data were analyzed using thematic analysis. It was analyzed to determine whether the business had already internationalized or was in the internationalization process. The theme patterns of the respondents' responses were considered, and a qualitative inference was made from the same.

3.4 Credibility and Authenticity:

Several actions were taken to guarantee the credibility of this study. First, transcripts were shared with participants as a member check to confirm that their experience had been captured in the research. Member check is considered one of the most important ways to enhance the credibility of a study. Second, detailed anonymized quotes from participants were used to bolster the themes and ensure that any stance of the research was not subjugated to participants' voices. Third, an account of procedures, methods, and decision points in doing the study was captured as an 'audit trail.' Fourth, the study's credibility was bolstered by providing information about the analysis's different clustered and grouped themes. This information exhibits the various stages for data analysis used to improve the study's traceability and trustworthiness. Additionally, detailed descriptions of the interview quotes strengthen every point.

4 – Findings

4-1 Brief description of the selected businesses:

Twenty (20) businesses were chosen, fifteen (15) were already international with the following criteria: All businesses were founded after the year 2000, they must have had internationalized until seven (7) years after the inception to at least five (5) countries, with approximately 25% or more foreign sales and five (5) was in the process, and they must belong to either high tech or low tech businesses.

4-2 Demographic profile of the participants:

When it comes to the demographic profile of the respondents, they were in total 20 managers, 10 was male and 10 females, the age of the participants was between 30-60 years. On the marital status, 8 participants were married, 3 were divorced, 7 of them was single, and 2 were widow among participants. Moving to education level (university & college), all 20 received a formal education. All firms were private sectors, and the total number of firms was 20 from the United States. The number of employees in these small businesses is between 3 to 100, The businesses are involved in high-technology.

Name of the managers replaced by code: M	Marital status	Gender	Age	Occupation	Education Level
M1	married	male	37	manager	Master degree
M2	married	male	50	manager	Master degree
M3	single	male	60	manager	Doctorate
M4	single	female	39	manager	Master degree
M5	widow	female	49	manager	Bachelor
M6	married	female	48	manager	Master degree
M7	widow	female	52	manager	BSc
M8	married	female	54	manager	PhD
M9	single	male	53	manager	Master degree
M10	single	female	30	manager	Master degree
M11	divorced	male	44	manager	BSc
M12	divorced	female	47	manager	Master degree
M13	single	male	43	manager	Master degree
M14	divorced	female	49	manager	Master degree
M15	single	female	41	manager	Master degree
M16	married	male	59	manager	Doctorate
M17	married	female	38	manager	Master degree
M18	married	male	60	manager	DBA
M19	single	male	40	manager	BSc
M20	married	male	43	manager	Master degree

Table 2: Demographic profile of the participants, Source: Author, December 2021.

Questions overview: According to the respondent's answers, data from the already internationalized businesses showed that organizations are aware of internationalization and its benefits. "Most managers defined internationalization in different contexts, including the relationship to small businesses, large businesses, and startup businesses". And most of them willingly mentioned their occupation, gender, marital status, age, and education level, ".

- The second question related to the motives of internationalization, all the participants mentioned “*Profit & Growth*” which is also supported by several theories such as, Chen, (2011); Fuentes-Lombardo & Vallejo-Martos, (2017).

M2, M17, M4, & M11, added, “*For sure money, also visibility, and being well known around the world, also to make the name*”

In addition to that, M17 states, “*Our main motives, which is also our goal and strategy is to **conquer the world** by our services or product” or “to take control or possession of the world market”. She added “many company such as, Coca-Cola, Mc Donald they have managed to conquer the world by their products”.*

M12 mentioned that their background has had an effect to the internationalization process. In addition, M12 mentioned their competitive product. When they develop products, they develop them in such a way that they are universal and easily localized.

“My own background, basically I am a curious person, I have traveled around the world, and then of course we have a product that has use anywhere and is genuinely useful to people. Of course, you want to share that benefit.”

While M3 & M17 says “You have to go to the international market. Our goal is to conquer the world...we are looking for a large market. The target must be set high if you are going to succeed.”

M11 mentioned competitiveness as motive of internationalization, he sees the competitiveness of the firm high.

“Our level of know-how, competence and quality is high, through these we are competitive.”

- Moving to the third question, about the entry model, most of the participants mentioned the basic entry model for internationalization such as, “*Exporting, networking, relationship, franchising, etc.*”

Concerning networks, M9 says that “*The businesses has gained some contacting from other countries for example through social media*”

But M2 states, “*Network and partner were valued and seen as important ways entering new market*”.

M3, states, “*Technology is best way of entering new market*”, M10, M11, & M4, agreed that. “*Technology is better approach for internationalization because the technology allows many businesses to come together even without physical interaction and transactions*”, meanwhile, M9 & M20, argues that, “*Old technology could be a problem or challenging for internationalization*”, similar theories was developed by Ferraris et al., (2019).

They added, “*Technology is a critical factor in internationalization*”. M9 continued saying that “*the internationalization entry also depends on psychic and geographical distance effect*” M1 argued that, “*psychic distance and geographical distance does not impact that much because of the advancement of technology*

- When it comes to fourth question about challenges faced, M1 mentioned funding as a challenge. M1 continued that the biggest challenge to the firm growth is a lack of funding, i.e. too little funding. “*By far the biggest challenge we have here is continuously funding. We are small, and young so far we have had a hard time getting investors to understand our business model and that logic, which enables us at some point, be able to scale this business big*”

“There are also challenges in building the distribution network and finding the right partners” says M5

“...The challenges, of course, are in a way building the distribution network, for example, we have 3,000 companies linked across Europe through the Europe Enterprises Network, and there we have the partner searches. Building a network is still in its infancy, yes, it is a challenge...there are many actors but where to find the right partners – that kind of strategic partners who really want to go together to invest in it, they are certainly needed more.” M5

M12 mentioned, “*The lack of resource as a challenge, it makes the internationalization operations more demanding for the companies, becoming a barrier for growth*”. While M5 and M7 mentioned another factor, “*That companies lack different administrative paradigms for doing Internet Corporation. Export operations are often sporadic, and there is an absence of a clear understanding of the link between internationalization, collaboration, and development*”.

M18 says, “*Political instability, war, invasion, and restrictions, are the main factors facing firms today. It was the case in Afghanistan, Syria, Yemen, Libya, Burma, and now in Ukraine (e.g. high tech business in Russia have been banned and restricted, while in Ukraine firms have been relocated even stopped completely operating)*”

- For instance, regarding question fifth about the speed of internationalization of high tech businesses; M3, M15, M20 & M10 states, “*The speed of the internationalization of high tech businesses depend on the quality of the institution, and the reputation of the home country*”, some studies made by Hittet al (2016) back up the thoughts mentioned by the participants. M1, M13, & M18, “*Emphasizes the importance of social networks respectively the networking ability of the entrepreneur as driver for speed of internationalization*”, Musteen, Datta & Butts (2014); and Ciravegna, Lopez, & Kundu (2014). Supported the argument made by the respondents.

M9, argues that, “*The fast and early internationalization of high tech business from developed economies are not the same and not necessarily transferable to emerging economies*”.

M15 says....” *The speed and the pace of internationalization depends on the firms’ ability to learn about new foreign markets and to adapt its FSA to the respective market needs. Due to advances in communication and transportation technologies, increasing globalization (e.g. free trade agreements) and*

the emergence of global social networks (for example with clients and suppliers), even traditional and conservative firms might internationalize faster and earlier”.

...”*New communication technology, cheaper transportation, logistics, and the existence of global social networks can speed up the internationalization of small high tech businesses process”*, mentioned by M1.

He added, *“There are internal characteristics, which drive internationalization, like for example, international experience, entrepreneurial and market orientation, innovativeness, the existence of a global vision, agility, adaptability, high quality and profitable products and services, or strong marketing and sales capabilities, these drivers are certainly very important”.*

- The sixth question about the strategies used, *“all of them mention the same strategies which are for example, extension to less competitive primary markets, segmentation of markets, etc.”*

M10 says, *“Our strategy is to create a unique product and develop special application”.* For instance, *“We are currently developing our own mobile application, also considering new distribution platforms and the language versions of the products are expanding continuously”.*

M10 concluded *“Our strategy and goal is to have our unique product translated into to more than 900 languages”*

M6 states, *“We developed a unique international competence trough an online presence, which helped us to internationalize”.*

She added, *“the possession of international digital competence was crucial”* M6

- Regarding question seventh about the process of internationalization. M2, M16, M19, M12, and M8 *“widely acknowledge the internationalization process notion”.* However, M10 states that, *“the basic concept needs further refinement”.* On one side of the views, when companies, such as major corporations, have excess funds, they are more likely to expand their internationalization efforts. On the other hand, it was discovered that if economic circumstances are steady and uniform, valuable market information might be obtained by means other than expertise (Schepsisi, 2020).

M9 says, *“In order to commence internationalization so called change agents, that is someone or something from inside or outside of the organizations must lunch the process and help implement”.* Similar thoughts were mentioned by Hollensen (2017).

- When discussing question eight about the growth of the businesses, M14 mentioned that *“Covid-19 being a game changer, before the Covid-19 epidemic, the growth forecast seemed good, but now the pandemic has made our growth faster and has made us rich”* M14 concluded by saying, *“Look what happen to Zoom company, before the pandemic it was not well known and rich, because of the Covid-19, Zoom meeting is used almost everywhere with a lot of profit”*

M1& M13 states, *“Growth goes together with future goals”.* Eventually, the businesses have to set future goals that will bring more growth, concerning the goals for growth of the businesses, the M13 says that *“the has multiple goals”.* One of the goal is to *“have 75 million users/monthly subscribers globally for our products”*

5. – Discussion and Interpretation of the Findings:

The results of the research were satisfactory because the researcher found the motives leading small high- tech businesses to internationalization also identified factors of the early internationalization of small high-tech businesses. Furthermore, answers were given to the two questions raised by the article. Moreover, most of the participants responded fully to the interview questions.

- The results of the research indicate that the main motives of an internationalization of small high tech businesses are “growth and profit” However, according to the findings the researcher discovered new motives, one of the participants mentioned about *“Our main motives, which is also our goal and strategy is to **conquer the world** by our services or product”* or *“to take control or possession of the world market”.* Another participants says that: *“Our small high-tech businesses have grown up from start up to a niche market and aims to **“revolutionize”** small high- tech businesses”*, and *“our mission is to create standardization of a product”* The results demonstrate that businesses embarking on internationalization are characterized by a common need for financing and resources. Conversely, the motivational drivers’ themes for internationalization that arose from the research can be indicated as the following: seek of growth, visibility, increasing the competitiveness and the effects of personal background and personal motivation towards internationalization. Furthermore, as a positive driver for internationalization, partners, arises from the result. The results proved the value of networks in internationalization, the networks were valued and seen as important factor in motivating and preventing obstacles in the process of internationalization. The interviewed businesses had created valuable international networks and local contacts in their target markets that helped them in their process of reaching the international markets. Networks and partners acted as a key element in getting into the foreign target markets.

Based on the participant’s answers, various motives for internationalization were discovered, growth was one of the motivation mentioned by the participants, a motivation to grow to gain profit, a primary function for all businesses. One main reason for internationalization is gaining growth from foreign markets. The findings indicate that the businesses representatives saw the growth potential in the foreign markets. The market growth was a factor of motivation, for all of the participants. When analyzing the reasons behind the company growth, another determined factor was the grown awareness of the company. In most case firms at the starting point for the business was being or becoming international, making the motivation to grow

internationally a natural part of the business development. Competitiveness and market potential another driver behind the motivation towards internationalization is the competitiveness and market potential of the product, as R&D lead to the development of firm-specific assets that are difficult for competitors to follow and support the achievement of the competitive advantage. However, the findings showed that small high tech businesses frequently started early internationalization in order to survive grow and succeed; the finding also proved that small high tech businesses were driven to internationalize due to the accelerated pace of worldwide technological innovation, leading to shortened life cycles which coupled with the high costs of research and development (R&D) effectively precludes exclusive domestic orientation.

In most cases, the business idea of the SMEs is originally a global concept. In addition, based on the findings, the firm representatives believe in the companies' competitiveness and their innovative products. The competitiveness is seen high mainly because of the competitive product. The results indicated that the products are developed in such a way that they are universal and easily localized and translated into many languages. The competitiveness entails competitive advantage for the companies. The results indicate that the firms believe in the potential of the target markets. Gaining new competence in the business, and possessing international digital competence has resonated positively towards internationalization. New competence has brought along new angles, new perspectives, new goals, and new knowledge. A great importance lies in competencies as they can become the actual determination of success in the SME internationalization. The results demonstrate that new competencies are yet needed by the businesses. The competencies are crucial for enabling the growth and in upgrading the overall internationalization knowledge.

- According to the findings, various barriers for internationalization were discovered based on the research, factors such as political instability, war, invasion, ban and restrictions, for example one M18 says, *“Political instability, war, invasion, and restrictions, are the main factors facing firms today. It was the case in Afghanistan, Syria, Yemen, Libya, Burma, and now in Ukraine (e.g. high tech business in Russia have been banned and restricted, while in Ukraine firms have been relocated even stopped completely operating)”*. As factors challenging the international growth, funding and resources were themes that strongly arose in the research. A common need for both could be identified from the results. The lack of resources makes the internationalization operations more demanding for the companies, becoming a barrier for growth. The results indicated that the firms would be able to trade larger if they had more opportunities, for example, to hire more sales force and experts. The literature review mentioned external factors such as globalization of economy, specificity of an industry, localization of clusters, size of domestic market. The internal factors comprise of unique knowledge of managers, innovativeness, specialization of production, and flexibility of operation. In addition to that, there are many reasons why internationalization has not been approachable, and most of the reasons given are resources and management-based. A financial constraint and understanding might be one of the causes behind this (Chalmers, Mannetta & Sensini, 2020).
- According to the participants, internationalization process of small high tech businesses greatly depends on psychic and geographical distance effects. However, the researcher come to the conclusion that the problem of psychic and geographical distance effects changes a little when firms enter distant foreign markets, namely in this case psychic and geographical distance hamper the entry of firms to foreign market. On the other hand, the entry was facilitated by factors shortening the distance such as: distance bridging (e.g. the recruitment of talented workers, the choice of appropriate entry mode, networks, previous experiences), also distance compressing (e.g. concerning macro-economic changes, such as social movements, institutional changes, globalization and technological development), (Owusu, & Servais, 2019).
- The findings also confirmed the factors previously identified in the literature review as influencing a small high-tech firm's internationalization. The findings showed the niche strategy and the network relationships are the key drivers for internationalization and the scope of international expansion. The experimental knowledge and international commitment of an entrepreneur, team competence and organizational flexibility of a firm to have a significant influence on small high tech businesses internationalization.

This study raises two important questions about the, what are the potential determinants of internationalization? And what digital skills are required for small high tech businesses to undertake an internationalization strategy? According to the study findings, the researcher was able to answer the two questions.

- 1- **What are the potential determinants of internationalization?** The study showed different determinants of internationalization such as development of new technologies, demand for specialized products and emergence of niche markets, development of SMEs on the global market, quality improvement and reduction in transport costs. Many authors mentioned similar determinants to internationalization, for example Hollesen (2017) mentioned about progress in production and processing technologies, creating global network. While Knight Cavusgil (1996) mentioned determinant such as development of communication, growing niche of market. Nelly (2019), mentioned internal and external determinants for internationalization. The findings confirmed the determinants previously identified in the literature review as influencing a firm's internationalization. In addition, several new factors were identified. The findings showed that many factors were influential, but the following were found to have greatest impact: The international vision of the founders/managers/CEOs, the identification of specific international opportunities, the possession of international contact and sales leads, and the desire of the management team to be international market leaders, as mentioned above the desire, the goal and the strategy to conquer or possess international market. The above internationalization determinants /factors of high-tech businesses, confirmed in numerous studies conducted still influence internationalization of small high-tech businesses
- 2- **What digital skills are required for small high-tech businesses to undertake an internationalization strategy?** The findings showed that the possession of IDC (International Digital Competence) enables high tech firms to expand internationally through an online presence. In emerging highly interconnected and collaborative form of value creation, the capacity to connect better to an integrate network will be

important to stay competitive. In order to enable thorough explanation of the internationalization of small high tech businesses these two keys trends are important: 1) Globalization of markets; which is associated with increasing homogenization of buyer preferences around the world, international networks, specialization and the development of the niche markets. 2) The technological advances in production, transportation information and communication technologies. In particular changes in production technologies and better access to and lower costs of transportation and communication have driven the emergency oh high tech businesses. According to the findings, small high tech businesses' internationalization strategy relies heavily on digital technologies to exchange information in a real-time fashion and quickly adapt to customer needs using fewer expenses. Digitalization of the value chain activities is essential for businesses that intend to internationalize. *"Digitalization is the heart of everything"* says M3, most of all, *"without digitalization our company would not have existed, we could not succeed 20 years ago because there would not have been an online infrastructure as it is now, the internet"*. He continued, the rapid pace of digitalization made it more urgent than ever for companies to find fast solutions to problems using their available resources. While the processes and resources for building business strategies, augmented by skilled leadership, have often been beacons of success during times of disruptions or transformations, the extent of integrating and using technology represents the stark differentiating role between success and failure. Digitalization of our value chain activities helped us to save time and money as well. M1 states, *"We have to be inventive in how we promote ourselves with lesser resources, having a 100% digital product, I would say that online is the most economical way to distribute and to sell"*. And he concluded, *"We use social media platforms not only to promote ourselves but to collect information on our target markets, market trends, and our competitors' offerings on those particular markets. Social media platforms and the internet, in general, represent a big source of data when it comes to our challenges regarding the strategy"*. The study showed that digitalizing business functions could involve redesigning a firm's business model in a way that enables new opportunities for internationalizing, creating value, and developing customer relationships. Technology, in particular, is a component in a more homogeneous corporate environment. The expansion of the internet has shortened the boundaries among nations and accelerated performance daily. Countries, therefore, can reach more consumers, producers, and different types of raw materials (Rantanen, n.d.). The global corporation runs against significant roadblocks to patriotism and the country system pursuing these tasks. Another critical point is that numerous scholars say that the globe is moving towards homogeneity.

- To sum up, the results of the research can be to exploit in finding ways to motivate small high-tech businesses to consider expanding to global markets by learning about the motivation factors and identifying specific challenges of internationalization. The results may serve in giving ideas for the development of internationalization services offered for businesses and in developing content for new regional projects aiming to support small high-tech businesses in internationalization. Moreover, high-tech businesses that enter international market must simultaneously innovate their product and service offering to adapt it to the needs of their new international customers that likely differs from those of venture current domestic and international customers.

6 – Conclusion:

This last chapter will present the conclusions and recommendation and study limitations and suggestions for further research.

6.1. Managerial Implications:

The study findings suggest that the initial internationalization of high-tech firms may not necessarily follow a systematic and particular pattern or have the same motives, but rather a more complex path due to the nature of their products and adopted technologies. The managers should be ambitious and identify strategic networks for these firms and manage the process of internationalization. The advanced technologies may facilitate this and ensure profitability. The managerial implications of this study are numerous. The managers must realize that there are various factors to consider before expanding from a developed market to an emerging market. The key factors include the culture and geographical distance, political, war, and market size. Beside the environmental forces to consider, there is also a connection between a firm's business model and the entry mode. Building developing and managing strategic partnerships/business networks over time is key. The researcher noticed that managers are widely encouraged to effectively integrate their organizational capacities and skills, strategically position themselves as market participants and actively drive their own ongoing digital transformation-

6.2 Study contribution:

The study can guide and help new small high tech businesses with their internationalization motives. The one looking for a business opportunity may take advantage of this study by understanding that despite the firm's small size and lack of resource, rapid internationalization may be pursued. More importantly managers, entrepreneurs can now understand the relevant of these factors that highly influence internationalization and how to take advantage of them, improving their business internationalization path. It further opens opportunities for diversification in the security sector. With the financial sector ever on intensification, there is a need for continued information updates about market dynamics. That is an area that the study highlights in making the corporate world more appealing. All these are geared towards making the globalization of technology more effective across the globe. The findings of this study contribute to the field of high-tech business because researcher will gain more understanding of motives for internationalization. The study will also contribute to managerial practice, because they will help managers to increase their efficiency of internationalization market development.

6.3 - Study limitation and Recommendations:

Although there were challenges in analyzing the type of organizations to utilize in the research, most of the chosen organizations showed full participation. The managers gave direct answers to every question asked. However, the fact that the study is based on limited number of firms hinders the possible replication of the influence developed. As all small high-tech business under study are Americans, a direct influence-based on country specific variables may be expected and the results applicability may be very particular to the American market. Further research might look at the timelines for high-tech businesses internationalization procedures. A quantitative methodological approach requires additional study to investigate relationships among operating system organizations' business strategies and preferred entry options. The research might be expanded to include other growing global nations and new commercial prospects for high-tech enterprises in international marketplaces, particularly given the shifting characteristics of multinational companies in the aftermath of the current pandemic. The development of innovation enables adoption and implementation in aspects of the digital revolution, which encourages internationalization via digitally enhanced understanding, internet backbone formation, and choice procedures. The study was limited to twenty small high-tech businesses located in the United States, the researcher suggested more studies to be carried in Asia, Middle east, Europe, and Sub Saharan countries. The researchers concluded that the conceived international businesses still experience difficulty entering new and unknown global economies.

7 – References:

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