

# UNIVERSITY OF TWENTE.

# Faculty of Behavioral, Management and Social Sciences

Thriving Across Borders: a Qualitative Analysis on the Relationship between Entrepreneurial Traits, Organizational Characteristics, and the External Environment in Born Global Success

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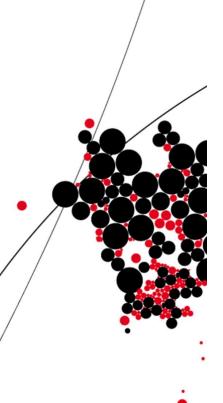
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#### **Abstract**

**Aim** – The increased attention and lack of research toward small companies entering international markets since the early years of their foundation (i.e., Born Globals, BGs) has stimulated the call for exploring this topic further. This study thus investigates the variables that enable BGs to enter new markets and remain successful, despite being small companies with limited finances and international market knowledge.

**Method** – To gather deep insights on the variables leading these BGs to success, 16 semi-structured interviews were conducted with founders of start-ups from different business domains such as tech, cleantech and healthcare. The data was analyzed following the grounded theory methodology.

**Findings** – This study reveals that specific entrepreneurial elements are needed to succeed in the international arena and help the team growing. Specifically, the founder turned out to be a key element in the first phases of the start-up, by setting, and adjusting to, the right strategies. In addition, the founder's previous work experience was crucial in acquiring the necessary market knowledge required to facilitate BG's growth. Moreover, the innovativeness of BG's value proposition and the high quality of the product/services sold demonstrated to be determinant traits for the firm's success. Furthermore, the complementarity of the entrepreneurial team and the role of external institutions in fostering the international growth of the start-up proved to be a key element as well.

Theoretical Implications – Through this research, the current knowledge on BGs is extended in two ways. First, in light of the results of this thesis, it is provided a multi-level framework with individual, organizational and institutional factors to offer a more comprehensive overview of the drivers leading BGs to perform in international markets. Second, the current study reveals the emergence of new variables that had not been analyzed by the literature such as the role of intellectual properties and the complementarity in team's composition. In addition, some variables that had received little attention in the past, such as the founder's work experience and government financial help, were key traits in driving BG to success.

**Practical Implications** – Start-up founders aiming at projecting their business into the international domain may consider the factors on which this study has focused upon. Furthermore, given the lack of financial resources these start-ups have, external entities such as governments and start-up accelerators can provide support to BGs through grants, networking, and crowdfunding campaigns.

**Keywords** – Born Global, Entrepreneurial Traits, Value Proposition, Innovation, Dynamic Capabilities, Network, Financial Aids

#### **Preface**

My academic career comes to an end with this thesis. Having the opportunity to have attended the Master's in Business Administration at the University of Twente allowed me to gain a lot of insights on topics concerning Innovation, Entrepreneurship and Strategic Vision. In addition to that, given my interest in the management of activities that exceed the national threshold and want to grow abroad, the desire to focus on start-ups that want to grow abroad in the first years of their activity has derived.

Achieving such a goal was facilitated by my supervisors, which were always available to me. Therefore, I want to thank Dr. Igors Skute for being interested in this project from the very beginning, giving me remarkable academic advice on how to improve the elaborate as new sections were added. I would also like Dr. Lara Carminati for her availability and to offer me relevant feedback throughout the various sections.

Lastly, I would like to thank all the friends who accompanied me on this journey abroad, especially Matteo, Tommaso, and Riccardo. A special greeting also goes to my family and to all the friends in Italy who supported me during this final phase of my studies.

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#### 1. Introduction

In the last 30 years, the third wave of globalization has brought with it new technological advances such as the Internet and the Personal Computer, facilitating instant exchange of information. These technological discoveries have facilitated the convergence of markets, with an exponential increase in the number of companies engaged in the distribution of goods and services across borders (Rodrik, 2018). More recently, the development of social networks, mobile apps, and cloud computing have made it even easier for small firms to reach far flung customers with the likelihood to increase their turnover (Verhoef et al., 2021). Consequently, thanks to virtual businesses, small firms and even start-ups may now pay very little attention to the location of their customers, whether within the national sphere or not.

In this respect, along with the third wave of globalization, a new category of small companies dealing with international markets has emerged. These companies are seen as a sub-category of start-ups and are referred to as Born Globals (BG), since their peculiarity is to enter international markets within a few years of their foundation (Kraus et al., 2017). In the past, companies that were labelled as BG were mostly from small nations, and because of their need to cover costs, they had to expand over larger nations to look for more customers and satisfy a market need felt by that foreigner market. However, with the possibility of having live economic relationships with businesses and customers also located in other continents, the BGs phenomenon has exploded even in countries with a large domestic market (Knight and Cavusgil, 2015).

By considering BG's early success on the international arena, the focus on factors leading to BGs' fast internationalization has gained increasing attention among scholars. In today's era of digital innovation, Hennart et al., (2021) underscored that BGs are more inclined to leverage new technologies such as AI and customized e-commerce, indicating a greater propensity toward technological adoption and adaptation. The role of technology in driving international expansion, together with the ability of the entrepreneur to project the company's operations internationally, allow the company to constantly promoting innovation and generating higher revenue. To this extent, the United Nation has identified both innovation and economic growth as essential pillars within the Sustainable Development Goals agenda for 2030. Still about innovation, Knight and Cavusgil (2015) have focused on BG's innovative propensity and how it is a key variable in deriving positive results from internationalization, compared to firm that do not have innovative propensity. Moreover, unlike traditional start-ups focusing on local market with a gradual expansion to countries that are culturally and geographically close, BGs have to deal with a multitude of critical strategic choices at the outset. These choices consist in choosing country to enter and the entry mode together with understanding the needs of an international clientele, all while considering limited financial and knowledge resources in the initial phase. From an institutional point of view, policymakers have fostered the need for policies favoring the export growth of BGs, with their impacting role on job creation and economic growth (Ferguson et al., 2019).

However, those continuing technological transformation have also increased the alertness of start-ups' founders to the fast-changing VUCA world (Troise et al., 2022). The VUCA acronym, made up by volatility,

uncertainty, complexity, and ambiguity, has to be matched with the founders' abilities to sense and seize business opportunities, in order to increase the likelihood of their businesses to survive even abroad. If the start-up does not adopt strategies to interface with the scenarios it may find abroad, the likelihood of not being able to grow as established and failing may be high. Hence, the risk of a business not surviving when entering an international ecosystem is high, especially for start-ups. To this end, Calvino et al., (2015) studied their failure rate, highlighting that in the EU area, 40% of start-ups fail after 3 years, with this percentage raising at 60% after 7 years. In particular, the Netherlands showed one of the lowest survival rates, with 55% of start-ups failing after just 3 years. Regarding failure risk, the already cited lack of initial financial resources together with lack of market knowledge and brand recognition for BGs when entering a new country, imply that this category deserve even a deeper analysis than traditional start-ups failure rate. These strategic choices are delicate, and a single misstep can potentially result in failure.

Prabaharan et al., (2021) state that there is a survivor bias for BGs. The same authors identify two main reasons that lead these companies to fail, and both are linked to the importance of value proposition (VP hereafter). In fact, in one case, BGs fail because they extend the same VP across multiple markets, not adapting it to customers; in the other case, instead, the focus is only on one market at a time and with an entry method that is very expensive. Efrat and Shoham (2012) present that one must consider both the internal and external factors when analyzing the BG possible failure and argue that there are external factors such as low growing markets, technologically turbulent markets and high-risk countries that initially influence the BG performance. From a point of view of internal factors, Odorici and Presutti (2013) articulate how the difference between novice and habitual entrepreneurs is fundamental in ensuring the long-term survival of the firm. Summarizing on the main problems concerning BGs, rather than entering one or few countries per time, these types of firms expose themselves to an internationalization shock and they may not withstand this shock.

Consequently, the challenges faced by BGs when entering new markets are an input for analyzing what factors enable the company to enter foreign markets in a successfully manner.

Research performed in the past unanimously showed how there is a lack of a common vision on the drivers of international performance for BGs. Through a managerial point of view, studies have argued that the role of the entrepreneur and his/her international orientation are fundamental for BG's international performance (Harveston et al., 2000; Oviatt and McDougall, 2005; Hagen and Zucchella, 2014; Pidduck et al., 2020; Escandon-Barbosa et al., 2019). Starting from the importance of entrepreneurship for high performing teams (Lumpkin and Dess, 1996), entrepreneurial orientation (EO) is defined as the bundle of practices and decision-making techniques that lead managers to behave entrepreneurially. Most of the studies on EO apply five dimensions to analyze this phenomenon: autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness.

On the other side, Hennart (2014), Kraus et al., (2017), Guo et al., (2022), have found that the capacity of BGs to have successful foreign sales from the beginning is given to their business models traits (BM). Moreover, Pidduck et al., (2022), Varma et al., (2016), Monferrer et al., (2015) and Gimenez-Fernandez et al.,

(2022) analyzed the firm's internal variables, consisting in the role of capabilities, network and entrepreneur prior experience. On the external variables' side, Hagen and Zucchella, (2014), Oviatt and McDougall (2005), Servais et al., (2006) and Jiang et al., (2020) concentrated on ICT technologies and industrial clusters. Gerschewski et al., (2015) and Autio (2017), have partially included both entrepreneurial and BM traits in their framework but there are still inconsistencies in the relationship between the above cited variables.

However, since the authors cited above have only focused on precise variables of research on BG's international success, the role of this study is to conduct qualitative interviews and collect in-depth insights from entrepreneurs to provide a more comprehensive overview of the drivers leading BG to perform in the international market. This aim will be achieved by means of an individual analysis (on the role of the entrepreneur fostering international success), an organizational (BG's VP together with firm's internal environment) and an institutional one (role of the external environment). Moreover, this study directs the call to understand what is determining the early internationalization among the BG, taking into account the resource constraint problem for BGs outlined by Knight (2015).

Therefore, by integrating the above cited strands of research on EO, BG's VP, firm's internal resources and external environment, the aim of the study outlined above leads to the following Research Question:

"How do individual traits, organizational factors, and institutional contexts collectively contribute to the successful performance of Born Global firms?"

This study contributes to the literature by considering VP and EO's role in sustaining the internationalization of start-ups in three ways. First, this research extends pivotal, previous theoretical models on BGs' internationalization (see: Oviatt and McDougall, 2005; Escandon-Barbosa et al., 2019; Gerschewski et al., 2015) by integrating variables such as VP, EO, Dynamic Capabilities and Business Networks which were treated alone in relation to the international performance of BG. In particular, building upon the path followed by past authors in determining the drivers of BG international performance, this variables' integration aims at providing a more comprehensive analysis on BG success. Moreover, in a fast-changing environment such as the digital one where BGs are involved, firms are updating their business with emerging technologies such as AI, ML, robotics, and continuously renewing patents. Therefore, an update to the current state of art is also needed for this reason. The aim of the current study is to provide a piece of work that, not being performed in a very long period of time (Jan-Jul 2023) can provide a solid and updated vision on BG environment.

The impact of the study is also crucial for aspiring entrepreneurs aiming to establish a BG. The analysis of factors driving international performance and the discussion on what are the factors to focus upon, will allow entrepreneurs to identify strategic areas for an effective internationalization process for their organizations.

Finally, considering the importance of the external environment in the success of BGs, the study can also contribute towards policy makers and how to encourage R&D spending in BGs, to ensure continuous innovation and competitive advantage in the market.

The rest of the paper is organized as follows. First, the relevance of BGs in the SDGs context is discussed, followed by an in-depth theoretical analysis of the variables discussed in the introduction. In section three, the research methodology adopted in the research is outlined, and the results of the research are shown in section four. Finally, results of discussion are provided, together with future direction – also based on the interview's outcome – and limitation of this study.

#### 1.1 The relevance of BGs within the SDGs

By looking at the Sustainable Development Goals (SDGs) set by the United Nations in 2015, for those with an economic scope, there is a robust link with BGs. Since the period between foundation and international market expansion for BGs is usually shorter than five years, there is a high need of human capital to expand abroad and foster business network. Hence, these typologies of firms have a strong impact in job creation and fostering entrepreneurship (SDG 8). Moreover, the already cited BGs focus on innovation is considered by UN for what concern the ability of innovative and high-tech firm to be more resilient in crises than other low-tech firms (SDG 9); (United Nations, 2022).

Finally, the role of SDG 17 is to connect global stakeholders to raise awareness on how important is to achieve all the previous goals. In relation to that, the global relationships that BG is able to develop after its foundation might be a key to enter in contact with an adequate business network and foster strategic alliances to ensure economic growth and innovative processes.

For a better understanding, the table below summarizes the BGs goals concerning the economic context.

Table 1 BG's role toward 2030 SDGs.

Goal	Scope	BG's goal contribution
SDG 8: Decent Work and	Economic	New products/services with
Economic Growth		potential to foster economic
		development and
		entrepreneurship
SDG 9: Industry, Innovation and	Economic	Technological leverage disrupting
Infrastructure		traditional businesses
SDG 12: Responsible	Economic	BGs focusing on sustainable
Consumption and Production		products/services
SDG 17: Partnerships for the	Overarching goal linking the	Cross-border collaboration and
Goals	previous 16 ones	partnerships with distributors

Source: Körtvési (2022)

# 2. Theoretical Background

To ensure that appropriate theoretical foundations are given on the variables that will be outlined in this section, the literature review performed for this study is focusing on seminal papers in the field of International Entrepreneurship, International Business and Strategic Entrepreneurship that have influenced subsequent research throughout the years (Knight and Cavusgil, 2004; Oviatt and McDougall, 2005; Gerschewski et al., 2015; Hennart, 2014; Martin et al., 2017). However, since the field of research on BGs is constantly evolving, a deep understanding of innovation and the role of digital technologies in more recent papers was needed.

In the field of International Entrepreneurship, scholars defines BG firm as the one that: (1) reaches at least three different international markets from the moment or within a maximum of 3 years from the moment it is founded; (2) is characterized by at least 25% of sales coming from the international market; (3) "act to satisfy a global niche from day one" (Tanev, 2012 p. 5); (4) is small in terms of revenue and employees; and (5) deal with information technology in the daily business.

These characteristics make BG the extreme category of International New Ventures (INVs) because they are international from the start and gain competitive advantage (CA) by selling in several countries. Moreover, BG are start-ups and they do not derive from any venture's spinout (Ferguson et al., 2019).

Given that multiple variables were previously considered in studying the performance of BGs, the image below (Fig. 1) provides a summary of those that are going to be analyzed in this study, with a precise scope of analysis for individual, organizational and institutional macro-categories.

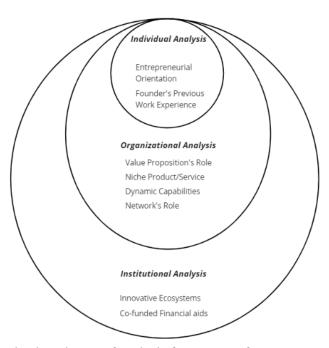


Figure 1: The three layers of analysis for BG's performance. Source: Own

For a better understanding of the variables outlined above, it was considered useful to provide a more detailed indication of those in the following table, which include a definition of each variable and the main source from

which it originated. More than this, since the aim of this research is to outline the role of each factor in fostering successful performance abroad, a definition of both financial and successful performance was needed.

Table 2
Variables and sub-variables that are going to be analyzed in this study.

Variable in the study	Sub-variable	Sub-variable definition	Author (Year)
Entrepreneurial	Motivation	Capacity to start a project and	Hefer et al., (2015)
Orientation		see it through completion	
	Innovativeness	Engage in new projects	Lumpkin and Dess
(Individual analysis)		resulting in new	(1996); Rezaei and
		product/service	Ortt (2018)
	Risk-Taking	Degree to which managers	Lumpkin and Dess
		make large and risky resource	(1996)
		commitments	
	Proactiveness	Acting in anticipation of	Lumpkin and Dess
		upcoming issues, needs or	(2001)
		modifications	
	Competitive	Ability to improve firm's	Lumpkin and Dess
	Aggressiveness	position and win industry	(1996)
		competition	
	Proactiveness	Acting in anticipation of	Lumpkin and Dess
		upcoming issues, needs or	(2001)
		modifications	
Founder's Previous		Entrepreneur's previous jobs	Park and Rhee
Work Experience		in start-ups' – international	(2012)
(Individual analysis)		firms	
VP analysis	VP's Role	Product/Service distinguishing	Kraus et al., (2017)
		the firm from competitors	
(Organizational	Niche Product/Service	Distinctive product/service	Hennart (2014)
analysis)		target a specific section of an	
		industry	
Firm's internal	Dynamic Capabilities	Ability to Sense, seize and	Teece et al., (1997)
environment		transform business	
		opportunities	
(Organizational	Business Network	Firm's capacity to develop	Gerschewski et al.,
Analysis)		knowledge through external	(2015)
		relationships	

Firm's external	Innovative Ecosystems	Actors and relationships	Tanev (2012)
environment		among them fostering	
		innovative activities	
(Institutional	Co-Founded Financial	Financial supports and	Falahat et al., (2021)
Analysis)	Aids	subsidies received from VC,	
		governments, Incubators	
Successful	Financial Performance	BG success based on sales	Gerschewski et al.,
internationalization		results, ROI	(2015)
process	Operational	BG success based on market	Gerschewski et al.,
	Performance	share, product success and	(2015)
		customer satisfaction	

# 2.1 Entrepreneurial Orientation

The role of the entrepreneurial activity is to create business opportunities and foster business expansion, innovate in technology, and enrich the economic system (Lumpkin and Dess 1996). To better understand what entrepreneurial orientation is and what does compose it, a focus has to be done on entrepreneurial processes. Lumpkin and Dess (1996) define those as the "methods, practices, and decision-making styles managers use to act entrepreneurially" (p.136), resulting in five traits that distinguish the entrepreneur. The bundle of these traits gives the concept of Entrepreneurial Orientation. For this study, it was considered that the autonomy highlighted by Lumpkin and Dess (1996) could be better represented by the entrepreneur's motivation (Hefer et al., 2015), mainly because autonomy is seen as the ability to be self-directed, while BGs usually are not a single-member firms. To deeply understand the entrepreneurial acting inside the firm, a description of the 5 Entrepreneurial Orientation traits is needed.

Motivation is the life-giving trait of entrepreneurship, pushing individuals or a group of people to start a new business because they want to pursue a business idea, be their own boss or due to financial ambitions. Without it, entrepreneurship will not exist.

Innovativeness. The ability to give rise to innovation guarantees the introduction of new ideas that turn into new products or services, increasing the expense on R&D (Rezaei and Ortt, 2018). Consequently, these novelties lead to the grow of new firms and to the decline of dominant firms.

Risk-taking. When setting-up a new venture, the entrepreneur mainly deals with three sources of risky actions. Those consists in borrowing money without having the certainty of being able to pay back this money, invest in new technologies – the digital disruption is an example of it -, and introducing new products or services in the market. The right degree of risk is the one that allow the entrepreneur to survive on the market.

Proactiveness consists in the entrepreneur sensing and seizing new opportunities and deriving a first-mover advantage on a new product or service in the market. To this end, Ejdys (2015) has studied how proactiveness

has a significant positive effect in fostering innovativeness. In this case, the entrepreneur is in fact able to have a forward-looking role in grasping new sources of wealth that other actors are not seeing yet.

Competitive aggressiveness. By considering that firms entering in aggressive and highly competitive sectors have less chances to survive, the entrepreneur must be aware of that and take actions related to gaining prominence in the industry, by distinguishing his firm through competitive advantage (Lumpkin and Dess, 2001).

Although Lumpkin and Dess (1996) developed a framework in which the five EO constructs led to performance, these were not specifically designed in the context of BGs. In this regard, (Knight and Cavusgil, 2004) tested the role of EO on BG performance, with the distinctive entrepreneurial abilities giving the firm the possibility to progress in international markets. Related to this aspect, the testing of all 5 constructs on EO influencing performance done by Gerschewski et al., (2015), finds strong support for what concern the financial and the operational performance. The study carried out by Dana et al., (2016), besides testing three of the 5 traits of EO towards export performance, states that accurate planning is essential to expand on the international market. Similar findings are provided by Harveston et al., (2000) with planned strategies influencing risk-tolerance. However, an opposite view is provided by Fletcher (2004) who founded that in the decision to export, the company must maintain openness to risk and flexibility to quickly adapt to difficulties that may arise during the process, without being tied to a specific strategy.

# 2.2 Founder's Previous International Work Experience

One way to overcome the resource deficit of the firm is the manager's international experience, with work and experience in an international start-up that are positively associated with rapid and early internationalization (Varma et al., 2016). Also, Park and Rhee (2012) studied how the international business experience of managers is a driver of the firm knowledge competency, while Harveston et al., (2000) have found evidence on how the manager's international experience is greater in BG firms rather than those that internationalize gradually.

Again, Varma et al., (2016) assume that the age of the entrepreneur is an important factor towards internationalization, with a higher age implying greater early internationalization. Similarly, according to Odorici and Presutti (2013), the habitual entrepreneur, older than the novice one, shows different and more incisive traits regarding the entrepreneurial orientation. In this regard, the habitual is more risk taking and shows a degree of innovation that considers both technology and product/market innovation.

By keeping a focus on the international experience and testing it on export performance, Dana et al., (2016) find positive results. Here, as experience it is meant both educational and work experience. Surprisingly, in this study it is also found that for companies that do not incur in export planning, having founders with more international experience has a negative result on export performance, due to too much confidence in knowing the foreign market.

### 2.3 The role of Value Proposition in the International Performance of BG

When a person or a group of people seek to enter in the business domain by forming an organization, one of the first things required for a clear understanding of the business sector is the business model. It is fundamental in representing the main characteristics of the firm such as the VP, the customer it wants to reach, the key activities and resources, the channel, the networks and finally costs and revenues. Kraus et al., (2017) affirm that the firm success comes from its business model and how it is designed. It is also shared the vision of how value creation and key resources are the main accelerator to ensure BGs a superior international performance.

The same importance of certain business model's traits is also emphasized by Hennart (2014) who states that unique VP of niche products is responsible for superior performance, while the measures related to entrepreneurial orientation are not reliable because founders assess themselves after the firm has entered successfully the market and they may take full credit of it. This process is also known as self-serving bias. The same author also focused on other business models components such as customer segments and relationships, by stating that when it is the customer that finds the seller and when the firm does not need to adapt its marketing mix to customers, it is easier to derive faster and successful international success among BGs. Moreover, among costs, businesses specialized in delivering services do not even need to set up plants abroad or deal with higher transportation costs. However, companies might allocate more time to find and obtain new foreign users, given obstacles such as market visibility and language.

Knight and Cavusgil (2004) focused again on the VP's role in having a positive impact on business strategies and performance in international markets. By showing an international marketing orientation, the firm concentrates on creating superior and unique value for international customers by leveraging marketing elements. In particular, the study states that the international marketing orientation is positively correlated with global technological competence, unique product development, quality focus and leverage of foreign distributors' expertise. For a successful firm, it is also important to update the VP. To this end, Guo et al, (2022) consider business model innovation as a key process in this area to ensure positive results.

In BG firms, the innovative capacity is one of the intangible resources and it is considered the root of competitive advantage. For a clearer understanding, according to Escandon-Barbosa et al., (2019), being innovative means putting in place "new products, processes and ideas within an organization" (p.3). Closely related to innovation, the Eurofound study (2012) highlights how, among the cost section of a BM, investing in R&D is crucial to the success of the BG. Furthermore, the same organization found that BGs spend much more on R&D per employee than non-exporting firms.

In recent years, with the advent of virtual business and the impact of digital technologies on business models, some authors such as Musso et al., (2022) and Jarosinski et al., (2023) have shifted the focus from BGs to born digitals, stressing the innovation side of BGs. First of all, since many start-ups today are present in the digital world, it must be specified that born digital's definition consider only those that sell a digital

product (Jarosinski et al., 2023). Born digitals benefits from the virtual world, which allows the company to have direct access to end users, implying that today many more BGs have B2C relationships rather than B2B. The case studied by Musso et al., (2022), highlighted how a manufacturing firm using e-commerce platforms and 3D configurators was able to have 50% of sales coming from abroad one year after its foundation and 90% after 6 years. Another view on how new technologies are revolutionizing the business model concept has been discussed by Vadana et al., (2021), stating that digital technologies are even facilitating BG's offering of product and services to a niche market. Through new forms of communication and product configurations, the firm can have relationship scattered in all the remote locations, increasing the demand for its niche market.

Guo et al., (2022) studied how Innovative VP, Value creation and Value capture play a role in determining superior business performance. It also emphasizes that especially when a company is dealing with digital, it is essential to bring innovation within the business model, to adapt to consumer preferences. When a company has not provided itself with digital tools when it was founded but wants to do so later, this strategy is part of the Digital Transformation. According to Jarosinski et al., (2023), creativity and constant re-invention must be the basis of digital business models. In the near future, between the theories at the base of the competitive advantage, there will not be the cost reduction but rather innovation and product differentiation. This is linked to the aspects on which the born digital of the future has to be connected: "direct engagement with stakeholders, automation, network effect, flexibility and scalability" (Jarosinski et al., 2023, p. 54).

#### 2.4 Firm's Internal Environment

The firm's ability to deal with customers and suppliers in the global scenario and deriving a superior performance in the international market is also related to the capabilities developed inside the firm. For BGs, prospering in internal capabilities is a central argument is overcoming the asset-constraint topic.

In particular, after having analyzed the individual traits of the entrepreneur and how do they shape the performance of the firm, the aim in this section is to understand what are the firm's internal capabilities developed by the founders and their teams that guarantee the success of the BG. The approach will be based on internal firm capabilities and the business network.

# 2.4.1 The Firm's Internal Capabilities

When looking at the importance of firm's internal capabilities, one of the most known management theories is the resource-based view (RBV). Its main core consists in focusing on firm's resources and capabilities as the key drivers for the firm's competitive advantage (Gerschewski et al., 2015). The RBV theory states that resources are heterogeneous across firms and to lead to a competitive advantage, those must be valuable, rare, inimitable and non-substitutable (Barney, 1991). By focusing on these internal resources, BGs can overcome their liability of foreigness and newnesss (Knight and Cavusgil, 2004). In particular, foreigness can be described as the unusual environment that the firm find when it internationalizes while the newness is the specific condition of BGs that enter a new market while being young. However, McDougall and Oviatt (2005) do not consider the newness as a liability, because it gives the firm more adaptability to the market condition

and flexibility, in respect to firms that are in a specific market since many years. As for physical resources and financial capabilities, the social ties that the company has developed can be useful to replace the lack of this type of resources (Keupp and Gassmann 2009). Therefore, from this point of view, the scarcity of physical resources is considered as a driver to internationalization, because it pushes the company to develop informal networks.

To maintain its readiness for changes in the external environment, internal dynamic capabilities play a key role in constantly updating the internal competencies of the BG (Rodriguez-Serrano and Martin-Armario, 2019). Similarly to the proactiveness definition among the EO constructs, here dynamic capabilities consists of three stages: recognize the opportunity (sensing), organize firm's resources to create value from that opportunity (seizing) and be constantly updated about the presence of new opportunities or be ready to transform the firm's strategy in the market (transforming). Dynamic capabilities can be adapted into the BG abilities to use the knowledge of the foreign market and gain competitive advantage.

While the focus so far has been on what capabilities are necessary for the BG to enter the global market, it is also necessary to understand how these capabilities evolve within the company as it grows in the market. The findings of Romanello and Chiarvesio (2017) show how the required capabilities differ in the prefounding, entry stage and post entry stage.

For pre-founding, the EO constructs already analyzed apply; entry stage, on the other hand, confirms the need for dynamic capabilities while in the transition to post-entry, the entrepreneur must be good at translating his capabilities to all employees to increase organizational knowledge.

#### 2.4.2 The Role of Business Networks

Several studies state that among other factors related to the BG's international performance, there is the network the firm relies on. In their study on the international performance, Gerschewski et al., (2015), apply the already discussed resource-based view and the network perspectives, as theories at the base of internationalization for small firms. According to these authors, the role of network is that of emphasizing "the development of knowledge through external relationships" (p. 559). Adding to that, the management's personal contact can give the firm the opportunity to overcome its resource-constraint characteristics by accessing a wide range of social capital. Monferrer et al., (2015) state that through the network the firm is able to foster adaptation, absorption and innovation capabilities. Adaptation consists in identify opportunities and be ready to deal with changes of those. Absorption involves incorporating external information inside the firm's set of knowledges while innovation capability comprehends apply the knowledge gained within the company to gain a competitive advantage. Those are defined as knowledge-based capabilities.

For what concern the other variable to be analyzed in the firm's internal environment, network has a moderating role in favoring the internationalization speed and Oviatt and McDougall (2005), study the network according to its strength, size and density. With regard to the strength, it depends on the relationship between actors, and it can be strong or weak. It is argued that strong tie has the role of involving a trustful and durable

relationship while weak ones are mainly represented by customers, suppliers and brokers. Bigger networks give the possibility to easily access foreign sources while the denser a network is, the more trust is created. However, scattered network leverage more and different information; hence are more efficient.

The access networks can provide to new and diverse skills and knowledge is also debated in the study of Gimenez-Fernandez et al., (2022). Rather than invest in R&D in a foreign country, BG can access the network of international partners.

#### 2.5 Firm's External Environment

Up until now the analysis has focused on individual and organizational characteristics, without considering how the BG's external ecosystem external can play a role in hindering or fostering its international processes. For what concern the risks coming from external environment and undermining the firm possibilities to grow, Efrat and Shoham (2012) identify target-country risk as the main external force threatening the competitive advantage of the BG. On the other side, Varma et al., (2016) and Jiang et al., (2020) stress the role of regional innovation ecosystems in enhancing successful international performance while Faroque (2015) studied how governmental supports are seen as a boosting factor for internationalization. The aim of this section is therefore to describe the cases in which the firm's external environment may act as an inhibitor or as a facilitator in deriving a successful internationalization process.

When a BG is looking to expand its operation abroad, the liability of foreigness previously explained may hinder the BG's growth because of risks deriving from political, economic and social environment of the targeted foreign country (Efrat and Shoham, 2012). Despite the recognized flexibility of BGs, when expanding, the company is faced with risks that can arise from each new country it enters (Zaheer and Mosakowski, 1997).

About the importance of technology trends, the third era of globalization, from 1990s on, has led small firms to became successful in international markets more than ever. Hennart (2014) shares the widely accepted view of the internet as a low-cost means of communication, implying no cost differences for the firm in selling to the home or the abroad market. All over the years, the Internet has offered the possibility to small firms to better reach foreign countries and foster fast interactions between the firm and the stakeholders. However, even if all BGs may use the internet to better spread their presence around the world, not all of them sell their product or service via the internet (Servais et al., 2006).

More than the internet, other external factors such as digital technologies have the power to bring innovation to the firm's main activities. In the study of a footwear firm offering to its customers the possibility to trying out shoes from their home with a digital configurator, Musso et al., (2022) describe how e-business allows access to new types of interactions between the company and the customer, creating new opportunities for expanding in foreign markets. The role of technology is also emphasized by Servais et al., (2006) who highlighted how the development of ICT (Information & Communication Technology) has allowed start-ups to move from being asset constraint to reaching global customers, without distinction of geographic location.

As mentioned, the industrial environment of the firm and the market sector in which it is established are other factors to be taken into account in international success. The industry growth rate and the level of competition in an industry are seen as influencing factors for early internationalization (Jiang et al., 2020). The ecosystem is seen as a base for the success of BGs by Tanev (2012), who considers the number of universities and firms operating in the same area of the firm. The coexistence in this environment allows the firm to be surrounded by experienced and skilled people, who can provide a network at the basis of competitive advantage. The same view is shared by Varma et al., (2016), who claim that the location of the company is crucial for the early start of international activities. By being in an innovation hub or industrial cluster, the firm can easily access information related to the industry and reduce the costs of procurement. Moreover, the regional cluster has a role in signaling the firm among other international potential stakeholders: the firm can also be easily noticed by investors (Jiang et al., 2020). In the same study, it is also argued that being in a cluster can however hinder the internationalization process because it may be that several firms want the same, limited resources.

Based on Faroque (2015) call for the public administration in assisting BGs, Falahat et al., (2021) and Moen et al., (2022), study how the government support mediates the relationship between EO and financial performance of the firm. The support here was given through export-promotion programs, with the role to incentivize small firm to engage in export projects. It is also argued that monitoring small firms' activities is needed in ensuring that those firms have the adequate strategic orientation and the right bundle of internal capabilities to achieve their international objectives.

#### 2.6 Successful Internationalization Process

One of the final aims of many academic articles reviewed was to provide theoretical frameworks whose ultimate goal was to understand what factors influence the performance of the BG. Also, in the framework that is going to be proposed in this study, performance is the last variable studied, seen as the dependent variable of the model. This section is divided into two subsections: the first one looks at previous models that studied which interacting variables enabled the performance of BGs, while the second one provides an understanding of the metrics used to measure BGs performance in the first years.

# 2.6.1 Variables Leading to Successful Performance

Park and Rhee (2012) developed a model where they tested company knowledge competency as a driver of international performance. Specifically, knowledge competency is here is intended as the intangible resources to gain performance in international market and is in turn influenced by the manager's international business experience and the number of networks in which the company is involved. The review done by Jiang et al., (2020) identify three determinants of early internationalizing firm performance. These authors pointed out how entrepreneurial characteristics, firms' factors – such as the strategy and the network – and environmental factors – such as geographic location and market characteristics – lead to internationalization of BGs. However, it is worth to consider how the factors causing internationalization are coming from different

fields (international business, entrepreneurship, and marketing), and imply different views. For instance, Escandon-Barbosa et al., (2019) took into account again internal and external factors, but considered different variables than those of Jiang et al., (2020). They gave value to the role of innovative capacity inside the firm and the market dynamism, together with the favorability of the environment for the external success' components. The study of Gerschewski et al., (2015) also highlight how managerial characteristics, networks and niche strategy are positively correlated not only to the financial performance but also to the operational one.

It is interesting how Jiang et al., (2020) tried to distinguish the variables that influence internationalization on the base of being not only internal and external but also controllable and uncontrollable factors in the short term. For instance, among the internal and controllable factors there are the product, market and niche strategy while in the internal and uncontrollable one can find the founder team characteristics and firm's network and technology.

#### 2.6.2 Indicators Considered for Successful Performance

Before starting to analyze the main indicators measured when dealing with successful performance, it has to be said that one has to look at those results with a double orientation: from one side it may be that more R&D investments are linked to a superior long-run performance but at the same time it is likely that they lead to a short-term lack of profits. Moreover, for small firms that are internationalizing since few months or years, it might be foolish to consider only financial indicators such as net profit or ROI.

Starting with the various types of performance identified by Gerschewski et al., (2015), sales volume, growth and ROI are the ones considered on the financial side while for what concern the operational performance, those authors take into account the time to market, success of products, market share in international markets and prestige of the firm. Moreover, the seminal findings provided by Lumpkin & Dess (1996) were crucial not only to build upon the EO constructs, but also to highlight what to consider for company performance. Their insights emphasize not only accounting measures, but also the firm objectives and goals, together with the stakeholder satisfaction. In the same vein, Falahat et al., (2018) measure both the financial and strategic performance of the company, with the strategic one consisting of new market entry and expansion, relationship with distributors, and the degree of product acceptance among customers. An insight on how those measures will be analyzed in this study is provided in the next section, together with a description of the chosen methodology.

# 3. Methodology

#### 3.1 Research Design

The aim of this study is to get insights from founders and managers of BGs on businesses' VP and entrepreneurial orientation interact with firm's internal and external environment with the final aim to foster the international success of BGs. To get these insights, a qualitative approach has been considered as the most

suitable method to gather useful information for this current study. In fact, this approach is characterized by problem understanding rather than numerical representativity, as it is in the quantitative study (Quieros et al., 2017). Regardless of whether a qualitative or quantitative approach is chosen, the validity of the results and reliability must be ensured in both cases (Whittemore et al., 2001). For what concerns the validity of this type of research, internal validity may find confirmation on data saturation, credibility of gathered data and accuracy of definition, while external validity cannot be tested for this study since the results of the sample cannot be extended to the population and will only have an internal validity (Lowhorn, 2007).

#### 3.2 Research Instrument

In this research, semi-structured interviews were chosen. This type of interview format allows the interviewee to ask already prepared questions but also to follow-up on interesting replies that may emerge during the conversation, while unstructured interviews are not pre-determined and structured interviews are all predetermined in order and quantity (Adams, 2015). The interview process consists of the following steps: select and contact the interviewee, outline the interview guide and process the collected details. Adams (2015) also suggests choosing the target in a random way, to eliminate the bias of reaching the best suitable samples. The interview guide was tested before starting the interviews, in a pilot interview, to make sure that questions were well formulated, and misunderstandings were not likely to emerge. Moreover, all questions that were judgmental, yes/no questions, or too broad must be avoided, together will all information that can be simply gathered from the firm's website.

After the first approach by mail or phone call, 16 in-depth and semi-structured interviews were performed exclusively in English, with the support of an interview guide. According to Crouch and McKenzie (2006), having more than 20 respondents limits the close association between the concepts that emerged and makes the survey less thorough. Moreover, the interview process stopped at 16 interviews because data saturation was reached. With this goal in mind, Corbin And Strauss (1990) states there is not an exact number of interviews that has to be respected strictly; in fact, the iterative process of collecting data stops when the interviewer is not creating anymore new categories from the interviews' coding.

For what concerns the questions' framework, it has been considered the advice of Charmaz (2006) to divide the interview, in introductory question – to get the interviewee acquainted with the process – intermediate and ending questions (Appendix 1). About this, after having touched upon the firm's core activities and operating situation, the author asked about specific information to define the firm as a BG one, when those could not be found in other sources. The guide was developed based on themes such as VP and the EO constructs role in influencing the firm performance together with the internal and external environment role in guaranteeing the firm's international performance. To measure the role of EO and VP, respondents were asked to bring insights about the role of business model's VP in ensuring performance, the presence in a niche market, the risk perceived by the founder when setting-up the business and the proactiveness in transforming a market need in a firm's competitive advantage. Three core questions reinforcing the highlighted theory were: To what extent do EO, VP, Firm Internal Environment and Firm external Environment contribute to the firm's successful

international activities? About the variables that has been touched until now, how would you link their role with the firm's international performance? What is in your opinion at the base of successful new products/services introduced in the international market? In the view of many measures that can be associated with performance, it is worth specifying that to measure financial performance, foreign sales volume and growth of turnover were considered. For what concerns the operational performance, product performance, time to market, and customer satisfaction were considered both for the national and the foreign economy.

Considering the semi-structured nature of the interview, follow-up questions were furthermore important to gain more insights or to clarify a vague response. The interviews lasted roughly from 30 to 50 minutes and were done via online calls, with the help of transcription tools (Microsoft Teams and transcribe feature in Microsoft Word 365) that favored the coding of those through Atlas.ti software.

# 3.3 Data Collection and Sample Selection

The sample used in this research comprises Dutch start-ups and scale-ups that are active on at least three different countries. To avoid any specific industry-bias, the cases were collected from different industries (with tech and healthcare start-ups as the most frequent). The reasons that justify the choice of this sample limited to the Netherlands has to do with the role of the external environment in shaping the internationalization process of the start-up. For instance, the geographical ecosystem and incentives available in a country other than the Netherlands, could have hindered the impact of internal company variables.

One of the datasets used to gather information were provided by a start-up accelerator at the University of Twente, with a list of Dutch start-ups participating in the CES (Consumer Electronic Show) Las Vegas 2023. A screening of these companies was then carried out to obtain their e-mail contact and they were contacted. Even if the technology is at the center of all these start-ups, the pool of companies that participated in CES falls into sectors as diverse as health tech, fin tech, pollution, agribusiness. Moreover, to have a general view on start-ups that were founded not only in recent years, but also in the past decade, the help of a global database such as Orbis was fundamental. To gain specific insights on the start-up world, Dealroom and Techleap were also decisive to gather information on Dutch companies and contact them. To expand the set of BGs available for the interview process, one of the interviewees suggested to contact the World Trade Centre in Hengelo, to gain more insight on BGs in the Overjissel area. The interviews were conducted by stating that the name of the interviewee and the company would be anonymized, with this process that started only after having obtained the ethical approval from the University of Twente.

Throughout all these firms, some patterns were considered when dealing with the possibility to contact them for an interview on BG international success. Before the first direct approach through mail, the author gathered information on the firm through its website and secondary source databases such as the Dutch Chamber of Commerce. All firms active exclusively in the domestic market were discarded, along with those that took more than three years to expand abroad. On the other side, either when information on the company's history could be clearly traced, or when some data was unclear regarding the international presence, they were later contacted by phone or e-mail to ask about unclear data and the interview was then set.

The table below offers information about the people interviewed, based on age, gender, role inside the firm, tenure and industry. As a first insight, it is interesting to see how only 16% of interviewee were under 40.

Table 3: Overview of the interviewed people

Interviewee	Age Range	Gender	Role inside the Firm	Tenure	Industry
			1711111		
I1	60-70	Male	Co-founder and CEO	4 years	Online Marketing
I2	40-50	Male	Founder and CEO	9 years	Healthcare
I3	30-40	Female	Founder and CFO	3 Years	Tech
I4	50-60	Male	VP of Sales	5 Years	Healthcare
I5	60-70	Male	COO	5 Years	Tech
I6	60-70	Male	Founder and CEO	1 Year	Tech
I7	60-70	Male	Co-founder and CTO	9 Years	Cleantech
I8	20-30	Male	Founder and CEO	2 Years	Tech
I9	40-50	Male	Managing Director	2 Years	Cleantech
I10	50-60	Female	Co-founder and CCO	9 Years	Tech
I11	50-60	Female	Co-founder and CCO	2 Years	Food
I12	60-70	Male	Founder and CEO	3 Years	Cleantech
I13	40-50	Male	Co-founder and CCO	4 Years	Tech
I14	30-40	Male	Founder and CEO	2 Years	HR consulting
I15	40-50	Male	Founder and MD	10 Years	Tech
I16	50-60	Male	Co-Founder and CFO	4 Years	Agriculture

# 3.4 Data Analysis

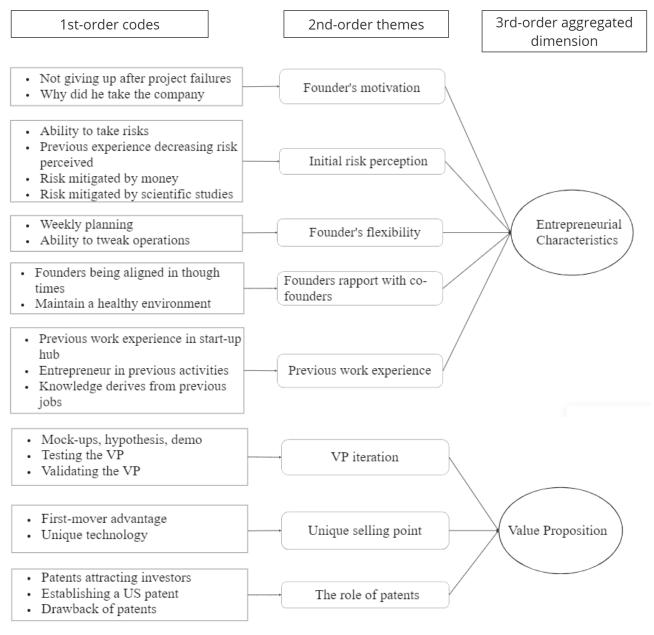
The collected data were analyzed through Grounded Theory method since it allows the researcher to identify new patterns and processes related to the current topic under investigation (Corbin and Strauss, 1990). To this extent, after having revised the theory concerning BGs, Table 1 had the role of constructing theory. Following the approach proposed by Corbin and Strauss (1990), grounded theory has as main characteristic the one of interrelation among data collection and data analysis. In fact, the analysis of data starts as soon as the first data are gathered so that the method can be implemented interview after interview. The grounded theory analysis embodies first order, second order analysis and aggregate dimensions. Accordingly, based on Gioia et al., (2012), this three-step process was followed, with the help of tools such as Microsoft Teams, allowing the live transcription of the interviews, and Atlas.ti for labeling and coding the interviews, to have an easier set-up of aggregate dimensions. Typical of grounded theory, the first stage consisted of reading and assign labels to the interview transcripts. In each interview, the aim was to explore how the entrepreneur was applying the EO construct, the role of VP and the importance of the external and internal environment leading to the firm's successful international activities. Once the interviewer has the general view of all the created codes, the second stage implied looking at all the interviews from a broader perspective and linking similar

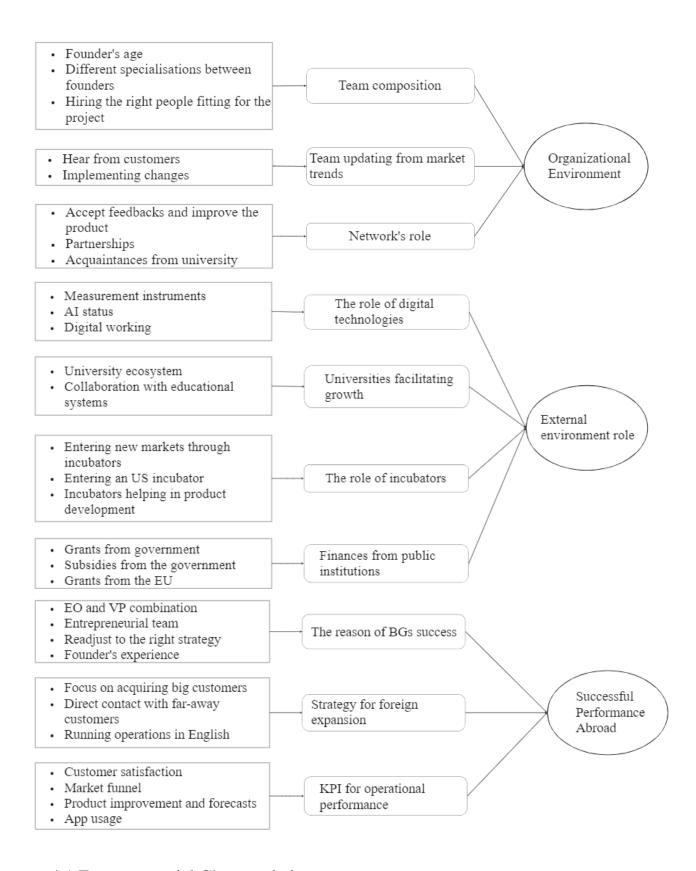
patterns in different interviews. For what concern the creation of aggregate dimensions, the aim was to look at relationships among EO, VP, firm's internal and external environment with the role of those variable to create competitive advantage and superior international performance.

#### 4. Results

In this section, the first order codes, second order themes and aggregate dimensions in the figure below provide an overview of the main topics that emerged during the interviews, by following the questions outlined in Appendix 1.

Figure 2: First order codes, second-order themes and aggregate dimensions emerging from the interview.





# 4.1 Entrepreneurial Characteristics

One of the first questions performed in the interviews were aimed at understanding why that person had founded a start-up. It emerged that some of those people expressed how stimulation and the willingness to create useful tools that people can enjoy were the basic traits leading them to found a start-up. In particular,

I10 pointed out that: "In some situations you need to have the courage not to be afraid of having a goal that is not good enough or not having enough money to start".

Related to the courage outlined above, the degree of risk a start-upper takes, has to be taken into account to understand what scenarios these people have faced in the past. According to I4, the entrepreneur must hold steady in moments where things are not going as planned, with personal characteristics of being risk-taker: "The entrepreneurial factors are important in the initial stage. You don't give up at the moment things are different than the ones scheduled, and you take risks then" However, the most interesting results for what concern risks are related to factors that may reduce the degree of risk perceived when setting up the start-up. This emerged thanks to interviewee I9, I11 and I16, who mentioned factors such as previous experience of that person in the business, accumulated cash from previous jobs and scientific studies demonstrating a problem to be solved in the market: "We didn't perceive so much risk because we knew the business and the customers" (I16), "I already had some spare cash because I was an entrepreneur before" (I9), "The risk was mitigated by scientific studies that have shown the health benefits of it" (I11).

Especially during the first years, the start-ups' interviewed faced tough times, mostly because of lack of finances and a strategy that was not returning the desired results. One of the key actions to avoid failure was linked with the founder's ability to make adjustments to new emerging situations: "At the beginning, constantly evaluating the strategy was fundamental. You've to constantly adapt to new situations, but keeping the people that you're working with is important as well" (I8). Still related to adjusting the strategy, the insights coming from I11 were also powerful: "Initially we focused more on the B2B but we understood that switching to B2C was better for our business".

Going deeper in this ability of the entrepreneur to tweak the current operations into new ones, it emerged that flexibility is a required trait to come up with a new strategy. In particular, finding new ways to derive a cash flow from the current activities and entering a new line of the business may save the current operations of the start-up. Thanks to the interviewee I13, it emerged how one of the ways to be flexible consists in having small weekly planned activities where the founder confront himself with other cofounders and the team: "You need to have a plan for the year, for the quarter and also one for the week. And we do that; we divide up our road map into smaller pieces until we arrive at a weekly basis strategy". However, it has to be noticed that adjusting the firm's strategy comes at a cost. Based on this, restructuring the company in tough times was the only possible solution for certain businesses: "When the situation is becoming critical, you have to ask people to fund more money or to step out, and that's what some of us did. That's the harsh way of doing business" (17).

None of the person interviewed were single entrepreneurs in the start-up. The role of the founder in collaborating initially with co-founders and later with employees proved to be key to the growth of the start-up. Being close with her partner was a key element for I10, who said that there was nothing that they couldn't discuss between each other. To this end, I8 mentioned that "If you have too much uncertainty that you spread within your organization, then there is a pretty big chance that people within the organization will also be

hesitant, scared, and feel these uncomfortable emotions that you don't want people to worry about because they are here to do something that they love to work on". Still on the pre-seed stage of the start-up, when there is not even a ready product to sell on the market, it emerged how the entrepreneur "has to be able to rally people behind you, because you have no money yet and you are not paying these people, but you want their help". Therefore, having a close rapport with co-founders and be able to coordinate with them on tasks, has contributed to overcoming though phases and developing successful strategies.

Continuing on the entrepreneurial characteristics, the participants greatly emphasized the importance of their previous work experience in being better prepared for problems arising from BGs' management, or in knowing the business sector better after years of working in it. As it is shown in Table 2, only three out of sixteen founders interviewed were younger than 40, with the previous working experience of the entrepreneur emerging as a common trait for founders in helping them succeeding. Still, even for the younger ones, having been a digital creator and creating websites has allowed one of the interviewees to already have some experience as an entrepreneur. I5 and I12 had already previous close experiences with start-ups, considering their career in helping start-ups to become scale-ups and giving masterclass to start-uppers: "I've spent my entire career in scaling companies in the electronic space, embedded systems with the global market footprint" (I5). As for other entrepreneurs, some ideas came from old acquaintances from university who contacted their old friends and asked if they wanted to join their project. As explained by I13, "We were the three who already kind of started a company when we were students [...] and he told me I'm thinking about starting a company and I said yes. And he has already talked to Vincent as well. That's how things got started, we quit our jobs and we started the company quickly".

# 4.2 Value Proposition

The insights generated by the questions on the company's business and its VP yielded results regarding the company's Unique Selling Proposition, the development and testing of hypotheses, the company's presence in a niche market and the role of Intellectual property.

Many interviewed people linked the product/service offered to the high quality of the item: "Our printers work with laser and guarantee that without laser your production line becomes cleaner" (I6). "Our digital pen is the only one in the world you can use on any paper" (I8). Apart from the quality, being the first firm on the market able to offer that product/service and deriving a first mover competitive advantage was the success reason for other start-ups. Moreover, the products and services adaptability and easiness to use were considered by the founders the reasons why customers decided to choose them.

However, when it comes to creating a high-quality product that is innovative in the market, employing an iterative process of testing hypothesis through demos and mock-up tests, followed by market validation, has emerged as a crucial strategy: "At first, the entrepreneur has to do his homework by developing hypothesis and test it" (I12). "The developer position is the key, but the VP is not determined by you, it is determined by a potential customer" (I7). Additionally, especially for bulky product, the start-up ability to offer a demo of

how the product works, was often the key to understanding whether the customer was satisfied with the product's operation, with the minimum viable product which was then implemented accordingly to potential buyers' feedbacks. About hypothesis testing and validation, the collaboration with B2B businesses helped I13 in succeeding: "The goal was at least to talk to three people ever week. I had a gazillion of these goals, this asking them about their businesses. Would you have willing to pay for this product if you'll got it? And then questions about privacy, safe security".

When the founders were asked whether they considered their company to be part of a niche market, many of them answered positively, emphasizing the specificity of their product/service in solving a market problem felt by specific categories, both in terms of age, needs or tastes.

To signal their quality and protect themselves from competition, it emerged that patents were responsible for making the start-up even more unique in the market, by guaranteeing the firm to avoid competitors using the same successful features of the interviewed firm. These close links with patents emerged at least for nine firms out of sixteen, with their founders declaring that patents had a clear role in guaranteeing them to have a unique VP in the market. However, it was also interesting to acknowledge that it might be difficult to defend the patent against big corporation when they release a similar product to the one of the start-up: "In my opinion the patent is not very protecting because it is very difficult to protect yourself against a big company, you will probably lose the battle because you need to sue somebody or you get sued" (I13). On the other side, it has been recognized how patents are able to add value to the company, with a founder who said to use them mainly because they attract investors rather than to defend themselves from competitors.

#### 4.3 Organizational Environment

Despite the focus on the entrepreneur in section 4.1, since all the start-ups interviewed had at least another co-founder in addition to the person interviewed, the role of team composition played an important role in determining the start-ups' future success: "We wanted to build a high performing team with complementary problem skills"; "My friend from Delft is a CFO and he is extremely sharp and very good in details and financing. The other one is commercial and I'm the technical guy" (I12, I7). Similar to this, another founder declared how one of his previous experiences in a start-up failed miserably because the team was technologically strong but commercially weak. To sum up on team composition, I13 offered a powerful insight: "Now the firm is really financial, but it depends on the phase of the start-up, with our previous focus on tech because we needed somebody able to study the product and the technicalities with it." From this insight it can be derived that at the beginning, when sales are not active yet, the firm may temporarily bypass the use of a commercial person. However, to guarantee the functioning of the start-up, the complementarity of team skills is an important feature founders look for.

Both I13 and I15 shared their take on how the team composition is fundamental for the start-up success: "Of course you have to have a good idea, but having the correct team is so important because you're never going to do everything on your own and in the end it is the best team who win"(I13); "In team we do a lot

together, and only when people are happy in your organization they can say what they want, be open to each other and go for the next mile" (I15).

More than the team composition, by looking at the degree of innovativeness and technological adoption in the start-ups interviewed, it was also studied the ability to be updated on market trends and therefore to identify new market opportunities. The innovation that the company is able to bring does not only derive from new market trends that are studied internally through market research. The most effective approach involves the firm actively collaborating with external actors, engaging in external collaborations: "You have to continuously talk to people, talk to suppliers, talk to experts in that specific fields" (I16). "Accepting feedbacks and do something with the feedbacks it's not nice to do, but it works nicer than do something from your lab desk and try to improve your product" (I7). Once the team has been able to hear from the customers and partners, those feedbacks are implemented to improve the actual product/service. With respect to that, I1 outlined how in his start-ups there are precise weeks reserved to carry out research and development of collected market ideas. For BGs more in their early stage, R&D is still a big variable among costs, representing between 50% and 65% for I4 and I9. Linked with the next sub-variable studied for the internal environment, the role of networks might be the key source of innovation, with I15 declaring that "Our most innovative guy was one of the founders, and he has weekly contact with our partner innovation department in Switzerland, having discussions about the future products to adopt". Still related to innovation, I3 highlighted how being close to the University of Twente allow his BG to get a lot of students from the engineering faculty. To this end, the role of the founder and team's network has allowed the BG to grow in the market.

In many interviews it has emerged how network are important for different BGs stages: before launching the product in the market, I16 considered fundamental to go and meet previous suppliers to receive feedbacks and building the prototype: "You have to go to suppliers with whom you had a good relationship with. Half of them have faith in what you're doing". Similarly, I3 entered a start-up as a co-founder because a friend of him knew he had a very good network of customers from the previous job activity. On the other side, the previous university career of I11 helped her to be in contact with Dutch food organizations that were willing to collaborate with her start-up when she started studying how to launch the product.

For what concern the BG growth phase, I14 explained how he was able to adopt the right strategies to expand thanks to the people he talked to: "The more people you can talk, the better you can expand your knowledge on the benefits and drawbacks of your current market strategy. I was really open in talking about the struggles I was facing, and some people helped me with it, not all of them". The network was also helping I8 to compose a team of trusted people: "My network from university helped me extensively because there I've met a couple of guys that I still work with now".

#### 4.4 External Environment Role

Once the overview of the BGs internal key variables for their growth was complete, the insights gathered on the role of external actors often proved crucial for their international development. By following the interview questions on digital technologies status in favoring the BGs' growth and the role of private and public investors, the following findings were generated.

For what concern the role of digital technologies, the nature of BG's business (product/service one) already plays a big role. About digital solutions, I1 explained how being able to be close to clients through social media and digital advertising was their key activity to acquire clients. On the other side, with regards to products development, I16 has highlighted how "Sensors are fundamental for us since the robot will make the task completely based on GPS [...] this is helping us in detecting more data quicker". Related to that, since investing in costly digital solution such as sensors might be difficult for a BG in its initial phases, the same interviewee elaborated his statements by saying that the right tuning with specialized partners is the key for their operations.

Deeply on the role of AI and ML, I8 considers the role of cameras built into their devices to be fundamental: "We have three cameras that need to process what you're writing. We have to capture and to process images and we have to understand what is being done in these images. The role of motion sensors is also fundamental so that we understand when the pen is moving as well". Furthermore, businesses such as the one of I14 are adapting to Generative AI to provide HR department solutions that are allowing the management to train their new employees: "The current story is that now we are heavily investing in integrating our solutions with Generative AI, but not so much implementing it yet because we also find the market a but hesitant to adopt AI". By looking at the company's ability to integrate new discoveries from the external environment, the company must also adapt from negative external events that may impact its growth. In this regard, the covid-19 pandemic made I9 very creative in being able to find new solutions with respect to the market they were targeting, allowing them to change their strategy and move towards online sales.

When a start-up is in its seed phase, and where there is not a product or service available on the market yet, it might be difficult to sustain costs without having a solid revenue stream. Related to this, the role of geographic ecosystems and co-funded financial aids has been seen by interviewees as a determinant source of growth in the BG's early stage. For what concern the geographical area of Twente region, I16 noticed that "Our company is at the exit of the university, standing ready for people that want to work with us. Talented people that are just coming off the university were and are easy to shape and they are very proactive to start working". Similarly, I4 pointed out that "Being on the other side of the university is clearly a direct connection to the university, and there is also a well-established investor network here". Moreover, working with student was also seen convenient under a cost reduction analysis for I16.

Deeply related to implementing innovation, incubators have helped I9 and I14 to better focus on the market research, hypothesis and hypothesis testing strategy: "We had a lot of help from incubator in TU Delft, which helped us in implementing our customer research" (I9); "Incubators helped us to create the product that it is now" (I14). About this, thanks to an US incubator in contact with large corporates and start-ups in the tech market, I10 has managed to be part of it, with their growth increasing exponentially right after that large corporates noticed them and started collaborating with them. To be able to enter in a US incubator, I13 declared

that the Dutch location is sometimes an issue, because even if the project is convincing, US large corporates are not going to invest based on a slide deck or an idea. The focus on US incubators as booster of a BGs activities were also shared by I10, sharing that "We didn't use Dutch incubators, we were really focusing on the US at that time because there were the large incubated programs are and they are working with an effective international view [...] so once you are in an incubator that has an international presence, it creates big opportunities for you".

When approaching interviewees with the question "What is the role of co-founded financial aids for your business and where do they come from? (VC, Governments...)" almost all of the BGs expressed how the government played a big role in helping them saving some initial costs. Among the financial aids received, subsidies and grants were the most common: "The impact of grants was really important for us; thanks to that we've build the prototype for our platform and it covered from 30 to 70% of our costs" (I13). It also happened that the Dutch Ministry of Health was providing I11 funds to encourage their activity in implementing the studies on healthy food. More than the Dutch institutions, in some cases, the European Commission has also given grants to some of the interviewed BGs, mostly because the environmental impact created by their activities and their respect of the 2030 Sustainable Development Goals agenda.

By looking not only at the public financial helps but also at the private ones, it emerged how other sources of funding were still fundamental for some BGs. Still on the ability of the BG to create impact, I9 mentioned how "impact investors" were specially investing in his start-up because of the positive environmental impact of their product. Among those, business angels and crowdfunding platforms were the most common: "We started with an angel investor and with his help we got here. By him, we could have a final product in the market, which is a huge milestone for us" (I2).

#### 4.5 Successful Performance Abroad

At this point, by having an overview of both internal and external key traits that helped the interviewed BGs to grow in the international market, the final part of the questions generated results on the BGs strategies to grow over competitors, the metrics used by BGs to measure their performance and reason behind their success.

When entering a market as a start-up, it might be difficult to start expanding and win competitor's competition in the first years of the business. I14 and I15 underlined how being able to secure big customers from the beginning was a tactic to attract more customers, like a source of advertisement for the quality and the seriousness of their business: "Our first customer was seen as a huge rock. It was quite big especially for start-ups, it was a big assignment" (I14); "We focused on this big customer, and in other key customers that were known in the market. From the collaboration with them, you could attract other big ones and of course the small one." (I15). Similar to these statements, I1 highlighted how talking to the potential customer and finding the best product market fit was a strategy that has allowed his BG to secure clients since the beginning of their operations.

Since the Dutch language is not common outside the Netherlands, having all the business documents written in English and an international environment inside the start-up, made the language variable as key one to grow in international market since the begin (I12). Moreover, these findings find confirmation in I10 statements: "For what concern the Dutch market, we were running all our operation in English right after we settled. We thought it might be easier for use to be internationally focused since we have a small home market here".

When looking at the performance, especially in these cases of small firms that just started their business few years before, it might be flawed to look only at financial indicators. However, I8 highlighted how the metric related to finance he cared in the past years was related to the cash the BG has, to be able to invest it in new project and come up with a resulting cash flow forecast for the next few months. Still on the same page, I9 was not looking at the financial loss his start-up had in the first 2 years because he was purposefully selling the items at a loss, as a self-promoting advertising campaign, with customers spreading the word around given the qualities and low price of the product.

When it comes to other Key Performance Indicators, they were more focused on the operational side (Table 4), helping BGs understanding if they were following the correct strategy in getting the customer or improving the product in the right way. Given their breadth, it was considered to depict them in the visual below for a clearer overview.

Table 4: Key Operational Performance Indicators resulting from interviews.

Quote from the interview	Operational Performance Measure (1 <sup>st</sup> -order codes)
"Another KPI is how many leads do we have in the	Insights from market research, customer leads and
lead funnel? How many of them did we email today	prospects
or this week? How many did we have an	
appointment with? How many proposals did we put	
on the mail this quarter?" (I10)	
"We took the sales funnel. How many people are we	
in contact at the moment? What stage are they?"	
(I13)	
The key KPI, if they're not financial, should be about	Forecasts
setting goals and achieving them." (I9).	
"At the beginning it is a learning curve, it is about	
positioning and making forecasts considering the	
volume and the opportunities" (I11)	
"The reason why most technical start-ups fail is	Customer Feedbacks
because they focus on technology, which is not the	
most relevant item at the begin of operations. These	
start-ups don't go out of the building and don't	

engage with customer. What is relevant is having	
someone willing to buy the product at a certain	
price." (I7)	
"In the beginning, the revenue is not so important.	
We looked at customers' happiness because happy	
customers are coming back, and they tell other	
people about your product" (I15)	
"When we had the prototype, we asked customers to	
come by. Moreover, we've got a lot of emails from	
farmers requesting demos of the product" (I16)	
"Your trust pilot score is definitely an important	
metric to take into account" (I8)	
"Our core metric is the app usage. We track how	App Usage
much the app is being used in a month and in three	
months. (I14)	

The final questions of the interviews were aiming at summarizing the insights that emerged and understanding which factor proved most important in enabling the BG to grow in the foreign market. Again, by considering the relevance of the insights coming from these questions, to facilitate the comprehension of the reader, it has been considered appropriate to represent the results in the following grid (Table 5).

Table 5: Variables' role in determining the BG's success.

Quote from the interview	BGs success reasons (1 <sup>st</sup> -order codes)
"When the product is somewhat mature and you can	Combination between EO construct and VP
sell it, the role of the founder becomes inevitably a	
bit smaller". (I9)	
"It's always a combination between the VP and the	
entrepreneurial experience. First, you need to look if	
there is a real need in the market" (I2)	
"To have a known product in the market, first you	
need to set the right strategy and engaging with the	
right customers. That's when the entrepreneur plays	
a key role" (I12)	
"The product is important, but the combination of	
having a brilliant idea with the entrepreneurial	

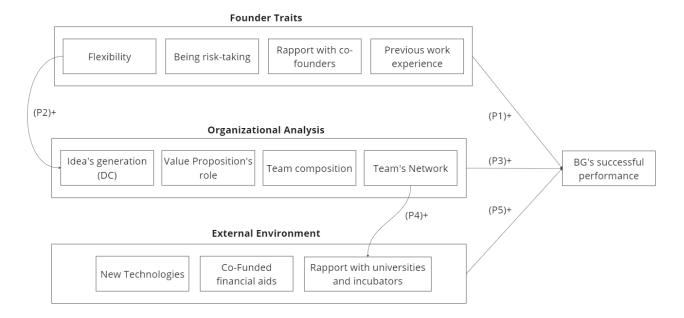
Flexibility
Previous Work Experience
The Entrepreneurial Team
Language used to Develop the Product

#### 5. Discussion

This research aimed at answering the initial RQ: "How do individual traits, organizational factors, and institutional contexts collectively contribute to the successful performance of Born global firms?" More specifically, the purpose of this study was to investigate the current state of art for BGs successful internationalization process and to outline similar or new variables that emerged from this research's results, in comparison with the ones described in section 2. By linking the layers of analysis in Fig.1 and the variables in Table 1 that has been used to ask questions to interviewees, the following multilevel conceptual model was

developed (Fig 3), with three key areas. To this purpose, the variables of each area should be considered when studying the reasons that lead a start-up to evolve and become a successful BG in the international arena.

Fig 3. Multilevel conceptual model of layers considered when studying the successful performance of BGs.



#### 5.1 Founder Traits

The findings pointed to the fundamental role of the founder, since this figure seems to be crucial to increase the business opportunities and the firm's growth. However, among the traits identified by Lumpkin and Dess (1996), only a few of those were in line with what emerged in the interviews. For what concerns risk-taking and motivation, those are both needed for the entrepreneur to cope with the most critical BGs' moments in the early years. Similar findings were also gathered for the dimension that Lumpkin and Dess (1996) address as proactiveness: throughout the interviews, it has become clear that the entrepreneur must be able to recognize when it is the moment to change the BG's strategy, because of a new opportunity. Therefore, the flexibility variable has to be seen as a causal variable of the innovativeness and proactiveness traits emerged in section 2. To conclude, the competitive aggressiveness does not find any link with the arisen results: according to the emerged results, the BGs were not really entering in highly competitive sector, but instead they were a forerunner of new markets. Moreover, among founder traits it emerged that the founder has to be able to coexist with her/his co-founders, by leveraging its personal characteristics and build rapport. In fact, the relationship created between co-founders ensured a common approach between the parties, avoiding internal conflicts and generating trust in each other.

On the same line of Park and Rhee (2012), the founders previous work experience was noted to be a key variable. According to the results of this study, even the youngest founders came from experiences that enabled them to acquire knowledge in the start-up or technical field. Consequently, both from the point of view of age (Varma et al., 2016) and of being a habitual entrepreneur rather than a novice one (Odorici and Presutti, 2013),

this research results confirm the findings previously gathered from the theory. Even if the having had international study experience did not prove to be a determining factor (Dana et al., 2016), it has been seen how certain founder's traits and their previous work experience are determinant for the BG successful performance. Therefore, the following proposition is derived:

(P1): Among the individual traits, being risk-taking, flexible and show coordination with the co-founders are seen as key traits for the future successful performance of the BG, with the previous working experience playing a crucial role.

# 5.2 Organizational Analysis

Among the variables analyzed as BG founder traits, from the findings of this work it came to light how the founder's ability to adapt to new opportunities on the market and being flexible were linked with the whole team/organization ability to generate new ideas and be able to tweak the internal strategy to go international. Therefore, the founder was able to influence the BG's employee ability to be updated on market trends and be able to adopt those to implement the best strategy for greater market success. Being ready to adapt to market changes is therefore linked to the ability of sense and seizing new opportunities coming from the market and enunciated in the dynamic capability theory (Rodriguez-Serrano and Martin-Armario, 2019). To this end, the following link between individual traits influencing the organizational strategy is derived:

(P2): The founder's flexibility in being able to capture new market opportunities and trends translates into the company's ability to generate ideas.

Still on the concept of capabilities, Romanello and Chiarvesio (2017) stated how different capabilities are a requirement in different stages of the BG's development, with the EO traits fundamental in the pre-founding phase and the dynamic capabilities being important in the market-entry stage. Looking at the interviews, it has been highlighted how the role of the entrepreneur was actually seen as fundamental in the initial stage, to set the strategy and talk to the right customers and network.

A relevant stream of this research has focused on the BG's VP, generating some results in line with theory and others that brought out new concepts to be considered. As outlined by Hennart (2014) and Knight and Cavusgil (2004), being able to offer a product/service that has a unique VP in the business domain and guaranteeing its focus on quality is a characteristic that has been shared by several interviewees, who said that being first to market gave them a first mover competitive advantage. Looking on the cost section of the Business Model and focusing on the R&D role, the results given by a couple of start-ups in the tech environment are linked to the Eurofound study (2012), which stated that having a medium-high amount of costs due to R&D is a key to success. By remaining on the BG's ability to innovate, the recent findings of Jarosinski et al., (2023) on creativity and innovation as the basis of competitive advantage finds confirmation both for what concern the EO traits highlighted in section 4.1 and the VP characteristics of the interviewed firms. Moreover, the concept of product differentiation as the base of a competitive advantage highlighted by the same author, is in line with what has been said above on the unique VP of the BG.

Looking at the quality of the product, it emerged that interviewed BGs focused on how improvements on quality could have been achieved thanks to demos, mock-up tests and idea validation through a close rapport with customers. In this regard, the value creation aspect set out by Guo et al., (2022) is indeed focusing on being concerned with industry trends, hearing from partners and adjust the firm's positioning in the business ecosystem by hearing from customer's feedbacks. To conclude on the VP variable, the role of intellectual property rights and the one of patents that emerged in section 4.2 found no link with theories related to how the VP can determine the success of the company.

Still remaining on the organizational analysis, one of the key traits in ensuring the BG growth in the market has been attributed to the team composition, even if on the theoretical point of view there were no findings related to the complementarity of the founders' role in leading the firm toward success. On the other side, the network's role was emphasized both on a theoretical and a results analysis. Deeply into that, the firm's network helped interviewees to overcome the BGs resource-constraint characteristics formulated by Gerschewski et al., (2015) who stated that without the collaboration of previously known business partners and friends, the BG would not have been so quickly successful. The ability of the firm to concentrate upon fostering adaptation and innovation through the network (Monferrer et al., 2015) was a core factor for certain organizations, which have implemented new products thanks to company networks. As for the organizational analysis, the results emerged by the interviews, lead to the following proposition:

(P3): The interplay of VP characteristics, the team composition and its ability to generate new ideas together with the firm's network, are crucial in helping the BG grow in the market.

#### 5.3 External Environment

By considering that many of the interviewed companies are part of the tech sector, their ability to use digital tools to their own advantage has enabled them to succeed in the marketplace. Specifically, the last trends in new technologies, consisting in the development of tools such as Generative AI, GPS sensors and ML has allowed some BGs to expand to more consumers, updating their VP. The theories of Musso et al., (2022) on the role of digital technologies in fostering new possibilities for market expansion are thus confirmed by the results, suggesting that if one collaborates with the right customers ready to adopt new technologies, this investment is often linked to a source of competitive advantage. However, other events coming from the external environment have slowed down the operations of some of the interviewed BGs, not through target country risk as hypothesized by Efrat and Shoham (2012) but rather because of Covid-19 pandemic, which hindered the start-up's partnerships and customer relationships that were crucial to its success in the early years.

While only few studies were highlighting the role of governmental aids in section 2.5, it proved to be crucial for many BGs interviewed. Indeed, instead of public support aimed at promoting exports (Moen et al., 2022), the Dutch government provided BGs with various grants that allowed them to cut some costs and focus their investments on other research and development activities. About that, it should be noticed that the government funds were received due to the nature of their activities, some of which were related to the SDGs 2030. More

than from the government, many aids are also derived from business angels and crowdfunding partners, arguments on which there was no focus by the authors held in consideration for this research.

From a more academic than institutional point of view, Tanev's (2012) theories on the importance of BG in being close to universities and research centers has been widely confirmed by the results collected. Specifically, for some companies, collaborating with universities to use laboratories, have professors on the board and attract students due to the geographical proximity to the university, were variables influencing where to locate the start-up, respecting Varma et al., (2016) on start-up location as a crucial element for its success. Moreover, linked to the ability of the BG to collaborate with universities, there is founder's already established rapport with the academic ecosystem. As a result:

(P4): The academic knowledge network developed by the team is important to implement the relationships with universities and incubators.

Concluding, by looking at the variables in the external environment, the following proposition is made.

(P5): New digital technologies, co-funded financial aids and collaboration with universities are key factors to consider when a start-up is looking to grow in the market and expand in the international arena.

#### 5.4 Successful Performance Indicators

After providing an overview of how different layers have determined the success of the start-up in the international arena, one has to understand the extent to which the interviews leading to these layers were differing from the theoretical background. Jiang et al., (2020) stated that entrepreneurial characteristics, network and geographic location are key for successful performance. Similarly, the factors most highlighted by the interviewed founders were related to the combination of entrepreneurial traits with the VP, focusing on how the former are more important in the initial phase of the start-up to set the strategy. Still looking at the characteristics of the founders, the flexibility in changing strategy is confirmed as the key factors in determining success for the born digital of the future by Jarosinski et al., (2023).

Moreover, while the previous work experience was seen as a key trait for BGs team in being successful (Odorici and Presutti, 2013), the cohesion and the role's complementarity of the team was not reviewed by the academic findings. Likewise, the English language used to develop the product and the one of all documentation available for investors and partners was considered as a booster to start collaborating with international entities but this one too was not studied by academics.

In light of the liabilities of foreignness and newness discussed by Knight and Cavusgil (2004), by considering the initial costs to develop prototypes and to carry out investments, in the first months or years of income in new markets the BGs financial performance could still be negative. Consequently, the interviews were also aiming at understanding what were the variables used by the founders to ensure that their way of proceeding was in line with the initial forecasts. Looking at new market entry and expansion rates and the degree of product/service acceptance shared by Falahat et al., (2018), the insights from market research in

generating new leads and prospects were considered by many BGs. Still related to rates aimed at aligning the expected growth with the current strategies, some BGs' KPIs were used to achieve the goals already set and gather data on the app usage. In addition, looking at the degree of product acceptance by customers, their feedbacks were thought as determinant in tuning the product/service toward the right customers' needs (Lumpkin and Dess, 1996)

# 5.5 Practical Implications

In this increasingly digital world, BGs have demonstrated how their focus on technology and innovative tools/services introduced to the market was the key for their success, paying attention to the quality of the product to gain competitive advantage rather than the price. By concentrating on AI, sensors and microchips development, these new firms were able to bring disruptive innovation in the business domain they were entering, with the consequence of gaining market share and pushing some competitors out of the market. The commitment showed by each BG interviewed toward technology was also a key reason for obtaining financial aids from the government and interest from business angels and crowdfunding associations. Especially for start-ups specialized in more than one domain, like the cleantech ones, participating in events related to both tech and clean environment gave them the opportunity to scale-up sooner than other firms only focusing on a specific domain.

In addition, by looking at the Sustainable Development Goals for 2030 agenda, following the goal n°9 with the aim of fostering innovation, the current database of BGs can provide a clear overview of some successful market segments in the entrepreneurial domain. By looking at the same goal, it is highlighted how higher-technologies industries are far more resilient in crises than their lower counterparts (United Nations, 2022). By remaining on the United Nations panorama with SDG n°8, BGs can foster economic growth in precise geographical areas thanks to collaboration with innovation partners such as universities and start-up incubators. Still, the role of universities, start-up incubators and mentors might be the key in training current entrepreneurs, students, and people passionate about innovation and entrepreneurship. In fact, by looking at the variables that lead the BGs to success, those entities can foster the importance of a VP centered on innovation, the right composition of the team and their ability to be flexible and tune the strategy according to new events happening in the market.

On the other side, considering the uncertain, risky and complex environment that start-ups face when trying to grow in the market, the results of this study can provide suggestions and help start-uppers in identifying what did not work in the past or to focus on what might be considered when they want to start their own business without receiving the support of the entities outlined above.

Furthermore, by looking at the role of policymakers, their ability to help these BGs when they were still in a seed phase has proved successful, with grants and subsidies that have helped entrepreneurs to lower the high costs associated to the technological development of their products and the ones related to testing and modifying prototypes in the market. To this end, many companies have said that without the help of state

finances they would have already gone bankrupt several times. With this goal in mind, policymakers are then required to better focus on how to finance BGs and what are the activities that require more support to these firms.

# 5.6 Limitations and Suggestions for Future Research

Like any other research, the limitations of this paper may represent an opportunity to deeply analyze this topic in the future with new research.

The first limitation comes from the origin of the sample analyzed with regard to BGs. The Netherlands is already an innovative country in the European Union panorama. Moreover, due to its size and a population of less than 20 million, these BGs may decide to enter the foreign market immediately, not only because they want to expand and grow, but perhaps precisely because remaining concentrated only in the Netherlands would not bring enough profit and growth to the BG.

A second limitation is related to the industry from which the people interviewed came. In order to avoid interviewing founders coming from a highly innovative and international industry as the tech sector can be, the author tried to consider as many types of industries as possible in this study, to analyze how the variables studied could influence the international growth of BG from sector to sector. However, although the aim was to have a pool of start-ups from different sectors, given the innovative component in determining BG success, most of them came from tech or cleantech sectors.

In addition, the BGs taken into analysis were at different stages of their internationalization process. Some are already global companies that entered the first foreign markets already a decade ago while others are start-ups that have just finished developing their product and have validated it with interested international customers through demos and pilot tests. Consequently, the role of the latest technological trends (AI, ML) has not impacted the internationalization of some companies while this has happened instead for the start-ups founded more recently.

Moreover, by looking at the qualitative research limitations, the interpretation of gathered data and its analysis depends on the author's analysis, which can cause bias and influence the reliability and validity of findings.

Related to the limitations listed above, some suggestions for future studies on variables that have a key role in ensuring the success of born global are outlined in the following lines.

Linked to the geographical area considered for this study (The Netherlands), future research may consider BGs that are born in much larger countries or compare BGs in relatively small countries with larger ones, to understand how some variables can change based on the size of bureaucratic and technological system peculiar to a certain country. Additionally, due to the technological infrastructure and the economic prosperity of the targeted country, it might be easier for some BGs to derive better results in innovative sectors and grow internationally.

To have more specific insights on a particular sector, future researchers can focus on a specific business, so as to examine possible new variables that could emerge connected specifically to a particular sector. Similarly, considering the different stages of the internationalization process among the study's participants organizations, in the future it is advised to perform a study that considers companies that are at the same level of growth in a specific period regarding entry into foreign markets.

In conclusion, the conceptual model set out in section 5 can be a starting point for quantitative research on this topic, by testing the five-proposition promoted in the same section. Following the quantitative approach, data can be collected through questionnaires rather than interviews, allowing future researchers to study the significance of variables in facilitating the internationalization process for BGs.

#### 6. Conclusion

The purpose of this research was to study the variables that drive the BGs internationalization process. Since in the past the framework offered by the academic literature were focusing only on specific variables and the research method was mainly quantitative, this study provided a more comprehensive overview of these variables, thanks to in-depth insights gathered through interviewing BGs' founders.

Despite the role of Entrepreneurial Characteristics and Value Proposition had already received attention from the literature, other traits such as the innovation of the VP and the founder's experience in managing other activities or start-ups prior to the current one, have been highlighted as key factors of BGs success. Unlike the literature, the team composition with complementary functions and the role of intellectual properties have been enhanced by several interviewees, which also mentioned factors that had received little attention in the past such as the importance of the business network in having access to human resources and financial aid from the government.

Given the high innovation rates of the companies interviewed, and the possibility of leveraging on more recent technological discoveries, this field of research deserves to be continuously updated, so as to map how new variables may emerge over the years or how other factors may not be as important as they were a decade ago.

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# 8. Appendices

#### 8.1 Appendix 1 – Interview questions

Before moving on to the questions, it was thought to write beside each one, the topic of reference, to aid understanding and ensure touch upon all topic analyzed in section 2. A list of Abbreviations is provided.

VPs - Value Proposition traits

EO – Entrepreneurial Orientation

FiE – Firm internal Environment

FeE – Firm external environment

CA – Competitive Advantage

SPIM – Superior performance in International Markets

#### **Introductory questions**

- 1. First, thank you for participating in this interview, it is really appreciated. So, tell me about your start-up, what's its core activity?
- 2. How much time elapsed between the firm foundation and the entry in international markets? [CV] (can be gathered through additional sources)
- 3. What is at the moment the percentage of international sales in the total sales [SPIM] (may be difficult for the manager to reply). [CV] (can be gathered through additional sources).

#### **Intermediate questions**

- 1. Tell me about your value proposition? (If they do not know what is it or are going out of track, enlight them).
- 2. What gaps does your VP addresses?
- 3. Follow-up question How do you consider your VP compared to competitors prices, quality? [VP] (Do I understand correctly that...?).
- 4. Apart from VP, are there other components of your VP that you consider unique for the success of the firm?
- 5. Would you say that the firm is operating in a niche market? [VP]
- 6. Are you actually using new digital technologies such as AI, ML, cloud computing.? Would you describe your start-up as digital? [VP and FeE]]
- 7. Why did you decide to leave the previous job and found this start-up?[EO]
- 8. What is the main source of innovation among product/services that your firm sell? It may be R&D expense, patents, market analysis... [EO and VP]
- 9. Tell me about the risk you perceived when setting up the business In terms of finances and the risk of offering a product/service that may not have been successful. [EO]
- 10. Follow up-question on degree of risk perceived (if the environment is perceived too risky, is the entrepreneur still setting up the business?) [EO]
- 11. Can you describe a situation where you identified a new opportunity inside the start-up, and what steps did your team take to capitalize on it? [EO and FiE because of sensing and seizing]
- 12. How do you stay up to date with market trends and changes in your industry, and how do you adjust your strategy accordingly? [EO and FiE]
- 13. Looking at the process that led to the firm international performance, how do you consider important the role of value proposition and the one of the entrepreneur? [EO and VP]
- 14. Did your personal network or the one of your colleagues helped you in achieving international presence? [FiE] (is the team international?)
- 15. Have you or members of your team studied and worked abroad before founding the firm? [FiE]

- 16. To what extent is the digital technology environment (with AI, ML, product configuration) responsible for the firm's internationalization? [FeE]
- 17. How did the geographic ecosystem foster the firm's internationalization? [FeE] (look for hints in bureaucracy and regional clusters)
- 18. What is the role of co-founded financial aids for your business and where do they come from? VC, Governments.
- 19. Do you think there's a link between the variables touched until now and the ability of the firm to guarantee itself a competitive advantage in the market? [CA]
- 20. What is at the status of your start-up current financial performance? (Understand about entrepreneur able to push the product or VP)
- 21. Follow-up question on performance: what do you consider being a good measure of operational performance? And do you think your start-up is doing well? (Hints for OP: market share, product quality)

#### **Ending questions**

- 1. Between VP and EO, what to you think were their role inside your start-up throughout these years? Follow up Do you think it is the sole product that made you successful or is there something else?
- 2. Would you like to touch upon something that has not yet been addressed during the interview?