

**BUILDING GLOBAL INNOVATORS MARKETING PLAN – A  
STARTUPS ACCELERATOR IN THE PORTUGUESE MARKET**

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## **Abstract**

In the last years, the entrepreneurship ecosystem has been experiencing a constant growth in Portugal, as a higher number of startups are created every year. However, these new ventures have a high rate of failure in the first years, due to the high risk characteristic of an early stage venture. In order to help new ventures to overcome early stage obstacles, the number of incubators and accelerator has been growing every year in Portugal, being increasing the number of startups benefiting from it. In relation to this, there is a clear opportunity for accelerators to catch the beginning phase of this phenomenon in Portugal in order to build a strong and solid position in the Portuguese market in the long term. The present project presents a marketing plan for BGI Acceleration Program, with the objective of increasing brand awareness in the target market. In this marketing strategy plan we elaborate an internal and external analysis, characterizing the Portuguese entrepreneurial ecosystem, the company, BGI's competition and the respective consumer - the Portuguese deep technology startups. In the Operational Marketing Plan, we develop a one-year plan to, defining the marketing-mix of the company and the implementation plan to follow.

**Keywords:** Business Plan; Accelerators; Startups, Entrepreneurship

**JEL Classification:** O310 - Innovation and Invention: Processes and Incentives; O320 - Management of Technological Innovation and R&D

## **Abstrato**

Ao longo dos últimos anos, o ecossistema empreendedor em Portugal tem experienciado um crescimento constante, observado através do número elevado de startups criadas todos os anos. No entanto, é importante verificar a elevada taxa de insucesso de startups, devido ao elevado risco característico da criação de uma nova empresa. De forma a ajudar estas novas empresas a superarem os seus obstáculos iniciais, é visível o crescimento do número de incubadoras e aceleradoras em cada ano em Portugal, estando a crescer o número de startups a beneficiarem destas entidades. Desta forma, existe uma oportunidade evidente para as aceleradoras aproveitarem a fase inicial deste fenómeno em Portugal, de forma a construírem uma marca forte e sólida no mercado português a longo prazo. O presente projeto apresenta um plano de marketing para o Programa de Aceleração BGI, com o objetivo de aumentar a sua notoriedade de marca no mercado alvo. De forma a elaborar um plano estratégico de

marketing, elaborámos uma análise interna e externa, caracterizando o ecossistema empreendedor português, a empresa, os seus concorrentes atuais no Mercado e o respetivo consumidor – startups tecnológicas portuguesas. No Plano de Marketing Operacional, desenvolvemos um plano com a duração de um ano de forma a definir todos os fatores de marketing da empresa e um plano de implementação a seguir.

**Palavras-Chave:** Plano de negócio; Aceleradoras, Startups, Empreendedorismo

**Classificação JEL:** O310 - Innovation and Invention: Processes and Incentives; O320 - Management of Technological Innovation and R&D

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## Glossary

**AgriTech** – Agriculture Tech captures the use of technology in agriculture, horticulture, and aquaculture with the aim of improving yield, efficiency, and profitability through information monitoring and analysis of weather, pests, and soil and air temperature.

**BAs** - Business Angels

**Blockchain** - Blockchain is a decentralized data storage method secured by cryptography. Cryptocurrencies are one of many innovations utilizing the blockchain. Companies building their product/architecture on top of this decentralized and encrypted technology are defined as blockchain companies.

**AI** – Artificial Intelligence (AI) refers to an area of technology devoted to extracting meaning from large sets of raw data, e.g. often including simulations of intelligent behavior in computers.

**Clean Tech** - Cleantech or clean technology is an umbrella term which is used to define technologies which optimize the use of natural resources, produce energy from renewable sources, increase efficiency and productivity, generate less waste and cause less environmental pollution.

**EIT** - European Institute of Innovation and Technology

**Exit** - Point at which an investor (usually a venture capitalist) sells his or her stake in a firm to realize his gains (or losses)

**FoodTech** - The application of technology to improve agriculture and food production, the supply chain and the distribution channel

**INE**- Instituto Nacional de Estadística

**IPO** - Initial public offering

**Medical Devices & Health Care** - Medical technologies and health-related technologies. Medical devices, processes for the medical industry. The Medtech sub-sector is primarily focused on designing and manufacturing medical technological equipment, devices, and tools - performing functions like diagnostics and drug delivery.



**MIT** - Massachusetts Institute of Technology

**Smart Cities & Industry 4.0** - Technologies involving smart cities, sensors, the internet of things, or that can be applied in a large-scale industrial context.

**Survival Rate** - The number of startups that are still currently operational over the number of startups that bankrupted.

**SME's** - Small and medium enterprises

**Sustainable Land Use** - refers to practices and technologies that aim to integrate the management of land, water, biodiversity, and other environmental resources to meet human needs while ensuring the long-term sustainability of ecosystem services.

**Water Economy** - Any technology, ranging from chemicals to patrolling drones, that involves the ocean and its ecosystem.

**TechDistribution-** New channels for biological food distribution in better maintenance conditions.

**VCs** - Venture Capitalists

# 1. Summary

In the last years the entrepreneurship ecosystem has been growing in Portugal, as a higher number of startups are created every year. However, these new ventures have a high rate of failure in the first years. In order to help new ventures to overcome early stage obstacles, in the last decade incubation and acceleration programs were created. Accelerator programs provide entrepreneurship knowledge to startups and help them to transforming their ideas into successful businesses, decreasing the barriers to enter the market.

The number of accelerators has been increasing in Portugal mainly due to advances in digital technology, and there are already three Portuguese accelerators in the 20 top active accelerators in 2015, according to the Gust & Fundacity European Accelerator Report from 2015: Beta-i, Start-up Braga, Fábrica de Startups and Building Global Innovators.

This master project has the objective to develop a marketing strategic and operational plan to increase brand awareness for Building Global Innovators (BGI) acceleration program in the Portuguese entrepreneurial ecosystem.

A marketing strategy was defined, and marketing-mix components were designed to create a brand positioning that will respond effectively to the startups needs.

Finally, we provide several insights about the Portuguese entrepreneurial ecosystem, mainly about deep technology startups and startups accelerators.

## 2. Executive Summary

This project has the goal to develop a Marketing Plan that supports a strategy to increase brand awareness of BGI acceleration program in the Portuguese entrepreneurial industry.

Building Global Innovators Accelerator (BGI) is a deep tech startups accelerator based in Lisbon- BGI was born from the MIT Portugal Innovation and Entrepreneurship Initiative (IEI) - launched to support Portugal's goal to strengthen its capacity in business education, technological innovation and entrepreneurship. The initiative was a collaboration between ISCTE - IUL, MIT Deshpande Center for Technological Innovation, MIT Entrepreneurship Center, MIT's School of Engineering and the Foundation of Sciences and Technology (FCT).

In 8 batches, BGI has accelerated 133 ventures, with a survival rate of 64%. BGI alumni (startups accelerated by BGI) have created 727 high tech jobs and raised over €181 Million. As a start-up's accelerator, BGI provides a program for startups where they have personal weekly mentoring meetings with relevant experts, and 3 bootcamps, with expert coaching - 2 in Lisbon and 1 in Boston. Furthermore, it provides its startups with access to a network of potential and relevant partners, in order to startup fundraising.

We detected an opportunity in the Portuguese entrepreneurial ecosystem. The acceleration industry in Portugal is definitely growing and startups are benefiting from it. In relation to this, there is a clear opportunity for accelerators to catch the beginning phase of this phenomenon in Portugal in order to build a strong and solid position in the Portuguese market in the long term.

According to the Report Entrepreneurship in Portugal by InformaDB (2017), between 2007 and 2016, 347.272 companies and other organizations were constituted, representing an annual average of almost 35.000.

According to the Portuguese ScaleUp Report (2017), the entrepreneurial ecosystem in Portugal is ranked within the top 25 of the World Bank ease of Business Index. This is also evident by the proportion of startups still operational in Portugal (97%), which is significantly higher when compared to benchmark countries.

As more and more startups are being created each year, developing effective ways to support them has become more relevant than ever. At the same time, reducing the cost of starting a startup has created the opportunity to invest much smaller amounts than before.

In this marketing strategy plan we elaborate an internal and external analysis, characterizing the Portuguese entrepreneurial ecosystem, the company, BGI's competition and the respective consumer - the Portuguese deep technology startups. In the Operational Marketing Plan, we develop a one year plan to increase the program awareness in the market, defining the marketing-mix of the company: product, price, place, promotion, people, process and physical evidence.

Our goal is to make the Portuguese deep technology startups to know the value proposition of BGI acceleration program. This is a growing type of market that will become more important in the next years, and so, the opportunity is expected to grow.

From the chapter 5 to 7 it was made an External Analysis. This includes a mediate analysis (political, economical, social, technological and environmental factors) an immediate analysis (a sector overview and future trends) and a competition analysis.

In the chapter 8 it was made an Internal Analysis about Building Global Innovators. We went on detail about BGI vision, portfolio and business performance indicators.

In the chapter 9 we used the previous work to complete a competitive analysis – SWOT.

In the chapter 10 we conducted a survey to understand the critical success factors for joining an accelerator program, in order to better understand the target.

In the chapter 11, it was developed a new strategic marketing plan. For this we analysed in detail the consumer, we defined our marketing strategy and we built our marketing-mix components (Product, Price, Place, Promotions, Physical Evidence, People and Process).

Finally, in the chapter 12, we set an implementation chronogram that will guide the strategic plan.

### 3. Definition of Problem Context

Building Global Innovators is worldwide deep tech startups accelerator created by ISCTE & MIT Portugal. Since 2008, BGI had eight editions of accelerations programs, raising over 181 Million€ and accelerating 133 startups.

In the last years, the entrepreneurship industry has been growing in the Portuguese market. According to the Entrepreneurship in Portugal Report by InformaDB (2017) , between 2013 and 2017, there was an increase of startups births of 2,4% in Portugal, specially in the sectors of services, retail and hospitality & tourism. The same report state that during these 4 years, 187.659 startups were born. However, Portugal does not yet have an IPO, and has a small proportion of startups that have been acquired (less than 2%) within the period of analysis.

According to the Gust & Fundacity European Accelerator Report (2015), startups accelerators have expanded across the world as a new way of helping entrepreneurs and startups. A data study about the European entrepreneurial industry (European Startup Monitor, 2016) sustains that Portugal ranks 5<sup>th</sup> position in the top 10 countries by startups accelerated.

Between 2009 and 2015, the number of European accelerators has grown consistently year after year, accordingly to Gust & Fundacity (2015). The number of new releases of European accelerators exposed a relevant increase 2015, as new accelerators continue to be launched in multiple regions. The Gust & Fundacity (2015) states that “of the 26 accelerators launched in 2015, fourteen of them are focused on specific niche markets including Health, Real Estate, Food, Media and many others”.

The acceleration industry in Europe, particularly in Portugal, is definitely growing and startups are benefiting from it.

In this project, we will develop a marketing strategy for the BGI acceleration program, in order to improve its awareness near the entrepreneurial community and reinforce its position in the Portuguese market, becoming the number one tech-based startup accelerator.

## 4. Literature review

European Commission (2006b), defines entrepreneurship as “referring to an individual’s ability to turn ideas into action. It includes creativity, innovation and risk taking, as well as the ability to plan and manage projects in order to achieve objectives. This supports anyone in day-to-day life at home and in society, makes employees more aware of the context of their work and better able to seize opportunities, and provides a foundation for entrepreneurs establishing a social or commercial activity”. (p.20).

“Entrepreneurial behavior involves the activities of individuals who are associated with creating new organizations rather than the activities of individuals who are involved with maintaining or changing the operations of on-going established organizations.” (Gartner & Carter, 2003).

### 4.1. Entrepreneurial Ecosystem

One emerging approach explaining high-growth entrepreneurship is the entrepreneurial ecosystem (Isenberg, 2010; Zacharis et al, 2003; Napier & Hansen, 2011; Malecki, 2011; Feld, 2012). Mayer (2013) stated that “Entrepreneurial ecosystems are very much a dynamic rather a static phenomenon and they provide ventures, access to sharp minds and smart resources”. Isenberg (2010) argued that accessible local and international markets, available human capital and financing, mentoring and other support systems, supportive regulatory frameworks, and universities are the most important factors for creating an entrepreneurial ecosystem. Therefore, the goal of this ecosystem is to create environmental and economic value supporting the development of startups.

These ecosystems represent a set of interdependent actors within a geographic region that influence the evolution of the entire group of actors and potentially the economy as a whole (Iansiti & Levien 2004). Cohen (2005) defines entrepreneurial ecosystems as “interconnected group of actors in a local geographic community committed to sustainable through the support and facilitation of new sustainable ventures”. In dynamic ecosystems, where it exists more interactions between players, startups have more opportunities to grow, creating employment and significant wealth conditions for the team (Rosted, 2012).

There are now a number of models of entrepreneurial ecosystems. In particular, Mota et al. (2016), defined the startup ecosystem by the following actors: entrepreneurs; support

organizations and individuals; government; service providers; large companies; and educational institutions.

- **Entrepreneur:** An entrepreneur is usually considered the carrier of risk in the pursuit of opportunities and commonly employ innovative behaviour to reach its objectives (Stevenson & Gumpert, 2008). His behaviour therefore involve three dimensions: innovation, audacity and pro-activity (Ireland, et al., 2006).
- **Government:** The role that the government plays in the development of an entrepreneurial ecosystem is an area of great importance (Neck et al., 2004). Given the role that entrepreneurship can play in local economics, governments have become increasingly interested in fostering a supportive ecosystem for entrepreneurship (Cohen, 2004). Political stakeholders foster the development of entrepreneurial ecosystems trough tax rates and incentives, subsidies and grants (Siegel et al.,2003). Moreover political stakeholders may provide financial supports or create adapted programs to support new ventures creation (Neck et al., 2004). According with the authors Neck (2004), Isenberg (2010) and Mason & Brown (2014), by supporting entrepreneurial initiatives, policy makers can support the entrepreneurial talent pool, and hence create a favorable environment for the development of new ventures.
- **Service providers:** These organizations are extremely important for the ecosystem. They provide several services for startups at a very affordable cost or, in many cases even for free (Mota et al.,2016). These entities, such as lawyers, accountants, business consultants, investors, recruitment companies, among others, understand the needs of new ventures. Such services are often willing to support new ventures at no charges, hopping to create long term business relationships (Mason & Brown, 2014).
- **Large companies:** Corporations play an important role in the evolution of the ecosystem as they have various resources, such as financial resources, market knowledge and brand awareness. By working with large firms, startups get the opportunity to implement pilots and validate their business model in the market. Moreover, by working with startups, corporations improve their brand image, creating a brand image of innovation (Mocker, Bielli & Haley, 2015). Large companies also contribute to the ecosystems by creation industry-focused acceleration programs

according to their specific markets, where they provide relevant market knowledge to startups. As Isenberg (2013) claimed, it is not possible to foster entrepreneurship without corporates supporting it. However, to make it possible, ventures should be open and coachable (Mason & Brown, 2014).

- **Educational Institutions:** Nick et al. (2004) points that "Universities are amongst the most commonly mentioned reason for the development of the entrepreneurial ecosystem". Entrepreneurship education is essential not only to shape the mindsets of young people but also to provide skills and knowledge central to develop an entrepreneurial mindset (Eurydice Report, 2014).
- **Support Organizations and Individuals:** Entities focused on developing, supporting and fostering a favorable climate to entrepreneurial activities. Given the large number of these entities, we will consider two different groups: ecosystem builders (accelerator and incubators) and investor groups (venture capitalists and business angels).

## 4.2. Ecosystem Builders

In order to support entrepreneurs during the validation phase, incubators and accelerators have being created, providing entrepreneurs resources that aim the survival and grow of the startup, while decreasing the risk of creating a new company (Clarysse, Wright, & Hove, 2015; Hoffman & Radojeovich-Kelley, 2012).

### 4.2.1 Incubators

Isabelle (2013), and Hoffman & Radojeovich-Kelley (2012) defined incubators as "groups of experienced businesspersons who provide nascent firms with advice, business services, financing on occasion and often office space to help them develop and launch their businesses with greater success than if the startups had not received assistance". The authors found typical characteristics associated with incubators as they are non profit organizations and provide co-working spaces at affordable prices. These entities support ventures, while, normally, not investing on them. Incubators are recognized by scholars and political stakeholders as an established local economic development tool, when accelerators are popularized in the private sector (Dempwolf, Auer, & D'Ippolito, 2014). According to Cohen



& Hochberg (2014), incubators help early stage ventures, allowing them to grow before entering in the market. Incubator managers may also provide deal flow to startups. Incubators, unlike accelerators, lack a fixed term on the incubation program, and experience continuous entry and exit of startups, that can stay resident for long periods of time (Fehder & Hochberg, 2014). Therefore, startup incubators play an important role regarding the seeding and growth process of new startups, as well as knowledge transfer (Almubartaki, Alkaraghoul, & Busler, 2010).

#### 4.2.2. Accelerators

Consensual is the broad definition that an accelerator is a group of experienced business people who provide services, office space, guidance, mentoring, networking, management services, knowledge and expertise to early stage firms, as a needed basis to help them succeed (Hoffman & Radojevich-Kelley, 2012). According to Hochberg (2015), acceleration programs are a combination of previously distinct services that were each individually costly for an entrepreneur to find and obtain: seed investment, value-added mentoring, co-working with other startups, network building and the opportunity to pitch to multiple investors.

Concerning the industry of accelerators, the first accelerators were primarily characterized as “generalists”, accepting ventures from a range of industry areas. However, more frequently accelerators are transitioning towards industry-specialization, focusing in industries characterized by specific knowledge and regulation, such as health care and sustainability. In practice generalist programs share a program more specific to that industry. (Cohen and Hochberg, 2014; Hochberg, 2015).

Previous literature outpoints the following five important dimensions of acceleration program structure (Cohen, 2013; Cohen and Hochberg, 2014; Hochberg, 2016; Miller and Bound, 2011). Each dimension is described below:

##### A. Duration

The limited duration of accelerators, usually three months, is the characteristic that most clearly defines this type of programs. Participating in an acceleration program may not necessarily keep the startup alive, instead, it may speed up the cycle of the venture - leading

to quicker growth or quicker failure. According to Cohen, S. & Hochberg, Y. (2014), accelerators, in contrast with incubators, are design to accelerator market interactions in order to help startups entering the market.

Graduations are marked by “demodays” where ventures founders pitch their businesses to large audiences of potential investors or partners. Overall, accelerator’s time compressed encourages a close relationship between accelerator directors and participating ventures, and encourage ventures to learn and adapt.

### B. Batches

Another consequence of the limited duration of the programs, is that ventures enter and exit the programs in groups, known as cohorts or batches. The experience of entering the same program fosters a strong feeling of community between the startups of the same batch. Accelerators create highly competitive and rigorous selection and recruitment processes to define the accepted ventures (Miller and Bound, 2011).

### C. Incentives

Accelerators may offer working spaces and seed investment to selected startups in exchange for 5-7% equity (Hochberg, 2016). Furthermore, some accelerator managers, as they have extensive experience as entrepreneurs or angel investors, offer mentoring to the ventures, from customer development to fundraising. Ventures affiliated with accelerators are called portfolio companies - consistent with the fact that most accelerators take equity in participating firms.

### D. Educational program

Education at accelerators appears to be intensive and often include training on a wide range of entrepreneurship topics. This training is given normally during bootcamps, where usually tmentors of the program or guest speakers share knowledge in specific topics. Investors also often serve as mentors, getting an early look at the startups, business plans, team dynamics and giving feedback about progress over the term of the program. Accelerators provide intensive trainings comparable to entrepreneurship classes at the collegiate level, with key experts or mentors in their field (Fishback et al., 2007; Hoffman & Radojevich-Kelley, 2012).

### E. Mentorship and network development

These programs provide intensive training in limited time to drive fast learning (Miller and Bound, 2011). Mentors work with startup founders during the program, providing advice and valuable feedback based on their expertise in specific areas (Hoffman & Radojevich-Kelley, 2012). Also, networking is cited as an important aspect of accelerator participation, where ventures are introduced every day to pre-selected mentors.

Previous research on this topic has tried to differentiate the definition of acceleration and incubation models, as they are often confused due to the newness of the phenomena. (Cohen and Hochberg, 2014). In order to avoid confusion between these two entities' conceptions, we present these differences summarized in table 1.

Table I. What do Accelerators do? Insight from Incubators and Angels

|                            | <b>Accelerators</b>         | <b>Incubators</b> |
|----------------------------|-----------------------------|-------------------|
| <b>Duration</b>            | Several months              | 1-5 yrs           |
| <b>Cohort</b>              | yes                         | no                |
| <b>Business Model</b>      | Investment; non-profit      | Rent; non-profit  |
| <b>Selection frequency</b> | Competitive, cyclical       | Non competitive   |
| <b>Startup stage</b>       | Early                       | Early, or late    |
| <b>Mentoring</b>           | Intense, by self and others | Minimal, tactical |

**Source:** Adapted from Cohen (2014)

#### 4.2.2.1. Value proposition of an accelerator

According to Osterwalder & Pigneur (2010), a value proposition describes a bundle of characteristics that create value for a specific target, by satisfying its needs. The value creation can be quantitative (e.g. price, speed of service) or qualitative (e.g. customer experience, brand). Hallen, B.; Bingham, C. and Cohen, S., (2017) dedicated their studies to define the characteristics among startup supporting entities. The value proposition of

accelerators has five parts: I. customer market, II. activities, III. rewards, IV. value experience, and V. alternatives and differentiation. Each aspect is described below:

I. Customer market: Accelerators focus on new ventures in a specific stage, in this way, they serve three distinct markets concurrently during this stage:

- New and potential ventures;
- Business Angels and Venture Capitalists;
- Existing firms searching for new products or firms to acquire as part of their portfolio.

II. Activities: Accelerators offer a bundle of services to each customer market they serve. To startups they offer a bundle of services in exchange for equity. Venture capitalists and investors receive information of viable investments and acquisition opportunities, respectively.

III. Rewards: An accelerator offers many potential rewards to startups as specialized knowledge, usually seed capital to proceed to the next stage of development, and ongoing proof of their concept throughout the accelerator experience. Rewards to VCs and Investors include reduction of opportunity costs associated with new investment opportunities, as the risk of an early stage company.

IV. Value experience: Accelerators offer different value experiences according to the market they serve. According to a study conducted by Hoffman & Radojevich-Kelley (2014) it was found that accelerator graduates have higher success rates compared to non-accelerator graduates, measured by longevity in business and receipt of further funding.

V. Alternatives and Differentiation

- Differentiation: Accelerators can find their differentiation along several dimensions, including the technology industries in which they specialized, and their unique combination of acceleration activities.
- Alternatives: Alternatives to participate in an accelerator, include participating in business incubators and the “null” option in which startups choose not be involved with accelerators/incubators and development with no assistance.

#### 4.2.2.2.Types of Accelerators

There are different types of accelerators that offer various services associated with accelerators and exhibit similar characteristics. For the purpose of this research, three types of entities have been identified, yet they have significantly different business models due to their foundation. The three types of accelerators are: innovation accelerators, university accelerators and corporate accelerators.

Innovation Accelerators: Innovation accelerators are private and for-profit in the business of identifying promising ventures with rapid and high-growth potential, usually providing early stage investment in the selected startups in exchange of equity, engaging in innovation activities to help these startups fundraising and cashing out for profit when these companies are required or have successful IPOs (Dempwolf et al., 2014).

University Accelerators: University accelerators are educational non-profits that accelerate the development of entrepreneurs at universities. They normally provide seed grants to support students through the development stages, mentoring, technical assistance, use of facilities, and networking (Hallen, Bingham, and Cohen, 2017). These programs often focus more on education opportunities than on potential future profitability (Hochberg, 2015).

Corporate accelerator: The emergence of corporate accelerators has been growing to the desire of many companies to be closer to innovation and gain access to emerging technology (Hochberg, 2015).

Corporate accelerators grow and manage portfolios of ventures to accelerate innovation and gain a competitive advantage. Corporate accelerators are often similar to innovation accelerators in structure, however there are many ways for corporations to participate in these programs. The most basic level resides in executives join already existing innovation accelerators as mentors or investors. The second level has corporates contracting others to run an accelerator for them (Hochberg, 2015).

## 4.3. Investor Groups

### 4.3.1. Business Angels

Just as the word “entrepreneurship” has different definitions, “business angels” does not have a widely accepted definition too (Preston, 2007). Hellmann & Thiele (2014) simply define angel investments as investments made by wealthy individuals into startup companies. According to the authors, over the last decade, angels have become a more important source of early stage funding for entrepreneurs. The rise of the angel market coincides with a shift in venture capital investments towards more later-stage deals. Angels invest with anticipation of a healthy return on their deal. They tend to have among the most lucrative returns, which matches the high level of risk they take when providing the first investments in a new company. As Preston (2007) stated, angel investors are also known for their willingness to bring knowledge to companies during their startup phase. Often, but not always, they are entrepreneurs who want to help the next generation of entrepreneurs (Cohen & Hochberg, 2014). BAs invest in startups because they have experience or personal interest in a specific industry (Hoffman & Radojevich-Kelley, 2012). Entrepreneurs receive their initial funding from angel investors, but may need follow-on funding from venture capitalists.

### 4.3.2. Venture Capital

According to Rodriguez (2011) venture capitalists are firms that are organized as limited partnerships that provide funding for properly-developed firms generally in early-growth and rapid-growth stages of development. According to Isakson (2000), venture capitalism is private capital invested in firms that are not listed on the stock market. The investment tends to be time limited and lasts for some years which, in practice, makes the venture capitalist a joint owner of the company. In order for it to be considered venture capitalism, it is necessary that the investor takes on a role in the firm, such as a representative amongst the board of directors. Venture capitalists pool their experience from several partners, some of whom are full time investors, who monitor and mentor the progress of the new venture. Venture capitalists are more selective and invest in more established firms that have proven track records and market acceptance (Hoffman & Radojevich-Kelley, 2012). VCs typically assign a representative member to handle advising with each venture in which they invest, with who they may spend a few hours per week interacting with. VCs also have relationships with the

ventures for several years, taking substantial equity ownership and employing legal protections that provide further control (Hallen, Bingham, Cohen, 2017).

## 4.4. Startups

A startup is a company looking for a scalable and profitable business model, without any or a few validation in the market (Blank & Dorf, 2012). Startups create innovation in traditional markets (Clarysse et al.,2015). However, it is a well-known fact that starting a new firm is a complex task. On one hand, a crucial challenge faced by entrepreneurs is to handle limited financials (Cassar, 2004), mentoring (Smith and Haningan, 2015) and human resources (Zott and Huy, 2007), crucial to the development of a new venture. On the other hand, the founding team's lack of experience (Gruber, MacMillan and Thompson, 2008) and difficulty in understanding and analysing opportunities (Ambos and Birkinshaw, 2010), is considered as a vital barrier. Nowadays, researchers and political stakeholders recognize that acceleration entities help entrepreneurs in overcoming the risks of developing and implementing new companies. (Aernoudt, 2004; Barbero, Casillas, Ramos and Guitar, 2012).

### 4.4.1. Startup Development Stages

Startup Commons Global works on scaling startup stages by working with the startup ecosystem, like educational entities, governments and corporates. This organization aims at developing and improving the volume and/or quality of the ecosystems key elements: innovation, entrepreneurship, talent, finance, policy and international connections.

According to this organization, the startup's life cycle has three stages: formation (consists in establishing the concept of the organization), validation (validating the product and the market fit) and the final stage, growth. In parallel with the three stages, there are 6 substages:

- Ideating: Initial idea on how it would create value, for a non specified market. Only exists one person or a vague team without full time commitment.
- Concepting: Defining mission and vision with initial strategy and key goals for next following years. The venture has two or three core founders with full time commitment.
- Committing: Ability to develop the initial product or service version, with committed resources, or already have initial product or service developed. Already exists co-founders and stakeholders agreements signed, including goals to achieve.

- Validating: Implementation of the service or product in the target market for validation. In this stage, key performance indicators (KPI) are identified and ventures start to attract additional resources via investments.
- Scaling: The ventures start focusing on their KPIs and measure its growth, having already customers and revenue in the market.
- Establishing: Capacity to easily attract financial and people resources. Founders and/or investors make exit(s) or continue with the company.

## 5. Mediate Analysis

### 5.1 Economic Factors

The entrepreneurship industry addresses the end-consumer mass-market, the business segment and public administration. Thus, the macroeconomic outlook impacts on entrepreneurial lines of business.

Portuguese economy has been facing a fragile situation, however the Portuguese GDP has been growing at a very slow pace in the last 5 years. Looking at the last data provided by PORTDATA, in 2017, the GDP has grown from 2,5% in 2007 to 2,7% in 2017(2,3% in the Eurozone). (Annex 1 – Economical Factors – Chart 1). The investment rate noticed a decrease from 22,5% in 2007 to 16,1% in 20017 (20,6% in the Eurozone). (Annex 1 – Economical Factors – Chart 2).

In another strain, the macroeconomic outlook is one of the most influential factors in this industry, due to the large impact on investment rates and creation of start-ups. According to ScaleUp Report (2017), in Portugal, CleanTech & Industrial areas appear to have the greatest share of investment, being normally dilutive (64,7%). (Annex 1 - Economical Factors - Chart 3). According to the same report, between 2011 and 2016, there were about 189 tech investors in Portugal, 0.86% of all the European Investors. (Annex 1 - Economical Factors - Chart 4). This observation is corroborated by the start-up's density, where every year there is an average of 8 new startups per 100 firms (ScaleUp Report, 2017). In 2016 there was a total of 386 start-ups, 189 investors and 382 founders (ScaleUp Report, 2017). The most popular funding origin is still the use of personal savings (86,8%). Family and friends also play an important role when it comes to financing a new startup, with 17,7%. Without appealing to



external funding, another strategy quite common in Portugal is using internal funding or operative cash flow (16,2%) (ScaleUp Report, 2017). Startup incubators and accelerators are increasing their support over new companies, financing around 26,5% of the startups. Venture capitalists and business angels have also started risking and investing on these new companies, with 27,9% of the companies having negotiated with those entities. Hence VCs and BAs are becoming increasingly more present on the Portuguese startup ecosystem. Banks are still an option when it comes to funding new business, since 14,7% receive traditional banking credit (ScaleUp Report, 2017).

This scenario is also affected by the unemployment rate. Portuguese unemployment rate has grown from 8.0% in 2007 to 8,9% in 2017, (1,3% above the European Union Unemployment Rate). (Annex 1 – Economical Factors – Chart 2).

In terms of employment, startups are responsible in average for 46% of the annual employment created in companies (InformaDB, O Empreendedorismo em Portugal, 2018). According to the European Startup Monitor (2016) the average number of employees at a Portuguese startup is 5,2 being the average number of founders 2.4, however 4.3% Portuguese Startups plan recruiting new employees within one year.

## 5.2. Political Factors

The political factors are one of the most influential factors in this industry, due to the to the government support to the creation of new companies.

In 2014, the European Commission created Horizon 2020 (H2020), the biggest EU Research and Innovation program ever with nearly €80 billion of funding available over 7 years (2014 to 2020). The goal is to ensure Europe produces world-class science, removes barriers to innovation and makes it easier for the public and private sectors to work together in delivering innovation, supporting small and medium enterprises. This fund divides itself in several funds, being one only available to small and medium enterprises including startups – the SME Instrument, with nearly €2.93 million of funding available. This fund presents financing opportunities for startups with strong internationalization potential with high risk/potential, based on the construction of a business model and its implementation. Following the development of H2020, Portugal agreed on a partnership with the European

Commission to create a policy to promote the economic, social and territorial development between 2014 and 2020 - Portugal 2020 (P2020). The policy is aligned with intelligent, sustainable and inclusive growth pursuing the Europe 2020 Strategy. Portugal will receive 25 billion euros until 2020, setting as objectives stimulate the growth and the creation of employment, with the creation of new companies and startups. This strategy also supports the research and innovation in strategic areas as science, technology and economy, in which Portugal has comparative and competitive advantages to emerge. The first great policy to help startups was the creation of the fund 200M. 200M fund is a 2 million matching fund that aims to foster investment in startups and small and medium enterprises experiencing elevated growth. This funds is directed to national or international venture capital investors and other entities who want to invest in Portuguese SME's. The goals of the 200M Fund is attract international entrepreneurs and startups to Portugal and foster International Venture Capitalists to invest in the Portuguese market.

In 2013, the Portuguese Ministry of Industry launched Portugal Ventures, a national venture capital agency for entrepreneurship to help young startups, by investing public capital of risk. As a public company, Portugal Ventures, has an obligation to contribute to the Portuguese ecosystem, encouraging the creation of more startups, more incubators and more accelerators. The clear mission of Portugal Ventures is to support the financing difficulties at the level of risk capital and act as an investor in technology startups and in strategic sectors for the national economy. In another strain, the Portuguese Ministry of Economy conclude that there was a necessity in the entrepreneurial market of an entity that had two main focuses: a strong focus in the internalization of startups and, on the other hand, that it aggregated mechanisms and resources available in the entrepreneurial ecosystem. For this reason, it was created in 2018, Startup Portugal, a private national agency of entrepreneurship. The Portuguese government only acted with seed investment, which mean, initial investment for equipment and human resources.

It's also important to take into consideration the Portuguese entrepreneurial ecosystem. According to the Summary Innovation Index, calculated based on the average performance score as a composite indicator, Portugal is a Moderate Innovator, with an innovation performance below the EU average. Over time, performance has declined by 2,4% relative to the EU in 2010. (Annex 2 – Political Factors – Chart 3). This classification provides an assessment of the research and innovation performed in Portugal, being the relative strengths

of the Portuguese innovation system the innovation-friendly environment, attractive research systems and human resources. The relative weaknesses pointed are linkages, sales impacts and employment impacts. Regarding the performance on innovation-friendly environment indicator, Portugal registered one of the highest rate of performance increase between 2010 and 2016 with 50,3%, compared to the EU members. (Annex 2 – Political Factors – Chart 3).

### 5.3. Social Factors

As with economic and political issues, there are several social factors impacting the entrepreneurial industry. For instance, Portuguese population is growing older and generation renewal is not accompanying its pace. Thus, market will shrink in the coming years, which represents a challenge to the entrepreneurial systems. Looking at the last data provided by PORDATA, the index of aging registered a grown from 112,6% in 2007 to 148,7% in 2016 (131,5% in the Eurozone). (Annex 3 – Social Factors – Chart 7).

In 2018, the Ager Study stated that in Portugal, the majority of the population (52%) believes that Portugal has technology available that makes entrepreneurship easier and has the opinion that the education system teaches people the skills they need to have entrepreneurial experiences. The same study states that in relation to the entrepreneurial spirit, most of the Portuguese's consider starting a business as a desirable career opportunity for themselves. According to these data, the Portuguese population shows a level of desire regarding entrepreneurship of 56% and a level of feasibility of only 49%. Regarding the intrinsic factors, the majority of the population believes that their family and friends are supportive (60%), followed by being willing to sacrifice their free time to work on their business idea (54%). The Global Entrepreneurship Report (2016) reports that only 16% of the population thinks the country is favorable for entrepreneurship, facing the 46% European perspective. However, 58% of the interviewees still maintain a positive attitude towards entrepreneurship and 39% still consider creating their own business, being the main reason not wanting to have a boss or going back to the work market.

According to the European Startup Monitor (2016), the predominant gender of the startup community is male (79,3%), being the share of male startup founders in Portugal 78,4%. The most common ages of entrepreneurs who establish their business have are from 25 to 34 years old (40.5%) and 35 to 44 years old (40.5%), being the most common age in the

European Union, from 25 to 34 years old. (Annex 3 – Social Factors – Chart 8). Portuguese founders of startups in a scale of happiness from 1 to 10 consider themselves being happy since the most common score was 8 (18,8%) and 61,5% of them consider that their business situation will be more favorable within the next 6 months.

It's also important to highlight that according to the report “State of European Tech Report 2017” by Atomico, Portugal was the 10<sup>th</sup> fastest-growing tech worker population of 2017 of Europe, being the 21<sup>st</sup> European country with more tech developers graduated (75.672 people).

### 5.4. Legal Factors

Legal factors are particularly relevant when performing an external analysis on the entrepreneurship industry. Discussion regarding ‘data protection’, may impact the industry in the near future.

The new General Data Protection Regulation took effect on May 25<sup>th</sup> and covers all businesses and organizations with operations in Europe. Now consumers will have to give express permission for the company to save and analyse their data, as emails, mobile contacts for example. The consumer will have to know the purposes why the company is saving the information, and the data can only be used for that purposes. Overall, these changes have a negative impact in the industry, forcing the companies to change their marketing strategies.

### 5.5. Technological factors

Technological factors have the most relevant impact in the entrepreneurial industry. New developments in technology create new opportunities for clients entering in new market. According to the European Patent Office, in 2017, the Portuguese patent applications were 149, decreasing 6% compared to the previous year (158) (78.307 in the European Patent Office States). (Annex 5 - Technological Factors - chart 9). However, the number of patents accepted was higher in 2017 - 68, compared to 2016, with only 59, an increase of 15,3%, the highest in 10 years.

In another strain, the same report points that in Portugal, the biggest number of applications were related with precision technologies (8%) and medical technologies (8%), areas experiencing a great growth rate, with some success cases. (Annex 4 - Technological Factors - chart 10).

## 5.6. Environmental factors

Environmental business impact is part of the world's agenda. Companies are developing an important environmental conscience and putting it into its business strategy.

The World Meteorological Organization, points as global climate change indicators the following:

- The increase of global air temperature - a global temperature indicator consistent with this, is corroborated by the high average temperatures over successive 60-month periods. The temperature increase for Europe is about 0.8°C larger than the corresponding increase for the globe as a whole;
- The increase ocean heat is an integral part of the climate system. Sea-ice area is closely linked to surface temperature. Increasing surface temperatures is one driver of sea-ice loss. The loss of sea ice in turn, leads to more absorbed heat, due to the surrounding open water reflecting less solar radiation than an area covered by sea ice;
- Increase of greenhouse emissions - the rapid increase of greenhouse gases and atmospheric levels of CO<sub>2</sub> could potentially initiate unpredictable changes in the climate system;
- The rise of the sea level - over the period from January 1993 to May 2017, the sea level has risen with a rate of about  $3.4 \pm 0.5$  mm/year in a confidence interval of 90%, which can be translated into a global increase about eight centimeters of sea level. On an inter-annual time scale, the rate of the global sea level rise showed a rapid increase during 2015, but was slightly reduced during 2016.

According to the 'Portuguese National Inventory Report on Greenhouse Gases, 1995 - 2015', from the Portuguese Environment Agency, in 2015, total Portuguese GHG emissions, including indirect CO<sub>2</sub>, without land-use, land-use change and forestry (LULUCF) were estimated at about 68.9 Mt CO<sub>2</sub>e, representing an increase of 15.7 % compared to 1990 levels and a decrease of 7.1% compared to the previous year (2014). The mean temperature

has risen in all regions of Portugal since the 1970s, at a rate of approximately 0.3 °C per decade.

In 2015, multiple countries agreed with the protocol “Paris Agreement” and the 2030 Agenda for Sustainable Development, thereby committing to the development and achievement of specific goals to obtain a sustainable future. Under the Paris Agreement, countries have developed national goals and strategies. In order to achieve their set objectives, technological innovation is key as an accelerator foster the implementation of national climate actions. To support the countries in this endeavor, the United Nations Framework Convention on Climate Change (UNFCCC) Technology Executive Committee declared a plan referring the important role of technology innovation. Technology has been unveiled that could drastically cut greenhouse gas emissions and impact positively the environment. In recent years, climate technologies have been deployed on an unprecedented scale around the globe. Particularly renewable energy technologies are now often competitive with fossil fuel options.

## 6. Immediate Analysis

Between 2013 and 2017 there was an increase of startups births of 2,4% in Portugal, specially in the sectors of services, retailers and hospitality & tourism. According to InformaDB (2017), during this 4 years 187.659 startups were born. (Annex 5 - Immediate Analysis - chart 11).

Based on the geographical area, in 2017, Lisbon had more births with 13.836, followed by Porto with 7.218 and in third Braga, with 2.982. Between 2013 and 2017 there was a decrease of 5,32% of the death rate of startups (InformaDB, 2017). According to the report “Acceleration Today: Trends & Challenges 2016” from the European Accelerator Summit (2016), more than 379.000 entrepreneurs worldwide are receiving support from accelerators. Moreover, according to the same study, €38 million were invested into 2.500 startups by 113 accelerators in Europe. There is no doubt that the last 5 years have seen a steady rise in acceleration programs and considerable change in how accelerators operate. A data study about the European entrepreneurial industry (European Startup Monitor, 2016) sustains that Portugal ranks the 5<sup>th</sup> position in the top 10 countries by startups accelerated. The same study points that 21,3% of the European startups cooperate with incubators/accelerators and 84.9%

of the startups planned to internationalize. In 2015, 11,6% of new startups sold abroad in their first year of life, more 4.4% than in 2008, while sales to foreign markets also represented more than half of their volume. (Annex 5 - Immediate Analysis - chart 12).

## 7. Competition analysis

The “European Accelerator Report 2015” by Gust & Fundacity, states the constant increase in the number of accelerators created every year in Europe, since 2009 to 2015. (Annex 6 - Competition Analysis - chart 13). This phenomenon is also corroborated by the National Network of Accelerators and Incubators, that sustains the increase of 11% in 2017, compared to 2016 in the number of accelerators and incubators.

In 2018, there are 130 incubators and accelerators certified by IAPMEI (Agency for Competitiveness and Innovation), however the number doesn't quantify the competitors since various incubators and accelerators are not certified.

The direct competitors of BGI are all private and public accelerators with operations in Portugal, being the indirect competitors all the corporate and university accelerators, and incubators. Taking in consideration the “European Accelerators Report of 2015” by Gust & Fundacity, that provides a mapping of accelerators in Europe with 237 organizations surveyed, we can point as main competitors the following accelerators: Beta-i, Fábrica das Startups and Startup Braga according to the number of startups accelerated.

### **Beta-i**

Beta-i is a non-profit organization, focused on acceleration and pre-acceleration. The company was founded in Lisbon in 2010, and launched the first ever accelerator in Portugal, in 2011. Beta-i sees itself as a platform that aggregates different players and stakeholders, being connected to investors, mentors, corporates, startups and the alumni network. Startups benefit from being part of the programs since they have access to the network.

Beta-i competitive advantage is the fact that the company is the platform where startups and corporations meet halfway, due to the great corporate relevant network of the accelerator. Beta-i believes that corporate-startup collaboration is fundamental for the healthy growth of

the ecosystem. Corporates are looking for innovation and startups are looking for clients, partners and investment. By associating with notable corporates this increases the brand awareness of the company, and its to capacity to provide seed investment to startups.

In the beginning of 2018, Beta-i merged with Boutique de Inovação Couture, having currently 64 operative HR. Considering Beta-i 9 acceleration programs, since 2011, the company already received 4.850 applications, from 65 countries. All the programs already accelerated 850 ventures, that raised 60€M, with a survival rate of 53%. To better understand Beta-i Business Performance Analysis, please consider the portfolio analysis on the table 2.

Table II. Beta-i portfolio analysis

| Program                                | Duration | Target                                      | Financial Support |
|--|----------|---|-------------------|
| Lisbon Challenge                       | 10 weeks | Industry and Tech startups                  | 10.000€           |
| EDP Open Innovation                    | 5 months | Energy Startups                             | 50.000€           |
| Free Electrons                         | 7 months | Energy Startups                             | -                 |
| Prio Jump Start                        | 2 months | Energy and mobility startups                | 10.000€           |
| Protecting startup accelerator program | 5 months | InsureTech, Healthtech and fintech startups | 10.000€           |
| Sibs Pay Forward Accelerator           | 4 months | Fintech startups                            | -                 |
| Smart Open Lisboa                      | 5 months | Mobility, Housing and Tourism startups      | -                 |
| Techcare                               | 1 month  | Healthtech startups                         | -                 |
| The Journey                            | 5 months | Tourism startups                            | -                 |

**Source:** Beta-i website (2018).

### **Fábrica de Startups**

Fábrica de Startups was created in 2012, with the goal of fostering business activity, the employment rate and the entrepreneurial activity. The company was created from a partnership of multiple business angels and Banif. Fábrica de Startups mission is to help



people becoming successful entrepreneurs, in the three stages of the startup development - idea implementation, business incubation and business acceleration.

The company helps in identifying business ideas, team building, business model design, customer discovery and business start-up. Fábrica de Startups competitive advantage relies on the partnerships made with notable corporates and political stakeholders, which enable them to reinforce their credibility and brand awareness close to the target.

Currently Fábricas de Startups has 6 operative HR working on their programs. Considering Fábrica de Startups 4 acceleration programs, the company already received 63 applications, from 65 countries. To better understand Fábrica de Startups Business Performance Analysis, please consider the portfolio analysis on the table 3.

Table III. Fábrica das startups portfolio analysis

| Program                  | Duration  | Target                      | Financial Support | Editions |
|--------------------------|-----------|-----------------------------|-------------------|----------|
| Tourism Explorers        | 2 months  | Tourism Startups            | 10.000€           | 2        |
| Health Ideation Week     | 1 week    | Healthtech Startups         | -                 |          |
| F2s – Fastrack 2 success | 10 months | Energy Startups             | up to 100.000€    | 2        |
| Startup Discoveries      | 1 month   | Travel and Tourism startups |                   | 5        |

**Source:** Fábrica de Startups website (2018).

### **Startup Braga**

Startup Braga is an innovation hub, founded in 2014, designed to support the creation and development of projects with high entrepreneurial potential in international markets. Created by InvestBraga (the agency that aims to boost the economy of the region) and in partnership with Microsoft Ventures, Startup Braga offers accelerations programs with global ambitions. The company sees itself as a community whose main goal is to support the creation and growth of technology-based ventures focused on the digital economy, health tech and nanotechnology. The competitive advantage of Startup is having a micro fund of 1M€ to invest in pre-seed startups (initial investment to validate the business model), created with mentors and business angels, with the goal of supporting early-stage startups that find difficult to raise investment.

Considering Startup Braga 2 acceleration programs, the company already received 700 applications, accelerated over 111 ventures that raised 14M€ and created 368 working places. To better understand Startup Braga Business Performance Analysis, please consider the portfolio analysis on the table 4.

Table IV. Startup Braga portfolio analysis

| Program                            | Duration | Target  | Financial Support | Editions |
|------------------------------------|----------|---|-------------------|----------|
| Startup Braga Acceleration Program | 6 months | Digital Economy, Healthtech and Nanotech startups | -                 | 5        |
| Startup Braga Launch Program       | 1 week   | Digital Economy, Healthtech and Nanotech startups | 2.500€            | 1        |

**Source:** Startup Braga website (2018).

## 8. Internal Analysis

Building Global Innovators (BGI) is a deep tech startups accelerator based in Lisbon. BGI was born from the MIT Portugal Innovation and Entrepreneurship Initiative (IEI) - launched to support Portugal's goal to strengthen its capacity in business education, technological innovation and entrepreneurship, in 2010, and to transfer high skill talent from Portugal to Boston. According to BGI (2018) "The initiative is a collaboration between ISCTE IUL, MIT Deshpande Center for Technological Innovation, MIT Entrepreneurship Center, and MIT's School of Engineering". MIT design this initiative to last 7 years in Portugal finishing in 2017, however BGI started having profit by launching accelerator programs for other entities, which was never planned in the first stage. In this way, BGI started to be private, held by multiple investors, in 2018 to continue its activity. BGI has its headquarters and all operational activities at ISCTE, a strategic place that not only enables the company to be near young qualified talent, but also to receive credibility for being associated with one of the best ranked business schools in the Europe.

In 8 batches, BGI has accelerated 133 ventures with a survival rate of 64%. BGI alumni have created 727 high tech jobs and raised over €181 Million. These results have led Hot Topics to designate BGI as one of the most influential accelerators in the world (2015), Fundacity to pick BGI as one of the top 20 accelerators in Europe (2014) and UBI Global to point BGI as one of the top business accelerators linked to an university in the world (2018).

More recently, BGI has been strengthening its ties with the European Institute of Innovation and Technology, in 3 Knowledge Innovation Centres, namely, EIT Digital, EIT Climate-KIC and EIT Food, representing them in Portugal and developing accelerations programs and outreaching events for them. EIT Digital, EIT Climate-KIC and EIT Food are three of the six Knowledge and Innovation Communities (KICs) created in 2010 by the European Institute of Innovation and Technology (EIT) with the goal of strengthen the innovation and research & development in the European Union, founded by the fund Horizon2020. BGI started representing EIT Digital at 2015, EIT Climate-KIC at 2016, and EIT Food at 2018, executing educational, entrepreneurial and executive programs. In 2017, BGI also started developing an accelerator requested by Idanha-a-Nova Municipality.

### 8.1. Vision

Values like continues improvement, entrepreneurship and sustainability are part of Building Global Innovators DNA and way of doing business. Building Global Innovators vision is to become a reputed entity, that can turn a startup in a success case, reaching an exit - Sofia Fernandes, Head of Marketing and Projects at BGI (2018).

### 8.2. Business Strategy and Positioning

In the 2017, Building Global Innovators had the necessity to position itself in the market face to the competitors. It position itself as “Taking You Further”, stating it’s mission of helping entrepreneurs developing and scaling their businesses to every market. BGI has the goal of designing a support system for early stage startups, helping them access to market but also to get access to finance to grow internationally. With this value proposition, BGI aims at targeting tech entrepreneurs who want to scale their business.

Following this positioning, BGI conducts a customized process, designing the programs according to the characteristics of each startup, mainly in the mentoring program that is

adapted to the necessities and industry of the startup. In Portugal, Building Global Innovators brand name is associated with values like innovation, success and proximity, as a consequence of the marketing strategy followed. The marketing strategy is based on direct marketing tools as presence in entrepreneurial events and direct contact with entrepreneurs. There is also an investment in indirect marketing as advertising and social media, with the goal of distributing relevant content to the target, not only related with BGI's offers but also with alumni startups. Currently BGI has 5 operative HR, working operatively in all the programs.

### 8.3. Portfolio Analysis

BGI develops 4 acceleration programs, being two of them for external entities - EIT Climate-KIC and Idanha-a-Nova Municipality. With these programs, BGI is able to enter new markets and start creating a track record in other technology areas. Each program was specially designed to target different technology areas.

#### Building Global Innovators Accelerator:

Building Global Innovators acceleration program points itself as BGI core businesses, having 8 editions already completed. The program runs once a year and lasts 11 months, providing startups personal weekly mentoring sessions with Business Angels and relevant experts, and 3 bootcamps, with expert coaching - 2 in Lisbon and 1 in Boston. Furthermore, it provides its start-ups with access to a relevant network of investors, corporates, potential partners, in order to look for the best fundraising opportunities for each venture. Selected teams have the opportunity to benefit from continued support accelerator up to five years after graduation. However, if the venture raises venture financing with a post-money of at least 2 million, BGI expects to receive back 3% of equity.

BGI program can be divided in three main parts: selection process, bootcamps and mentoring program, Boston Global Immersion and the Venture phase.

At the first stage, startups that integrate the program are chosen through a very demanding selection process. It's only accepted ventures from one of the four following technological market sectors: 1) Medical Devices & Health Care, 2) Smart Cities & Industry 4.0, 3)

Blockchain and AI, 4) Water Economy. Startups under five years old can apply in BGI from any part of the world without a need to relocate. In this program are only accept ventures in the validating and scaling stages. BGI comprises a multi-stage selection process combining application evaluation and interview.

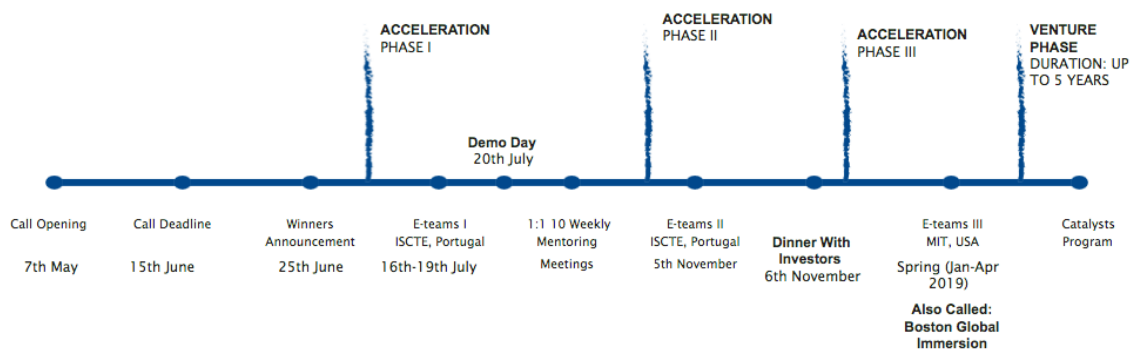
Selection takes place during June and ends in July with announcement of a batch, where between 6 to 12 startups are accepted on average from 100 applications.

During the bootcamps and mentoring program phase, ventures participate in two bootcamps in Lisbon July, with duration of one week. Bootcamps are intensive coaching periods, with the purpose of instructing entrepreneurs on decision making processes, market knowledge and effective communication. Between August and October, a mentor is assigned to the ventures who meets with them on a weekly basis both in structured and unstructured meetings, during 10 weeks, where the startup has to deliver a specific task to have the mentor's feedback. To conclude these bootcamps, in the final day of training period there is a Demoday the first in July and the second in November. During this day, startups have the opportunity to put in practice what they learnt, pitch for investors and present their business to the public.

In the third phase, venture are invited to participate in the program Boston Global Immersion, taking place in April in the following year. In this phase a bootcamp is hold in Cambridge MIT, with the aim to enable startups to raise investment at the US market. Startups can choose to go or not according to their stage of development and readiness to scale in the US market.

Finally, in the Venture phase, BGI offers ad-hoc support to the startups to raise investment until five years after graduation from the program. To have a better understand of BGI acceleration program, we summarized it in Figure 1.

Figure I. Building Global Innovators Acceleration Program Timeline



**Source:** BGI website 2018.

Boston Global Immersion program:

Boston Global Immersion is the third phase of BGI Acceleration Program. It’s a program designed exclusively for highly vetted promising global technology-based start-ups aiming to raise significant investment and scale to the USA. This program focusses on mature ventures and provide them business model validation in international markets and intros to potential customers, partners and investors, in Boston. This program is open to all BGI acceleration program alumni startups and external startups for a specific cost.

EIT Climate-KIC Acceleration Program (CKIC):

EIT Climate-KIC accelerator supports startups and projects (not incorporated companies), offering solutions tackling climate change (low carbon level), meaning they provide solutions that emit less CO2 or use less resources than the current solutions in the market. Ideally this projects/startups should be sustainable or strive for a circular economy or decreasing water or energy. Climate-KIC supports over 200 start-ups all over Europe, being represent in each European Union country by an accelerator or incubator. This program focuses on CleanTech startups developing solutions in 4 different markets: urban transitions, sustainable production systems, decision metrics & finance, and sustainable land use. The program runs once a year and offers expert mentoring, as well as uniquely designed bootcamps in Lisbon and in Frankfurt.

BGI accepts the second stage and third stage startups for this accelerator:

- Stage 2: Startups in this stage are focusing on business model validation and customers acquisition through private mentorship and personalized coaching, with financing up to 25.000€ and no equity taken.
- Stage 3: For startups that already have some sales traction and want to scale, with financing up to 50.000€ (no equity taken) including access to experience business catalysts, international mentors, introductions and connections to the startup ecosystem from the Climate KIC network.

In Portugal, BGI doesn't represent stage 1 startups (ideation phase) for this program since they will not benefit the most from BGI network and expertise.

Startups and projects under three years old can apply to Climate-KIC from any part of the world without a need to relocate. In what concerns on application process, it is free and open to the public, but very competitive. CKIC program can be divided in two main parts: two acceleration phases, in Lisbon and in Frankfurt consecutively. Selection takes place during February and ends in May with announcement of a batch. Startups are analyzed and interviewed by panel of three to five experts from the European Union and the European Institute of Entrepreneurship and Technology, and up to maximum of 6 startups are accepted on average from 50 applications.

In the first phase of the CKIC program, ventures participate in two bootcamps one in Lisbon (July) and one in Frankfurt (July), where they meet all the startups supported by EIT Climate-KIC in all European Union. Between May and October, a mentor is assigned to the ventures who meets with them on a weekly basis both in structured and unstructured meetings, during 10 weeks. To conclude this first phase of acceleration, BGI organizes one Demoday. Here startups have the opportunity to pitch for investors and present their business to the public.

Second stage takes place in November. In this phase a bootcamp is held at Idanha-a-Nova (Castelo Branco) at the i-Danha Food Lab Annual Event, with the aim to enable startups to obtain new clients and partnerships. Besides, ventures have an opportunity to pitch for different investors and corporates, as well as establish new network of contacts. To have a better understand of CKIC acceleration program, we summarized it in Figure 2.

Figure II. EIT Climate-KIC Acceleration Program Timeline



**Source:** BGI website 2018.

### i-Danha Food Lab Accelerator:

i-Danha Food Lab Accelerator its and AgriTech and FoodTech accelerator created by BGI and sponsored by Idanha-a-Nova’s municipality. The program aims to help start-ups and traditional businesses to develop more sustainable solutions than the ones offered in the market, having its first edition in 2017.

i-Danha Food Lab aims at creating a test facility in Idanha where many technologies can be tested (from both traditional businesses and start-ups) in order to improve both in terms of CO2 mitigation, null use of chemicals, sustainable land use, environmental impact and efficiency in the whole value of the food industry. The ultimate goal of this accelerator is to help the Idanha-a-Nova’s local producers and boost the local economy.

This program lasts 7 months, providing 1 bootcamp in Lisbon and 2 in Idanha-a-Nova, personal weekly mentorship with business catalysts, expert mentors, investor and corporates, access to the main Portuguese network working in the sustainable area, finance support up to 15.000€ (not equity taken) mainly for prototype verification and business model validation, directly with local suppliers and clients. The program looks for two main tracks: new business models for traditional businesses and early stage startups that want to test their technologies in the field. The program focuses on the following three market technology areas: AgriTech, FoodTech and TechDistribution.

The program runs once a year and offers expert mentoring, as well as uniquely designed bootcamps in Idanha-a-Nova and in Lisbon. The program can be divided in three main parts: one acceleration phase, in Lisbon and Idanha-a-Nova, a pilot phase in Idanha-a-Nova and a “Demonstrator” phase in Idanha-a-Nova.



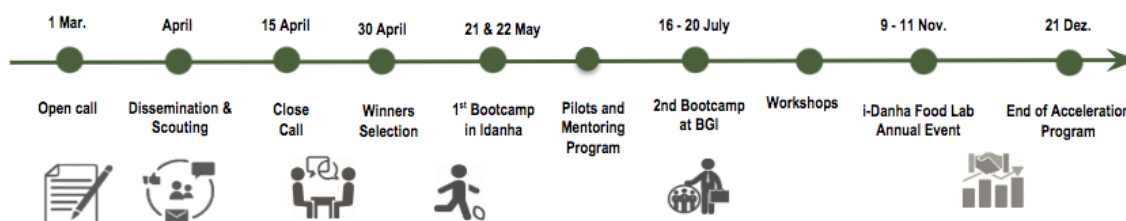
Selection takes place during March and ends in April with announcement of a batch, being the application process, it is free and open to the public. Startups are analyzed and interviewed by a panel of three to five experts from BGI and Idanha-a-Nova’s Municipality, and up to maximum of 6 startups are accepted on average from 50 applications.

In the first stage of the program, ventures participate in two bootcamps one in Idanha-a-Nova (May) and one in Lisbon (July). In the first Bootcamp they meet the key people at Idanha-a-Nova and local producers in order to understand their needs. At the second Bootcamp in Lisbon, they have an intensive training, which serves to educate entrepreneurs and companies in market knowledge and piloting strategy. Between May and September, a mentor is assigned to the ventures who meets with them on a weekly basis both in structured and unstructured meetings, during 8 weeks. To conclude the first phase of acceleration, BGI creates a Demoday in July, at the Lisbon Bootcamp. Here startups have the opportunity to put in practice what they learnt, pitch for the investors and present their business to the public.

The second stage takes place between May to November at Idanha-a-Nova, where startups move to Idanha-a-Nova and start installing pilots in order to test their technologies, with already existing food productions, working closely with local producers.

The third stage takes place in November. At this phase a bootcamp is hold at Idanha-a-Nova (Castelo Branco) - the i-Danha Food Lab Annual Event, with the aim to enable startups to obtain new clients and partnerships, and demonstrate their pilot’s results. To have a better understand of i-Danha Food Lab acceleration program, we summarized it in Figure 3.

Figure III. i-Danha Food Lab Acceleration Program Timeline



Source: BGI website 2018.

Table V. Building Global Innovators portfolio analysis

| <b>Program</b>               | <b>Duration</b> | <b>Target</b>   | <b>Financial Support</b> | <b>Number of editions</b> |
|------------------------------|-----------------|---|--------------------------|---------------------------|
| BGI Accelerator              | 6 months        | start-ups from: Medical Devices & Health Care, Smart Cities & Industry 4.0, Blockchain and AI, Water Economy. | -                        | 8th Ed.                   |
| Boston Global Immersion      | 2 weeks         |   | -                        | 8th Ed.                   |
| EIT Climate-KIC Accelerator  | 7 months        | CleanTech start-ups   | up to 50.000€            | 3rd Ed.                   |
| i-Danha Food Lab Accelerator | 7 months        | AgriTech, FoodTech and Tech Distribution start-ups  | up to 15.000€            | 2nd Ed.                   |

**Source:** BGI website (2018)

## 8.4. Communication strategy

Currently BGI uses multiple communication and marketing channels to disseminate BGI acceleration program. BGI uses different channels according to the stage of the program:

Table VI. Communication strategy

| <b>Stage</b>                               | <b>Duration</b> | <b>Channel</b>  |
|--|-----------------|---|
| Scouting for startups                      | 2 months        | Social media - Instagram, Facebook, Twitter and LinkedIn (2 posts a week)<br>Newsletter (1 per week)<br>Presence in events (according to the events happening)<br>Roadshow (2 weeks)<br>Direct calls (2000 calls) |
| Selection Process and Results announcement | 2 weeks         | Social media - Instagram, Facebook, Twitter and LinkedIn (2 posts a week)<br>Newsletter (1 per week)  |
| Program                                    | 7 months        | Social media - Instagram, Facebook, Twitter and LinkedIn (2 posts a week)<br>Newsletter (1 per week)<br>Presence in events (according to the events happening)  |

**Source:** Author's own elaboration (2018)

The company uses a continuous promotion strategy in social media - Instagram, Facebook, Twitter, LinkedIn and Youtube, to scout for applicants for the program and disseminate the program activities and news. To reach a greater target and have a more direct communication, BGI is also present in multiple events and does direct phone calls to startups, presenting them the opportunity. The most differentiated communication tool is the roadshow, where it goes to different accelerators and incubators to talk directly with the startups incubator about the program.

### 8.5. Business Performance Analysis

In 8 Editions of the BGI Accelerator, the program received 969 applications - 2,642 entrepreneurs, from 59 countries, being 60% incorporated companies and 40% international. The program already accelerated 133 ventures that raised over 181 million euros being 73% from VC and BA funding. The program has a survival rate of 64% and 727 highly qualified jobs were created.

Table VII. Capital raised by BGI Acceleration Program alumni startups

| Capital Raised                       | 1 <sup>st</sup> Batch % | 2 <sup>nd</sup> Batch % | 3 <sup>rd</sup> Batch % | 4 <sup>th</sup> Batch % | 5 <sup>th</sup> Batch % | 6 <sup>th</sup> Batch % | 7 <sup>th</sup> Batch % | Total               |
|--------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|---------------------|
| 1. Dilutive Financing                | 75.103.752€ 95,2%       | 4.527.817€ 49,3%        | 30.398.582€ 81,4%       | 5.653.575€ 54,2%        | 7.273.091€ 38,3%        | 690.000€ 36,8%          | 20.000€ 48,4%           | 123.666.818 € 78,9% |
| 2. Non-dilutive Financing            | 3.774.037 € 4,8%        | 4.665.299€ 50,7%        | 6.933.382€ 18,6%        | 4.773.210 € 72,1%       | 11.708.828 € 61,7%      | 1.185.000€ 63,2%        | 21.365€ 51,6%           | 33.061.121€ 21,6%   |
| Subtotal (1+2)                       | 78.877.789€ 100%        | 9.193.116€ 100%         | 37.331.964€ 100%        | 18.981.918€ 100%        | 18.981.918€ 100%        | 1.875.000€ 100%         | 41.365€ 100%            | 156.727.939 € 100%  |
| 3. Secured funding if Milestones met | 336.000€ 0,4%           | 620.000€ 6,3%           | 100.000€ 0,3%           | 399.600€ 5,7%           | 971.000€ 4,9%           | 180.000€ 8,8%           | 50.000€ 54,7%           | 2.656.600€ 1,7%     |
| Total (1+2+3)                        | 79.213.789€             | 9.813.116€              | 37.431.964€             | 10.826.385 €            | 19.952.918€             | 2.055.000€              | 91.365€                 | 159.384.539 €       |

**Source:** BGI website (2018).

**Note:** only counts the capital raised after entering in the BGI acceleration Program

In the 8 Editions of the program Boston Global Immersion, BGI travel to Boston 60 startups - over than 115 entrepreneurs, from 13 countries, that raised over 190 million dollars.

In the 3 Editions of the Program EIT Climate KIC, BGI received 118 applications - 354 entrepreneurs, from 14 countries, being 25% international. The program already accelerated 20 ventures, with a survival rate of 90%.

In the 2 Editions of the Program i-Danha Food Lab Accelerator, BGI received 80 application - 240 entrepreneurs, from 17 countries, being 35% international. The program already accelerated 12 ventures, being all of them still active and 6 of them piloting at Idanha-a-Nova.

## 9. Competitive Analysis

### 9.1. SWOT Analysis

In this chapter, we will execute a SWOT Analysis of BGI. This analysis will consider the company internal positive points (strengths) and internal negative points (weaknesses) and also market opportunities and threats. This analysis aims to enlarge the benefits of BGI's strengths and prevent the damages originated in weaknesses. We will also define the relative importance of each one of these factors:

- Strengths and weaknesses will be evaluated in importance: from 0 (no importance) to 5 (maximum importance);
- Opportunities will be ranked according with their attractiveness: from 0 (no attractiveness) to 5 (maximum attractiveness);
- Threats will be assessed in according with the estimated impact: from 0 (no impact) to 5 (maximum impact).

We will also try to forecast the future evolution of strengths, weaknesses, opportunities and threats in three trends: increase, decrease or study.

Table VIII. SWOT Analysis

|   |  |
|---|--|
| <p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>● Connection with MIT and European Institutes</li> <li>● Market expertise and credibility</li> <li>● Competitive position in the deep tech sector</li> <li>● Relevant network</li> </ul>   | <p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>● Number of operative HR</li> <li>● Brand equity and brand awareness</li> </ul>  |
| <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>● Increase of tech graduated talent</li> <li>● Increase number of tech startups</li> <li>● Internationalization desire</li> <li>● Increase number of tech startups participating in acceleration programs</li> <li>● High unemployment rate</li> <li>● Increase of the political support</li> <li>● Increase number of patents accepted</li> </ul> | <p><b>Threats</b></p> <ul style="list-style-type: none"> <li>● Increasing number of new accelerators / incubators</li> <li>● Decrease of investment rate</li> <li>● Strong position of direct competitors in the market</li> </ul> |

**Source:** Author's own elaboration (2018)

Table IX. Hierarchical SWOT Analysis

### Internal Analysis

| <b>Strengths</b>                             | <b>Importance</b> | <b>Evolution Forecast</b> |
|--|-------------------|---------------------------|
| Connection with MIT and European Institutes  | 5                 | Increase                  |
| Relevant Network                             | 5                 | Increase                  |
| Market expertise and credibility             | 5                 | Stable                    |
| Competitive position in the deep tech sector | 5                 | Stable                    |
| <b>Weaknesses</b>                            | <b>Importance</b> | <b>Evolution Forecast</b> |
| Brand equity and brand awareness             | 5                 | Decreasing                |
| Number of operative HR                       | 4                 | Decreasing                |

### External Analysis

| <b>Opportunities</b>  | <b>Importance</b> | <b>Evolution Forecast</b> |
|---|-------------------|---------------------------|
| Increase of Political support   | 5                 | Increase                  |
| Increase number of tech startups participating in acceleration programs | 5                 | Increase                  |
| Increase number of tech startups  | 5                 | Increase                  |
| Internationalization desire   | 4                 | Increase                  |
| Increase of tech graduated talent                                       | 3                 | Increase                  |
| Increase number of patents accepted                                     | 4                 | Increase                  |
| Increase of the unemployment rate                                       | 3                 | Increase                  |
| <b>Threats</b>  | <b>Importance</b> | <b>Evolution Forecast</b> |
| Increase number of new accelerators / incubators                        | 5                 | Increase                  |
| Decrease of investment rate   | 5                 | Stable                    |
| Strong position of direct competitors in the market                     | 5                 | Increase                  |

**Source:** Author's own elaboration (2018)

### Strengths

Building Global Innovator's market expertise is the most solid and most important strength of BGI. The perception of expertise in deep technology that the brand has in the Portuguese entrepreneurial industry is a very important asset. By being created by the MIT, the best engineering university of the world, BGI is a great expert in the areas of technology, engineering and research in the Portuguese entrepreneurial ecosystem. This strength is also built by the fact that BGI was also founded by ISCTE, ranked in the 80<sup>o</sup> of the Financial Times ranking, having expertise in the management and economics area. This partnership enables BGI to transfer the relevant knowledge to deep tech startups not only related with their technology but also in their business model strategy. The fact that BGI was created by these two universities, also gives credibility to the company operational activities, which also represents a strength, especially in the areas of deep technology, where the technology and research are key points in the development of the startups.

A consumer study (CB Insights, 2018) sustains that the 18<sup>o</sup> reason pointed as for startups failure is the “didn’t use of network”, as the lack of relevant network in the startups’s field of activity which creates a barrier in finding the right partners and potential key clients when entering new markets. Due to the connections with MIT and EIT, one of BGI’s greatest strengths is the relevant network in the US and Europe, with a relevant network of 10.000 contacts, among the various key players as corporates, mentors, political stakeholders, investors and entrepreneurial ecosystem builders. These relevant contacts enable the startups to enter softly in the goal market with relevant partners, expertise on the key customers and know-how on how to find investment.

This relevant network in the US and Europe also represents a major importance in supporting the internationalization of the startups. By leveraging these relevant contacts, BGI creates opportunities and support for startups to internationalize in Europe and US. This strength is expected to increase since each year BGI makes partnerships with more EIT’s Centers of Innovation and Knowledge.

### **Weaknesses**

The biggest fragility of Building Global Innovators it’s the brand equity and brand awareness. BGI only started developing a strong position in the direct communication channels - presence at events and social media, in 2017, hiring communication and events manager. Before then, BGI communication was mainly through its partners and the media. In 2017, the company also developed a new marketing strategy and positioning, consolidated in its slogan “Taking You Further”, that was build through communication in the brand’s social media, the presence in relevant events of the industry and the dissemination through it’s entrepreneurial institutions partners, as other accelerators and incubators. This late strategy creates a barrier for the success of the acceleration programs, due to the low number of startups that know the company and a perception of “newness in the market and low credibility”. However, by adopting a new strategy focusing on communication, this weakness is expected to decrease.

Finally, the limited number of operative HR also presents itself as a fragility of the company, compared to its competitors. Having only 4 operative employees and only 3 senior managers limits the capacity of the company in accepting new projects and creating new partnerships,

which also creates a barrier on creating more awareness for the company. It's also important to point the fact that 2 operative employees are in the company since 2017, and the other 2 are only in the company since 2018, which translates in the lack of knowledge of the entrepreneurial industry that affects the autonomy of this employees on their daily tasks. However, the company is adopting a long-term strategy on hiring people, in order to grow autonomy between the employees, and for this reason, this weakness is expected to decrease.

### **Opportunities**

The European Commission support to foster entrepreneurship in Europe points itself as a great opportunity for accelerators and startups. The creation of European funds and entrepreneurial institutions as the European Institute of Innovation & Technology (EIT) reveals itself as an effort to create innovative products and services, educate the new entrepreneurial generation and create new startups in Europe. Following the European Commission efforts, Portugal government is also committed in fostering the entrepreneurial industry in the country, with the creation of startups, and attraction of international entrepreneurs and startups to Portugal. To achieve this goals, political stakeholders are creating innovation funds and entrepreneurial institutions as Startup Portugal. Accelerators can not only benefit from the financial support of European and Portuguese innovation funds, but also from the increase of the target market.

The increase number of tech graduates is a very important indicator of a trend that it's influencing the industry, since a high percentage of tech startups are founded by tech graduates. With an increase of talent pool, there is a potential grow of the potential market. The increase of Portugal unemployment rate also points itself as an opportunity since startups are responsible in average for 46% of the employment rate created in companies (Informa, O empreendedorismo em Portugal, 2018).

A data study on the entrepreneurial industry (Barómetro Informa, 2017) points that since 2013, there as been a constant and relevant increase of new startups founded every year, being a very important opportunity for BGI to explore. The greatest number of startups founded in 2017 was in tech areas, being the ones that are more attractive for private and public investors. To reach soon this growing market is a great opportunity for accelerators.



Due to the high investment on the education of universities in Portugal and the high demand of this area of work, this trend is expected to increase.

According to the European Patent Office in 2017, the number of patents has been increasing in Portugal. "The growth in the demand for European patents confirms the attractiveness of Europe as a leading market in technology ", summarizes in an IEP statement its president Benoît Battistelli. The European companies have also applied for more patent applications than ever - proof of their ability to innovate. The increase of technological innovation reveals as an opportunity for BGI.

According to the "European Startup Monitor" by European Startup Monitor, 2016, 84.9% of the startups plan to internationalize. Entrepreneurs are gradually finding important to internationalize their startups activity beyond Portugal, due to the limited number of potential consumers. Startups found that to secure a long-term activity, they have to export their services/products. This presents itself as an opportunity for BGI to explore, given its relevant network in Europe and US that can support startups internationalization. Due to the difficult economic conditions in Portugal, this trend is expected to increase.

Finally, an entrepreneurial report (European Startup Monitor, 2016) sustains that 21,3% of the European startups are cooperating with incubators/accelerators. Startups are getting more aware of these support entities, that can help them validate their business models and achieve the first clients. As they do, the number of startups being part of acceleration problems or being incubated is increasing in all European Countries. However, due to the newness of these entities, there's still a large number of startups that is not aware of the benefits and conditions of being part of these programs. Due to this reason, accelerators and incubators are making an effort to reach more effectively the target and to adapt their programs to it, creating more industry-oriented programs. According to this, it's expected to grow the number of startups cooperating with accelerator/incubators.

### **Threats**

The biggest threat for BGI activities, it's the increasing number of incubators and accelerators. The strong position of the direct competitors in the market with a relevant

portfolio and a higher number of operative human resources points itself as the higher threat to BGI. In this way, competitors are able to attract more startups and investment for the accelerated startups. The grants provided in acceleration programs are expected to win more relevance in entrepreneur's decision and, therefore, other programs that give grants will be BGI biggest threat.

It's also important to notice that corporates are entering the market creating accelerators in their core business. By doing this, they are able not only to create a high brand innovation awareness but also to captive innovation. These new entrants represent a relevant threat due to their amount of available resources, expertise on specific markets and brand awareness, attracting easily their target. Municipalities are also creating incubators and acceleration programs in a way of attracting talent, create employment and revenue in the municipality. These new entrants in the market represent a significant threat to BGI, being a trend that is expected to increase.

The decrease of the investment rate in Portugal can also be characterized as a threat, since startups are moving to other countries or entering in international acceleration programs, where they expected to raised higher amounts of investment in order to secure their business activity. The migration of these companies represents a loss of high talent in Portugal and a decrease of the target market.

The new General Data Protection Regulation took effect on May 25<sup>th</sup> affecting the way companies do their marketing strategies. The implementation of this new law obliged companies to change and create new marketing strategies. In the case of accelerators, this creates a significant threat since in order to have applications to accelerations programs, accelerators contact startups by direct channels as phone call, e-mail and newsletters. Accelerators normally obtain these contacts through events or other acceleration programs. By having this new law, startups have now to consent accelerators to send them commercial information, which reduces dramatically its contact database. In this way, recruiting for acceleration programs is more difficult to these new constraints, representing a stable treat to accelerators.

## 10. Methodology

### 10.1. Research design

This project aims on identifying which are the factors that influence a deep tech startup to choose a specific acceleration program or choose to not participate in any, and on the other hand, intends to understand why startups choose to be part of BGI acceleration programs. In order to reach these objectives, firstly a suitable methodology should be outlined. The methodology will assume a significant role in the outcome of the study, as it will describe and justify the methods to be used throughout the research, data collection and results analysis of the project. To accomplish the development of an appropriate methodology, was used primary and secondary data.

The secondary data was of two types: internal data and external data. To obtain internal data, BGI contribution was very important and to obtain external data we used information gathered from doing the literature review, as from INE, Pordata and InformaDB. The primary data was acquired from an online survey to tech Portuguese startups that participated or not in acceleration programs having as focus understand the motives that make startups choose to apply for an acceleration program, and their stage of development.

Before the questionnaire was launched, pilot tests were conducted to BGI alumni startups. The questionnaire was distributed online, by different sources, through social networks and emails and in BGI acceleration program first bootcamp, and was provided a private environment due to the anonymity and confidentiality assured in the beginning of the questionnaire. The questionnaires was shared with 100 startups. The minimum intended number of answers was 30, but the final sample accounted 51 valid answer. The questionnaire was live from July 26th to August 16th. With the use of data analysis, some conclusions were retrieved in regard to stage of the startups, motives to apply to an acceleration program and benefits by joining the program.

## 10.2. Questionnaire composition

To understand the perceived value of acceleration programs, data was collected through an online survey to Portuguese startups. The survey was elaborated to understand the reasons that made startups choosing to apply acceleration, in order to define the critical success factors of these programs. The choice of using an online survey is justified by the goal of obtaining information from a larger sample and by the need of having specific data to this recent industry.

The questionnaire used on the project was fully conducted in English and consisted of 13 questions divided into three main sections. The first section, aimed to understand the startup profile of the respondent, being composed by 9 questions. These questions were used to understand the profile of the startups that apply or not to acceleration programs as their main constraints which created motives to apply. The second section was composed for 3 questions, being the objective to measure the reasons why startups choose to enter an acceleration program over not applying, and how they differentiated one program over another. In this section, respondents were asked the relevance of criteria when choosing to apply for an acceleration program, using a par scale (1 - completely disagree and 4 - completely agree). The criteria were composed based on information gathered for the literature review. Finally, the third section aimed to understand the communication tools most used by accelerators, consisting in 1 question.

## 10.3. Characterization of the Sample

The online survey targeted entrepreneurs that had tech startups and was only distributed to Portuguese startups that may applied or not to acceleration programs.

The sample collected is composed by 86% masculine observations and 14% feminine observations. The majority of answers are in 25 - 34 the years old range. Regarding the educational attainment of the observations, there are no respondent with primary school as the higher educational level obtained. Almost of 100% respondents have, as the higher educational level obtained, a Master's degree in university. Having higher educational levels

are 12% with a PhD. It is possible to affirm that the sample of the survey has high levels of educational attainment, the majority with, at least, one graduate qualification.

Concerning the spatial distribution of respondents live in Lisbon (45%), however, there is also a considerable volume of answers of other regions. By order of appearance, the following most represented regions are: Porto (24%), Centro (22%), Norte (6%) and Alentejo (4%).

Analyzing the stage of startups, 34% of the startups was created only 1 to 2 years ago, followed by 3 to 4 years and 72,5,5% of the respondents point that the startup is already generating revenues. The majority of the startups are generating revenues, being mainly for the area of IOT (13). There was also a considerable volume of answers of other areas, being by order of appearance the following: Medical Devices & Health Care (10), Industry 4.0 (9), AI (7), Smart Cities (7) and Water Economy (2).

### 10.4. Questionnaire Results

Starting by the stage of the startups, correspondents were asked to rate the biggest struggles of the startups. The majority of the startups consider the main struggle the access to finance, although there was a considerable volume of answers in the following areas, being by order of importance the customer acquisition, the internationalization and the access to relevant distribution channels.

Correspondents were asked if they had already participated in an accelerating program with the 94% answering positively. Considering the motives to join an acceleration program, correspondents pointed as the biggest benefit the relevant network of the accelerators. However, it's also considered the expertise and credibility of the accelerator in the market, the mentoring program offered and the access to grants. Can be conclude as motives to not join an acceleration program the believe it is a time-consuming program and the fact that some programs don't give grants.

The final section considers the communication tools used by accelerators to scout for more talent. Corresponds were asked the way they found out about accelerators programs, being mainly pointed as contact by e-mail and contact in an event.

## 11. Marketing Plan

### 11.1. Strategic objective

The marketing and communication goals settled for BGI acceleration program, must be accomplished from January 2019 to December 2019. A calendarization with the actions will be presented further. The marketing and communication goals are:

- Increase brand awareness of BGI acceleration program in the entrepreneurial industry;
- Increase the number of startups applications for the acceleration program;
- Improve the program to correspond to startups needs.

### 11.2. Segmentation and Targeting

It's important to proceed a market segmentation, which implies grouping the consumers according to their characteristics and behaviors, in order to define a target. Therefore, it is considered two segmentation criteria.

Firstly, considering demographic criteria, the factors concerned are age and educational background. These will be the primary criteria to target definition and quantification. Considering age and education background, BGI acceleration program is destined to entrepreneurs with more than 25 years old, having a higher educational degree obtained. Although the entrepreneurial market is majority male, both genders are targeted at this strategy.

Secondly, it's important to consider the stage of the startup, therefore three issues are pertinent: years of activity, financial state and industry. When studying these criteria, the program is destined to ventures in the validating and scaling stages, ageing from 1 year ago to 4 years, and that are already generating revenues. The industry also represents a fundamental criterion, given the specialization of BGI acceleration program. Therefore, the target should be from the areas of Medical & Health care, Smart Cities, Blockchain & AI and Water Economy.

Table X. Segmentation Criteria and target

| <b>Criteria</b>             | <b>Target</b>   |
|-----------------------------|---|
| <b>Demographic Criteria</b> |   |
| Age                         | More than 25 years old  |
| Education Background        | Higher educational degree obtained  |
| <b>Stage of the startup</b> |   |
| Years of activity           | 1 year to 4 years   |
| Financial state             | Generating revenues   |
| Industry                    | Medical & Health Care, Smart Cities,<br>Blockchain & AI and Water Economy |

**Source:** Author's own elaboration (2018)

### 11.3. Strategy definition

#### 11.3.1. Marketing-mix

##### 11.3.1.1. Product

Considering the main struggles pointed by startups before the application for an acceleration program (Annex 8 - Questionnaire answers), startups apply for acceleration programs looking for the relevant network of the accelerator, expertise and credibility of the accelerator in the market, the mentoring program offered and the access to grants. Given these answers it's important to create a strategy for BGI acceleration program that fulfill these needs.

Firstly, it's crucial to start increasing the access to finance to startups, given being a key motive for startups application. There is two exclusive mutual strategies that can be applied to implement this. The first option could be creating a partnership with corporates known in the market as an innovative player. This strategy will not only benefit mutually the brand image of the corporations and BGI and will also allow corporates to invest directly in startups or recruit talent. The second strategy, followed by the most successful accelerators in the world, is the creation of an indoor venture fund for investment in the accelerated startups.

This fund could be created by several investors in the market and managed by BGI, and it will be used to invest, according to the startups needs.

Secondly, although BGI has a relevant network, mostly of political stakeholders due the connections to MIT and EIT, there's a lack of strong connection with industry stakeholders. Therefore, it's important to increase the connections with corporates and research centers, that can be useful to startups to create partnerships to validate their product, have relevant distribution channels and share knowledge of the intendant market. This action will not only improve the acceleration program but also increase the perception of credibility and expertise of the program in the market. There should be also an effort to create connections with small and medium enterprises, since they could be potential clients for the startups.

Finally, it should be made an effort to improve the mentoring program, guaranteeing that startups get the best advices and leads to achieve goals. During the mentoring program, BGI tries to match a mentor (expert in a certain area) with a startup, according to its needs. However, sometimes mentors are experts in their area but don't have knowledge in financial access programs, the main struggle for a startup. For this reason, it's recommended that BGI creates a program, where relevant investors can coach mentors in order to satisfy effectively the startup needs.

### 11.3.1.2. Communication

In order to increase brand awareness of BGI acceleration program in the entrepreneurial industry there will be developed several strategies, mostly in terms of advertising campaigns, events and partnerships.

Firstly, there should be made an effort to create strong dissemination partnerships with other players of the industry as incubators and accelerators. Dissemination partners should disseminate BGI acceleration program, given in returning dissemination by BGI or an involvement in the program. This will allow to reach a greater target and will strength the relation with these partners.

Secondly, the roadshow of BGI acceleration program will be improved by reaching a higher number of incubators, accelerators, research centers and universities. This strategy will



permit reaching a higher target and increasing the number the number of applications to the program by giving information and explaining questions directly in person. The main focus should to be present at a high number of incubators and guarantee several startups in the presentation.

Finally, according to the questionnaire, most of the startups are persuaded to join acceleration program in events. Therefore, should be created a launching event of the acceleration program. During this event, it will be important not only explain the program but also have alumni startups giving testimonials about their experience and the program impact. Should be invited relevant entities in the entrepreneurial market and media, to create dissemination and awareness.

Table XI. Dissemination partnerships

| Action              | Dissemination partnerships  |
|---------------------|---|
| Detailed actions    | <ul style="list-style-type: none"> <li>- Identified key incubators and accelerators to disseminate according to the industry of startups accelerated;</li> <li>- Create a dissemination partnership where both parties disseminate each other opportunities;</li> <li>- Invite dissemination partners to be involved in the program (e.g. mentoring program, presence at the Demoday, etc.);</li> </ul> |
| Specific objectives | <ul style="list-style-type: none"> <li>- Get 20 entities to share the opportunities during the scouting and recruiting phase</li> <li>- Have 50 meetings during the scouting and recruiting phase</li> <li>- Be in contact with 50 startups during the scouting and recruiting phase</li> </ul>   |
| KPIs                | <ul style="list-style-type: none"> <li>- Have 20 effective meetings during the year</li> <li>- Establish 20 partnerships during the year</li> <li>- Have 50 shares of the program during the scouting and recruiting phase</li> <li>- Get 5 applications for the program</li> </ul>   |

**Source.** Author's own elaboration (2018)

Table XII. Roadshow

| Action              | Roadshow   |
|---------------------|--|
| Detailed actions    | <ul style="list-style-type: none"> <li>- Identified the key incubators and accelerators, according to the number of startups incubated or accelerated and the industry of them</li> <li>- Guarantee a strong communication before the presence</li> <li>- Give talks for startups explaining the program</li> <li>- Invite alumni startups to share testimonials</li> <li>- Brand activation before and after the event</li> </ul> |
| Specific objectives | <ul style="list-style-type: none"> <li>- Get a meeting with 50 locations during the scouting and recruiting phase</li> <li>- Assure the presence of 50 startups in each location of the roadshow</li> </ul>  |
| KPIs                | <ul style="list-style-type: none"> <li>- Presence in 20 diverse locations during the scouting and recruiting phase</li> <li>- Get 10 applications for the program</li> </ul>   |

**Source.** Author's own elaboration (2018)

Table XIII. Launching event

| Action              | Launching Event  |
|---------------------|--|
| Detailed actions    | <ul style="list-style-type: none"> <li>- Invite key relevant entities in the entrepreneurial market</li> <li>- Invite relevant experts in the market</li> <li>- Invite media to cover the event</li> <li>- Present the acceleration program and the results from the previous ones</li> <li>- Invited BGI alumni startups to share their experience</li> <li>- Have a networking moment between startups and relevant experts in the market</li> </ul> |
| Specific objectives | <ul style="list-style-type: none"> <li>- Invite 100 relevant entities before the launching event</li> <li>- Invite 20 people from each category: corporates, entrepreneurial institutions, startups, investors and universities</li> <li>- Invite 20 media entities to cover the event</li> </ul>  |
| KPIs                | <ul style="list-style-type: none"> <li>- Have 50 attendees in the event</li> <li>- Get 20 applications for the program</li> <li>- Have 15 media mentions after the event</li> </ul>  |

**Source.** Author's own elaboration (2018)

### 11.3.1.3. Place

“Place is about delivering the right product in the right place” (Mercator, 2010). The tools considered to be in contact with potential startups will be events and internet (BGI website and social networks).

With regard to BGI website, the website presents all the information about BGI acceleration program, how to apply as well as alumni testimonials about the program. As the program accepts startups from every country, the same information will be displayed in relevant international entrepreneurial websites as Crunchbase, Pitch Book and Angel Co. The presence in online networks will also display information as well as to use as a communication channel.

Since events are also pointed by startups as the main contact point with accelerators (annex 8 – Questionnaire results), BGI will assure presence in the most relevant events of the entrepreneurial community in Portugal.

### 11.3.1.4. Physical Evidence

Relatively to the physical headquarters of the company, BGI is based at ISCTE, in Lisbon. The presence at ISCTE presents itself as a benefit for the company due to the central character of the place, getting recognition for being in a leader business university and availability to ISCTE rooms and auditoriums. For this is reason, it's recommended to stay in the university.

### 11.3.1.5. Price

Currently, BGI acceleration program it's a no-fee program, a strategy implemented by most of the acceleration programs, however BGI applies the revenue model of taking equity. BGI doesn't invest in startups but offers training, mentorship and investment deal flow for 1 year, and only investment deal flow during the next 4 years, and in return, takes 3% of equity when the startups reaches a valuation of 2 million euros. The company follows this revenue model due to its fairness: BGI only receives the equity if the startup gets investment, therefore

during 5 years, BGI is focused only on getting investment for its accelerated startups. This revenue model transmits trust and support to startups, creating a strong relationship with them, since only if the startups succeeds, BGI succeeds. If the company don't achieve the 2 million euros valuation, BGI doesn't receive any equity. When startups get the valuation, BGI can choose to take dividends or sell their equity. Over 8 years, BGI startups already raised more than 155 million€.

### 11.3.1.6. Process

BGI acceleration program lasts eleven months, starting in May and ending in April of the next month, being composed by: scouting and selection, bootcamps and mentoring program, Boston Global Immersion program and the Venture phase.

Following the launching of the program in May, the scouting and selection take place until June. During scouting, the project manager of the program is responsible for elaboration a marketing and communication strategy to reach potential startups for the program. The marketing strategy is composed by direct phone calls to startups, presence in relevant events and a roadshow. The marketing strategy is composed by elaboration of newsletters, posts on social media and dissemination partnerships. The KPI for applications is set based on the number of applicants in the previous year, and startups have to apply by the platform F6S. Following this process, it's the selection phase where the Head of Marketing and Projects and the Executive Director evaluate each applicant based on several criteria as: team, market potential and value proposition. After this evaluation, the startups with greatest evaluation are invited for a skype interview with the Executive Director about their business. Depending on the quality of the applicants between 6 to 12 startups are chosen to enter the program. The startups not accepted are provided with feedback on their proposals.

In July, ventures are invited to participate in the first bootcamp in Lisbon, with one-week duration. During this week startups have an intensive training on topics as go to market strategies, human resources, accounting, consumer achievement, pitch, marketing and internationalization as well as trends in their markets. They experience contact with relevant experts and corporates. To conclude the bootcamp, startups have a Demoday where they can present their business to relevant investors from the Portuguese entrepreneurial community.

In the end of the bootcamp, ventures are asked to evaluate and provide feedback anonymously regarding the bootcamp.

Between August and October, a mentor is assigned to the ventures who meets with them on a weekly basis both in structured and unstructured meetings, for 10 weeks, where the startups have to deliver each week a task to be reviewed by the mentor. The selection of this mentor is made by BGI and relevant experts, being the program each week evaluated by the startup and the mentor in order to assure if both parties are satisfied with the program. In November, ventures are invited to participate in the second bootcamp on the program in Lisbon as well, with two days duration. This bootcamp happens during the Web Summit, leveraging the presence of relevant international experts and investors in Portugal. To conclude this bootcamp, startups have a Demoday and a VIP dinner with an exclusive community of experts and investors present attending the Web Summit. In the end of the bootcamp, ventures are asked to evaluate and provide feedback anonymously regarding the bootcamp. In the end of the year, a results assessment is fulfilled regarding the startup's sales and capital raised in the respective year.

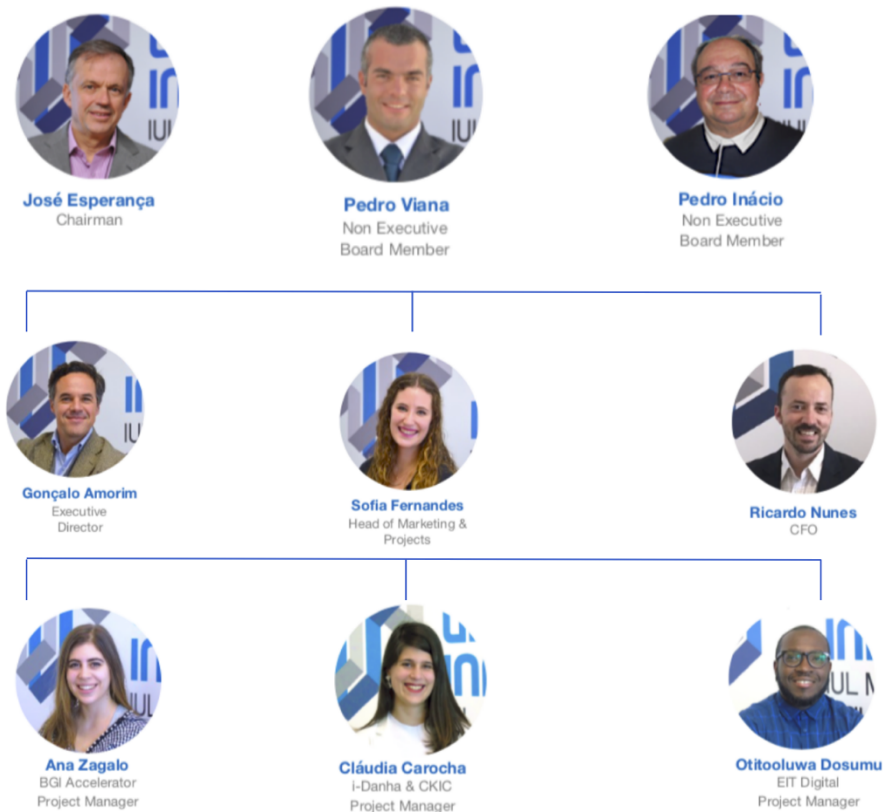
In the third phase startups are invited for the program Boston Global Immersion, taking place from April in the next year. In this phase a bootcamp is held in Cambridge MIT, with the aim to enable startups to raise investment at the US market. Ventures have the opportunity to pitch for different investors and corporates, as well as establish new partnerships. Startups can choose to go or not according to their stage of development and readiness to scale in the US market.

Finally, in the venture phase, BGI provides investment deal flow to startups to support them raising finance until five years after graduation from the program. During these five years, BGI keeps a close contact with the startups to know their achievements and understand their needs.

### 11.3.1.7. People

BGI team is composed by 6 operative employees plus the administration. The operative employees are responsible for the business plan and the operational activities of all the programs of the company. The project managers are responsible for all the activities related to their project, as accounting, strategy, sales and communication, being all supervised by executive director and the head of marketing and projects.

Figure IV. Building Global Innovators hierarchical structure



**Source:** Author’s adaptation of BGI website

José Paulo Esperança is the Dean of ISCTE Business School and the Co-founder and Chairman of Building Global Innovators (BGI). He is also a chairman at AUDAX-ISCTE, an associated center focused on entrepreneurship and family business. He got a PhD in economics from the European University Institute, Florence and has published in various journals. He is the Portuguese Delegate for the SME Instrument of the Horizon's 2020 Program of the European Commission and a member of the board of CPADA, the Portuguese Federation of Environmental Associations.

Pedro Viana is the Executive Coordinator of ISCTE Business School and a Non-Executive Board Member at Building Global Innovators, since 2017. Pedro holds an economics Bachelor’s degree from ISCTE-IUL, an executive Master’s degree of financial markets and asset management from INDEG ISCTE-IUL and is currently doing a PhD in Management, Strategy and Entrepreneurship at ISCTE-IUL.

Pedro Inácio holds a bachelor's degree in management from ISCTE-IUL, Master's Degree in Management Sciences at IAE Bordeaux and a PhD in Management - Finance at ISCTE-IUL. He is currently and Assistant Professor of ISCTE-IUL in the Finance Department Member of the Department Scientific Committee Executive Trainer and a Non-Executive Board Member at BGI.

Gonçalo Amorim combines over 16 years of actual deployment of venture capital investment, from restructuring to early stage (tech transfer & commercialization). Gonçalo founded BGI in 2010, with the goal of facilitating a model for early stage commercialization of IP-intensive startups in a global marketplace. Gonçalo serves in the board of several startups in Portugal and abroad. Gonçalo holds an MSc in Engineering Management from the University of Bristol with a Mechanical Engineer degree from Brighton University. He's a Chartered Engineer by the Institution of Mechanical Engineers (UK).

Sofia Fernandes is a marketer, graduated from ISCTE-IUL with a management bachelor's degree and a master's degree in management with Major in Marketing from NOVA SBE. She had various experiences in consulting, namely with Unilever, Impresa, Stockholm University administration office. Currently she is the Head of Marketing and Projects at BGI.

Ricardo Nunes holds the company RSN - Contabilidade e Auditoria, Lda since 2006, and he's currently the CFO at BGI.

Cláudia Carocha is a marketer, graduated from the Instituto Politécnico de Lisboa - Escola Superior de Comunicação Social, with a Marketing and Advertising bachelor's degree and doing a master's degree in business administration at ISCTE-IUL. She had some previous experiences in marketing at Spark Agency and Club Med. Currently she is the Climate-KIC, EIT Food and i-Danha Food Lab Project Manager.

Ana Zagalo holds a bachelor's degree in Multimedia Arts in the Belas Artes Faculty and a master's degree in Art Markets at ISCTE-IUL. She also had some experiences in the International Amnesty and at AIESEC as professional internships director. Currently she is the Communications Manager.

Otitooluwa Dosumu holds a bachelor's degree in economics from the University of Ibadan, a master's degree in Energy, Environmental Technology and Economics from the School of Engineering and Mathematical Sciences of the City University of London, and he's currently doing a PhD in Economics at INDEG ISCTE IUL. Otitooluwa has over 6 years of

professional experience in economic and management consulting and has also worked in the Office of the Chief of Economic Counseling of the President of the Federal Republic of Nigeria. Currently Otitooluwa is the EIT Digital Project Manager.

## 12. Implementation Forms

To implement BGI acceleration program, it was built a chronogram that will guide the implementation through its various stages. The program will be launched in May 2019 and will operatively continue until April 2020. Following the implement chronogram, it's also presented the budget for each action

Table XIV. Implementation Chronogram

| Action                                     | 2019 |   |   |    |   |   |    |   |   |    |    |    | 2020 |   |   |    |   |   |    |   |   |    |    |    |
|--|------|---|---|----|---|---|----|---|---|----|----|----|------|---|---|----|---|---|----|---|---|----|----|----|
|  | Q1   |   |   | Q2 |   |   | Q3 |   |   | Q4 |    |    | Q1   |   |   | Q2 |   |   | Q3 |   |   | Q4 |    |    |
|  | 1    | 2 | 3 | 4  | 5 | 6 | 7  | 8 | 9 | 10 | 11 | 12 | 1    | 2 | 3 | 4  | 5 | 6 | 7  | 8 | 9 | 10 | 11 | 12 |
| <b>Launching the Acceleration Program</b>  |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| <b>Scouting and Selection</b>              |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Launching Event                            |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Dissemination partnerships                 |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Roadshow                                   |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Direct Calls                               |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Presence in events                         |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Social Media                               |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Newsletter                                 |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Applications Accessment                    |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Selection Process and Results Announcement |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| <b>Bootcamps and Mentoring Program</b>     |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| 1st Bootcamp Lisbon                        |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Mentoring Program                          |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| 2nd Bootcamp Lisbon                        |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| Results acessment                          |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| <b>Boston Global Immersion</b>             |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |
| <b>Venture Phase</b>                       |      |   |   |    |   |   |    |   |   |    |    |    |      |   |   |    |   |   |    |   |   |    |    |    |

Source: Author's own elaboration (2018)



Table XV. Implementation Budget

| Action                                     | Cost       | Total      |
|--|------------|------------|
| <b>Launching the Acceleration Program</b>  |            |            |
| <b>Scouting and Selection</b>              |            |            |
| Launching Event                            | €12,500.00 |            |
| (Catering)                                 | €5,000.00  |            |
| (Space renting)                            | €5,000.00  |            |
| (Payment of Alumni startups expenses)      | €500.00    |            |
| (Decoration)                               | €2,000.00  |            |
| Dissemination partnerships                 |            |            |
| Roadshow                                   | €500.00    |            |
| (Travel Expenses)                          | €250.00    |            |
| (Accomodation expenses)                    | €250.00    |            |
| Direct Calls                               |            |            |
| Presence in events                         | €200.00    |            |
| (Travel Expenses)                          | €100.00    |            |
| (Accomodation expenses)                    | €100.00    |            |
| Social Media                               |            |            |
| Newsletter                                 |            |            |
| Applications Assessment                    |            |            |
| Selection Process and Results Announcement |            |            |
| <b>Bootcamps and Mentoring Program</b>     |            |            |
| 1st Bootcamp Lisbon                        | €20,000.00 |            |
| (Catering)                                 | €8,000.00  |            |
| (Speakers Payment)                         | €5,000.00  |            |
| (Photograph and movie coverage)            | €7,000.00  |            |
| Mentoring Program                          | €4,000.00  |            |
| (Mentors Payment)                          | €4,000.00  |            |
| 2nd Bootcamp Lisbon                        | €10,000.00 |            |
| (Catering)                                 | €4,000.00  |            |
| (Speakers Payment)                         | €2,500.00  |            |
| (Photograph and movie coverage)            | €3,500.00  |            |
| Results assessment                         |            |            |
| <b>Boston Global Immersion</b>             |            |            |
| <b>Venture Phase</b>                       |            | €47,200.00 |

Source: Author's own elaboration (2018).

## 13. Project Limitations

This project main goal is the definition of marketing strategy to improve BGI acceleration program. However, it has necessarily some limitations that are important to consider when reading this work.

Firstly, it's important to consider the newness of the accelerator phenomena causing a lack of comprehensive research. The absence of studies creates confusion between the concepts of accelerators and other entrepreneurial entities with similar business models, and the impact of its programs. There is also very little information about accelerators and incubators business performance indicators, creating a barrier in understanding the relevant competitors of BGI. In our competition analysis, we consider Beta-i, Fábrica de Startups and Startup Braga according to a Gust & Fundacity (2016), due to be the only report analyzing this area.

Thirdly, there is also a lack of information regarding startups in Portugal, being the information available very diverse and displayed in multiple sources, which creates reasonable doubt this indicator. For this reason, we didn't went further in detail to understand startups areas and position in the market.

## 14. Project Conclusions

This project aims to contribute in terms of marketing know-how, in terms of creating new marketing solutions for startups accelerators.

The entrepreneurial industry is a very recent phenomenon in Portugal, that it's growing every year. Portuguese entrepreneurial ecosystem is characterized by the increasing number of startups created, the increase of the number of foreign startups relocating to Portugal and the increasing amounts of investment made in Portuguese startups. Therefore, there is a clear opportunity for startup accelerators to grow by acquiring new startups and provide investment deal flow for them.

This project is a strategic marketing plan of an acceleration program, focused in deep tech startups, to improve the program according to the startups needs.

We made an internal and external analysis and asses Building Global Innovator's competitive position.

We analyze the market key players. Although the Portuguese entrepreneurial ecosystem is growing, startups still point as the biggest struggle the access to finance and the customer acquisition, by not having the relevant network to reach the right consumers. Ventures are then turning into entrepreneurial entities as 94% participate in acceleration programs, to benefit from the relevant network of the accelerators and the expertise and credibility of the accelerator in the market. However, some ventures still refer acceleration programs as time-consuming and refer the fact of not giving grants as motive for not joining.

We improve the service marketing-mix, creating new activities for the program and improving its communication. Our main improvement was in terms of acceleration program, by the creation of an indoor fund, the improvement of the mentoring program and the extension of the network. There was also improvements in terms of communication, since most of the ventures are also normally contact by accelerators by e-mail or by contacts in events. According to this, it was suggested the creation of a launching event, the improvement of the roadshow and the creation of more dissemination partnerships.

This marketing plan is an important tool for BGI to improve its acceleration program and most importantly its communication strategy, reaching more startups in an effective way. It will allow the company to reinforced its credibility in the market, with a relevant and reachable value proposal for every deep tech startup.

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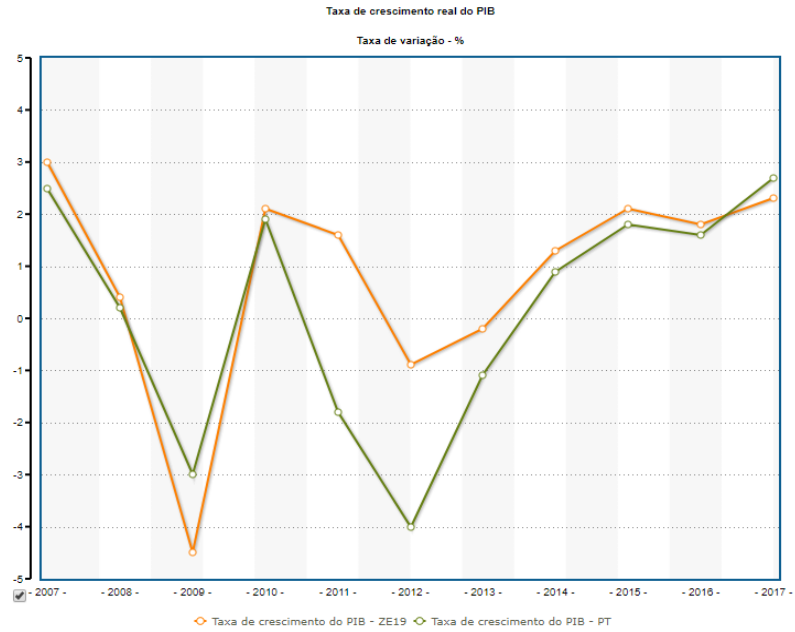
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# 16. Annexes

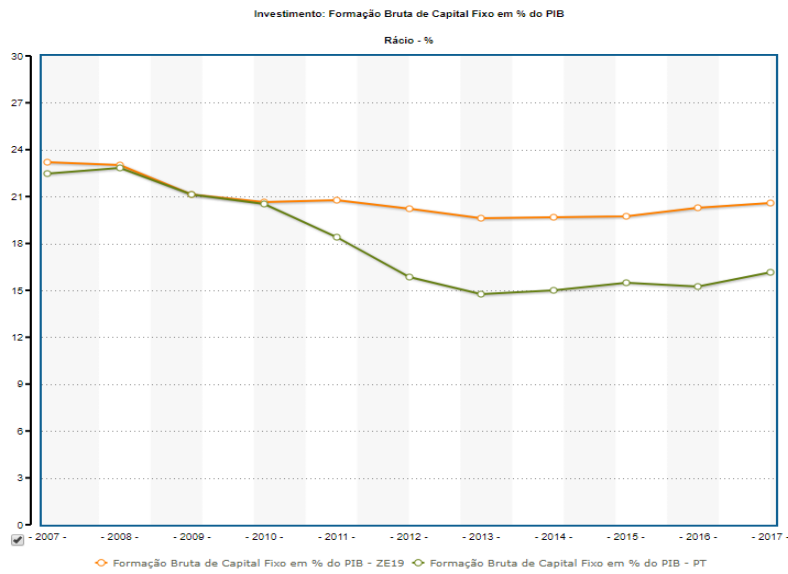
## Annex 1 – Economical Factors

Graph I. Portuguese vs Eurozone GDP Growth Rate



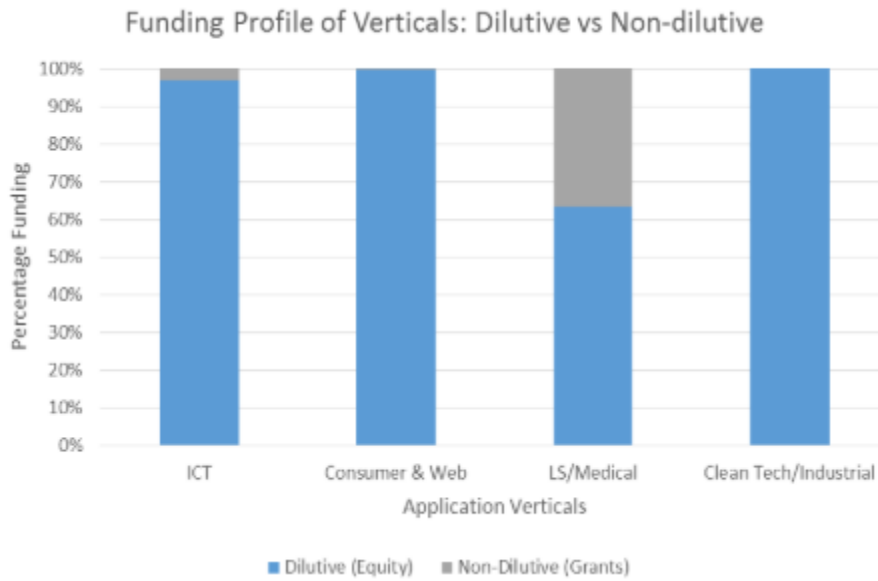
Source: Eurostat, INE (2018).

Graph II. Portuguese vs Euro Zone Investment Rate



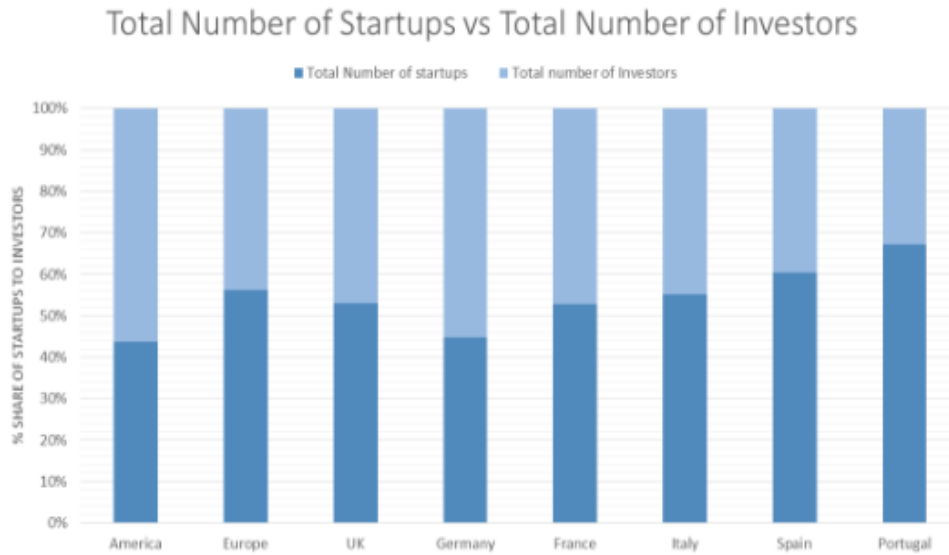
Source: Eurostat, INE (2018)

Graph III. Funding Profile of Verticals: Dilutive vs Non-dilutive



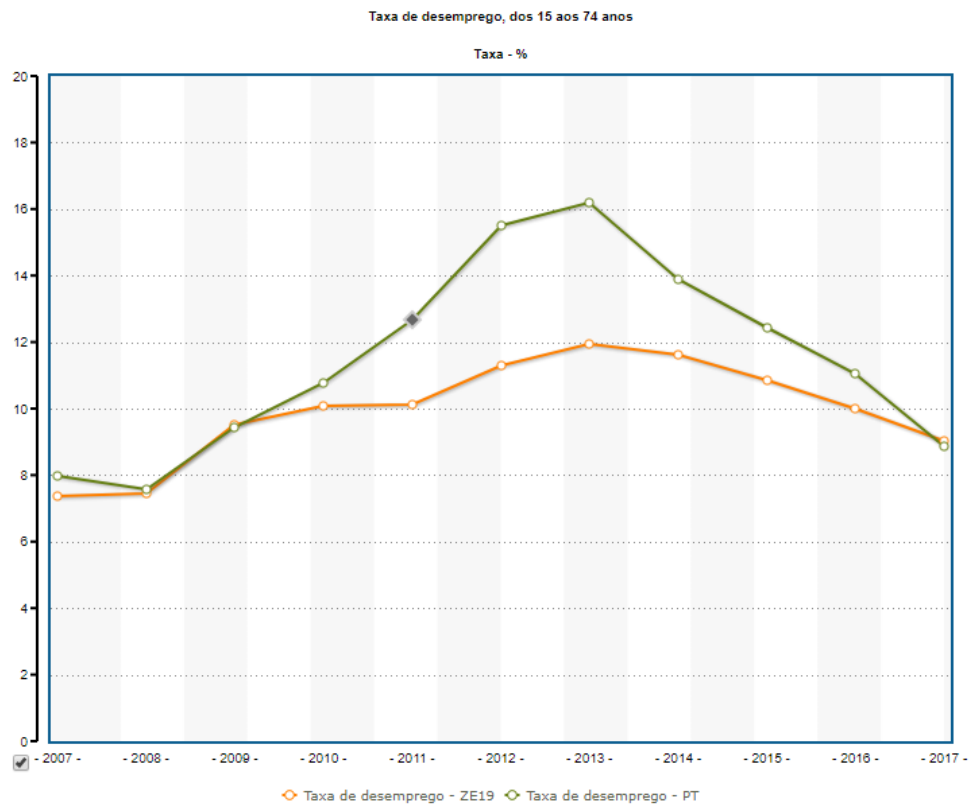
Source: ScaleUp Report (2017)

Graph IV. Total Number of Startups vs Total Number of Investors



Source: ScaleUp Report (2017)

Graph V. Portuguese vs European Union Unemployment Rate



Source: Eurostat, INE (2018)

## Annex 2 – Political Factors

Graph VI. Summary Innovation Index – Performance Relative to EU 2010 in 2010 and 2016

Source: European Innovation Scoreboard 2017

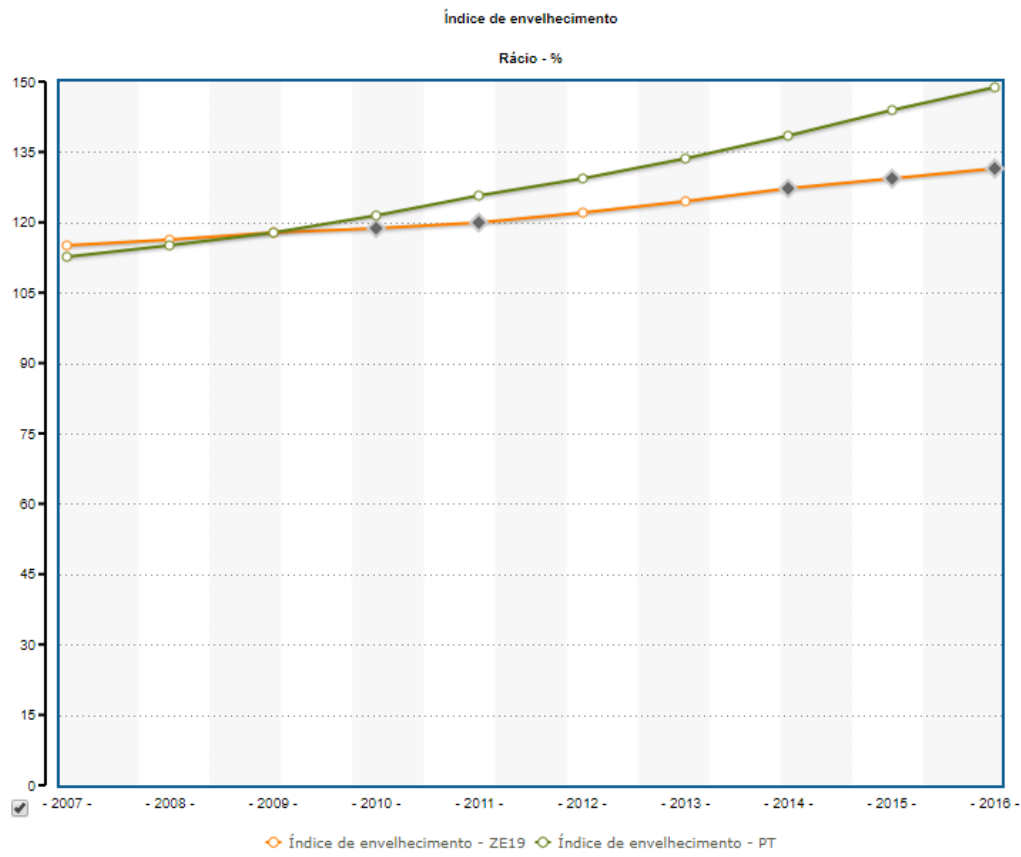
| Portugal                                     | Performance relative to EU 2010 in |       | Change 2010-2016 |
|--|------------------------------------|-------|------------------|
|  | 2010                               | 2016  |                  |
| <b>SUMMARY INNOVATION INDEX</b>              | 85.4                               | 83.0  | -2.4             |
| <b>Human resources</b>                       | 120.5                              | 111.6 | -9.0             |
| New doctorate graduates                      | 200.0                              | 131.0 | -69.0            |
| Population with tertiary education           | 48.7                               | 111.2 | 62.5             |
| Lifelong learning                            | 108.4                              | 88.4  | -20.0            |
| <b>Attractive research systems</b>           | 80.7                               | 112.4 | 31.7             |
| International scientific co-publications     | 145.7                              | 294.3 | 138.6            |
| Most cited publications                      | 84.8                               | 85.5  | 0.8              |
| Foreign doctorate students                   | 51.6                               | 90.0  | 38.4             |
| <b>Innovation-friendly environment</b>       | 103.3                              | 153.6 | 50.3             |
| Broadband penetration                        | 144.4                              | 277.8 | 133.3            |
| Opportunity-driven entrepreneurship          | 74.2                               | 66.0  | -8.2             |
| <b>Finance and support</b>                   | 84.1                               | 81.7  | -2.4             |
| R&D expenditure in the public sector         | 92.9                               | 89.3  | -3.6             |
| Venture capital expenditures                 | 73.1                               | 72.0  | -1.0             |
| <b>Firm investments</b>                      | 94.9                               | 88.6  | -6.3             |
| R&D expenditure in the business sector       | 62.2                               | 49.3  | -12.9            |
| Non-R&D innovation expenditures              | 95.6                               | 90.0  | -5.6             |
| Enterprises providing ICT training           | 128.6                              | 128.6 | 0.0              |
| <b>Innovators</b>                            | 127.2                              | 100.2 | -26.9            |
| SMEs product/process innovations             | 154.2                              | 129.9 | -24.3            |
| SMEs marketing/organizational innovations    | 113.5                              | 92.6  | -21.0            |
| SMEs innovating in-house                     | 114.4                              | 78.8  | -35.6            |
| <b>Linkages</b>                              | 55.8                               | 38.0  | -17.8            |
| Innovative SMEs collaborating with others    | 121.4                              | 65.7  | -55.7            |
| Public-private co-publications               | 45.0                               | 34.9  | -10.1            |
| Private co-funding of public R&D exp.        | 11.4                               | 18.1  | 6.7              |
| <b>Intellectual assets</b>                   | 69.0                               | 75.9  | 6.9              |
| PCT patent applications                      | 41.2                               | 43.4  | 2.3              |
| Trademark applications                       | 76.2                               | 105.1 | 28.8             |
| Design applications                          | 100.9                              | 97.2  | -3.7             |
| <b>Employment impacts</b>                    | 50.7                               | 69.4  | 18.7             |
| Employment in knowledge-intensive activities | 43.6                               | 66.7  | 23.1             |
| Employment fast-growing enterprises          | 55.9                               | 71.4  | 15.5             |
| <b>Sales impacts</b>                         | 72.1                               | 45.5  | -26.6            |
| Medium and high tech product exports         | 49.7                               | 49.2  | -0.5             |
| Knowledge-intensive services exports         | 51.9                               | 54.1  | 2.2              |
| Sales of new-to-market/firm innovations      | 122.8                              | 30.9  | -91.9            |

Dark green: normalised performance above 120% of EU; light green: normalised performance between 90% and 120% of EU; yellow: normalised performance between 50% and 90% of EU; orange: normalised performance below 50% of EU. Normalised performance uses the data after a possible imputation of missing data and transformation of the data.

Change highlighted in green is positive; change highlighted in light red is negative.

## Annex 3 – Social Factors

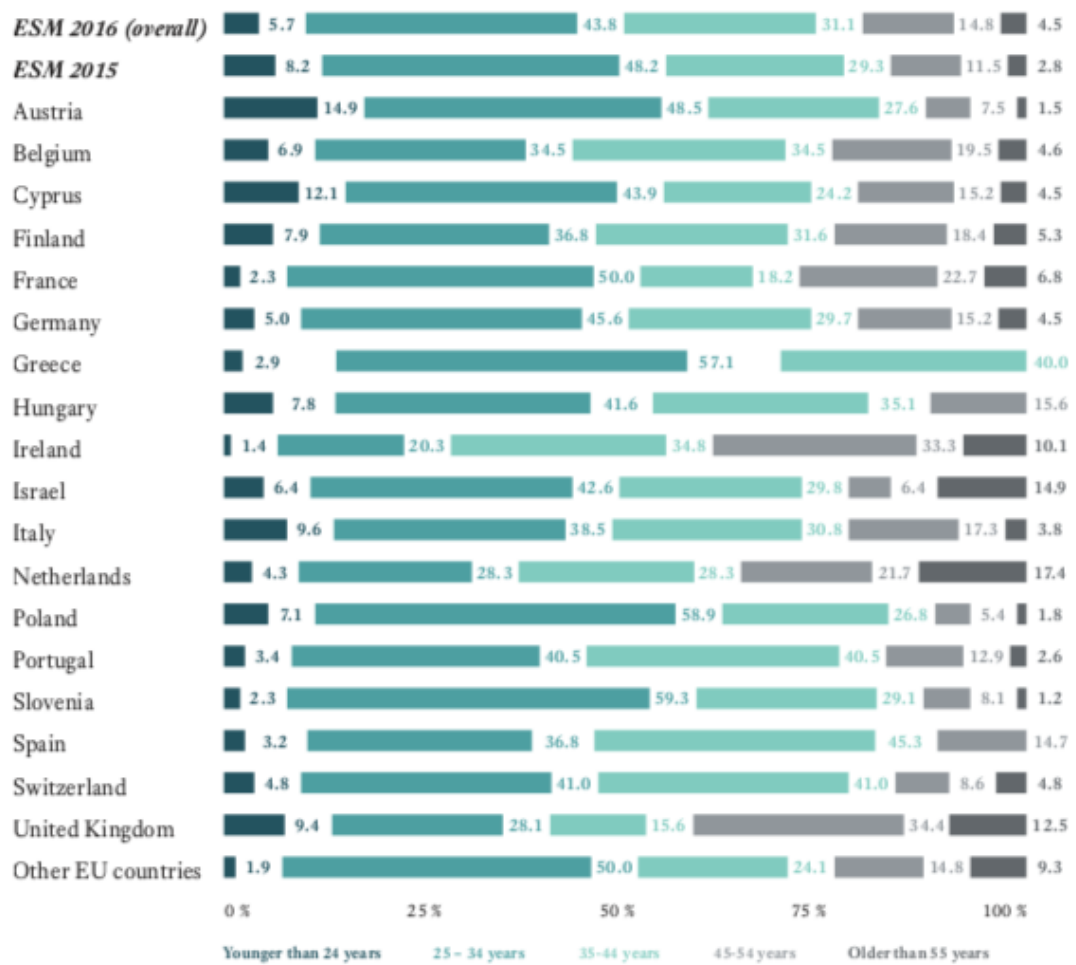
Graph VII. Ageing Index



Source: Eurostat, INE (2018)



Graph VIII. Age Ranges of Startup Founders



Source: European Startup Monitor (2016)

## Annex 4 - Technological Factors

Table XVI. European patent applications - Portugal in Comparison with EPO state

| Origin        | 2016    | 2017    | % change 2017 vs. 2016 | Share in total applications 2017 |
|---------------|---------|---------|------------------------|----------------------------------|
| Portugal      | 158     | 149     | -5,7%                  | 0,1%                             |
| EPO states    | 76 140  | 78 307  | 2,8%                   | 47%                              |
| All countries | 159 316 | 165 590 | 3,9%                   |                                  |

**Source:** European Patent Office (2018).

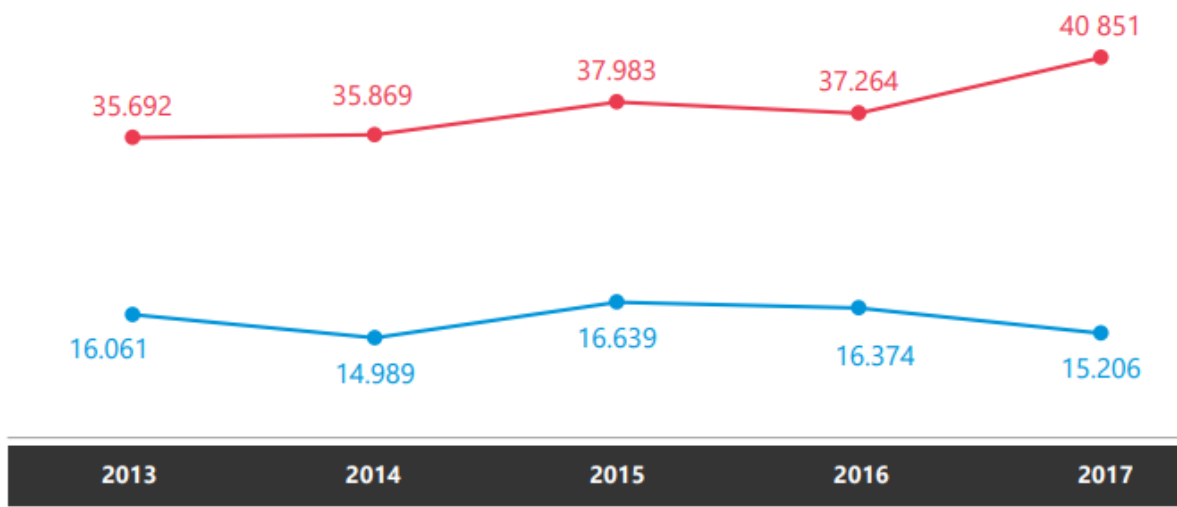
Table XVII. European patent applications -Top 15 technology fields in Portugal

|    | Technology Field                        | 2016 | 2017 | 2017/2016 |
|----|---|------|------|-----------|
| 1  | Measurement                             | 9    | 12   | 33,3%     |
| 2  | Medical technology                      | 6    | 12   | 100,0%    |
| 3  | Handling                                | 10   | 11   | 10,0%     |
| 4  | Civil engineering                       | 11   | 11   | 0,0%      |
| 5  | Organic fine chemistry                  | 9    | 8    | -11,1%    |
| 6  | Computer technology                     | 7    | 7    | 0,0%      |
| 7  | Pharmaceuticals                         | 12   | 7    | -41,7%    |
| 8  | Other special machines                  | 4    | 7    | 75,0%     |
| 9  | Electrical machinery, apparatus, energy | 8    | 6    | -25,0%    |
| 10 | Digital communication                   | 6    | 6    | 0,0%      |
| 11 | Biotechnology                           | 9    | 6    | -33,3%    |
| 12 | Surface technology, coating             | 0    | 5    |           |
| 13 | Mechanical elements                     | 0    | 5    |           |
| 14 | Telecommunications                      | 3    | 4    | 33,3%     |
| 15 | Control                                 | 3    | 4    | 33,3%     |
|    | <b>Sub-total</b>                        | 97   | 111  | 14,4%     |
|    | <b>All fields</b>                       | 158  | 149  | -5,7%     |

**Source:** European Patent Office (2018).

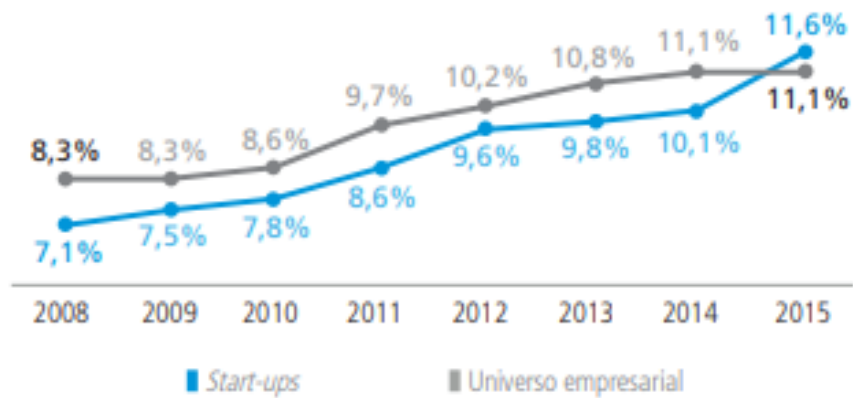
Annex 5 - Immediate Market

Graph IX. Number of Startups Births and Deaths - 5 years



Source: InformaDB (2018).

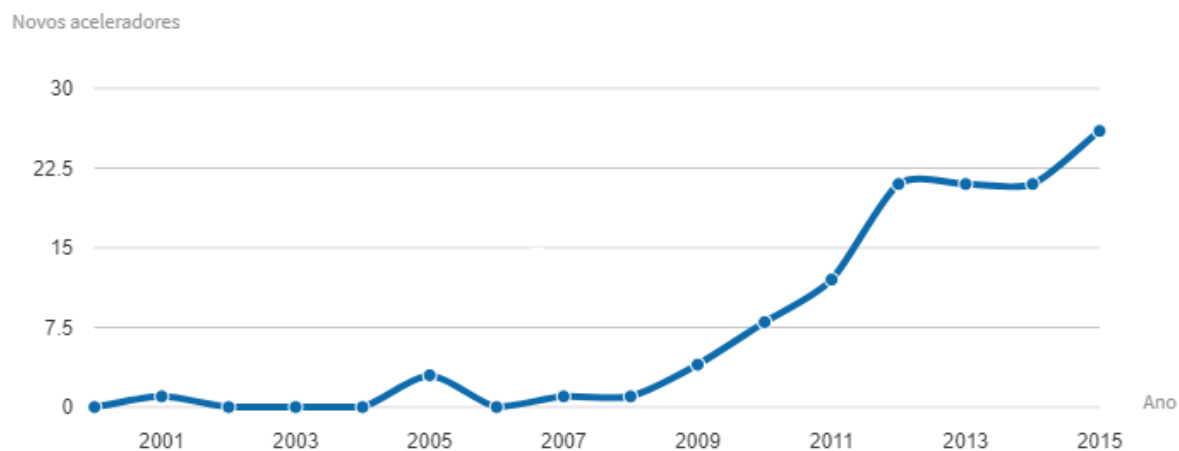
Graph X. Percentage of startups exporting compared to the market



Source: InformaDB (2017)

## Annex 6 - Competition Analysis

Graph XI. Accelerators industry evolution in Europe



**Source:** “European Accelerator Report 2015” by Gust & Fundacity (2015)

## Annex 7. Survey questions

Table XVIII. Survey questions

| Question                    | Possible Answers  | Research Goal   |
|-----------------------------|---|---|
| 1. I am                     | a) Male<br>b) Female<br>c) Other  | This question allows to understand the target and also predict what kind of startups join acceleration programs - Target definition |
| 2. What’s your age range ?  | a) 18-24 years old<br>b) 25 - 34 years old<br>c) 35 - 44 years old<br>d) 45 - 54 years old<br>e) 55 - 64 years old<br>f) > 65 years old | This question allows to understand the target and also predict what kind of startups join acceleration programs - Target definition |
| 3. Academic qualifications? | a) Middle School<br>b) High School<br>c) Bachelor Degree<br>d) Master Degree<br>e) Phd Degree   | This question allows to understand the target and also predict what kind of startups join acceleration                              |

|   |  |   |
|---|--|---|
|   |  | programs - Target definition  |
| 4. Have you had an entrepreneurial experience before your startup?        | <ul style="list-style-type: none"> <li>a) Yes</li> <li>b) No</li> </ul>  | This question allows to understand the target and also predict what kind of startups join acceleration programs - Target definition |
| 5 . What is the area of your startup?                                     | <ul style="list-style-type: none"> <li>a) Medical devices &amp; Health care</li> <li>b) Smart Cities</li> <li>c) Industry 4.0</li> <li>d) Blockchain</li> <li>e) AI</li> <li>f) IOT</li> <li>g) Water Economy</li> <li>h) Other</li> </ul> | This question allows to understand the target and also predict what kind of startups join acceleration programs - Target definition |
| 6. In what regions is your startups based?                                | <ul style="list-style-type: none"> <li>a) Lisbon</li> <li>b) Porto</li> <li>c) Norte</li> <li>d) Centro</li> <li>e) Madeira</li> <li>f) Açores</li> <li>g) Alentejo</li> <li>h) Algarve</li> </ul>   | This question allows to understand the target and also predict what kind of startups join acceleration programs - Target definition |
| 7. How old is your startup?   | <ul style="list-style-type: none"> <li>a) &lt; 1 year</li> <li>b) 1 - 2 years</li> <li>c) 2 - 3 years</li> <li>d) 3 - 4 years</li> <li>e) 4 - 5 years</li> <li>f) &gt; 5 years</li> </ul>  | This question allows to understand the target and also predict what kind of startups join acceleration programs - Target definition |
| 8. Is your startup generating revenues?                                   | <ul style="list-style-type: none"> <li>a) Yes</li> <li>b) No</li> </ul>  | This question allows to understand the target and also predict what kind of startups join acceleration programs - Target definition |
| 9. Which of the following areas is the biggest struggle for your startup? | <ul style="list-style-type: none"> <li>a) Access to finance</li> <li>b) Customer acquisition</li> <li>c) Partner acquisition</li> </ul>  | This questions allows to understand the target and  |

|  |  |   |
|--|--|---|
|  | <ul style="list-style-type: none"> <li>d) Internationalization</li> <li>e) Access to relevant distribution channels</li> <li>f) Communication strategy</li> <li>g) Access to market</li> </ul>   | also predict what kind of startups. The respondents had to rate the struggle according to the scale - 1 - completely disagree and 4 - completely agree. |
| 10. Did you ever participated in an acceleration program?  | <ul style="list-style-type: none"> <li>a) Yes</li> <li>b) No</li> </ul>  |   |
| 11. If you answer yes to the previous questions, please tell us the reason why:                                      | <ul style="list-style-type: none"> <li>a) Relevant network of the accelerator</li> <li>b) Expertise in the market and credibility</li> <li>c) Visibility of the accelerator</li> <li>d) Content of the acceleration program: bootcamps and events</li> <li>e) Access to grants</li> <li>f) Mentoring Program</li> <li>g) Easier access to finance</li> <li>h) Networking with other companies</li> <li>i) Positive testimonials from companies that were previously accelerated</li> </ul> | The respondents had to rate the motives according to the scale - 1 - completely disagree and 4 - completely agree.                                      |
| 12. If your answer was negative, please tell us the reason why you have not participated in an acceleration program: | <ul style="list-style-type: none"> <li>a) Equity given to the accelerator</li> <li>b) Time consuming program</li> <li>c) Not grant given</li> <li>d) Not interested in participating in acceleration programs</li> </ul>   | The respondents had to rate the motives according to the scale - 1 - completely disagree and 4 - completely agree.                                      |
| 13. Please tell us how did you find out about the acceleration program   | <ul style="list-style-type: none"> <li>a) Contact in an event</li> <li>b) Contact by phone call</li> <li>c) Contact by e-mail</li> </ul>   | This question allows to understand the main communication channels used by accelerators   |

|  |   |  |
|--|---|--|
|  | <ul style="list-style-type: none"> <li>d) Word-of-mouth</li> <li>e) Social media</li> <li>f) Google search</li> <li>g) News and publications</li> <li>h) Other</li> </ul> |  |
| 14. Please provide your email address if you want to see the results of this survey. Thank you |   |  |

**Source:** Author’s own elaboration (2018).

## Annex 8 - Questionnaire answers

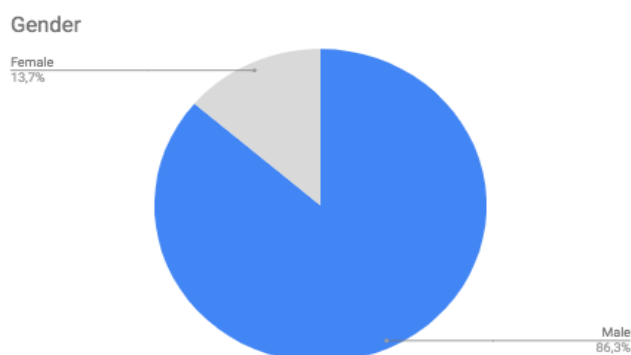
### Startup’s Perception of Acceleration Programs

This survey was elaborated in the framework of a master's thesis of the Business Administration Master, at ISCTE Business School. The survey will only take 5 Minutes of your time and the purpose is to get additional insights of your participation in an acceleration program. If you would like to see the results from this survey among other insights, please provide your email before you submit the survey. This survey is anonymous, therefore please fill truthfully. I would like to thank already your availability and participation.

#### 1. Gender

- a) Male
- b) Female

Graph XII. Gender of the respondents

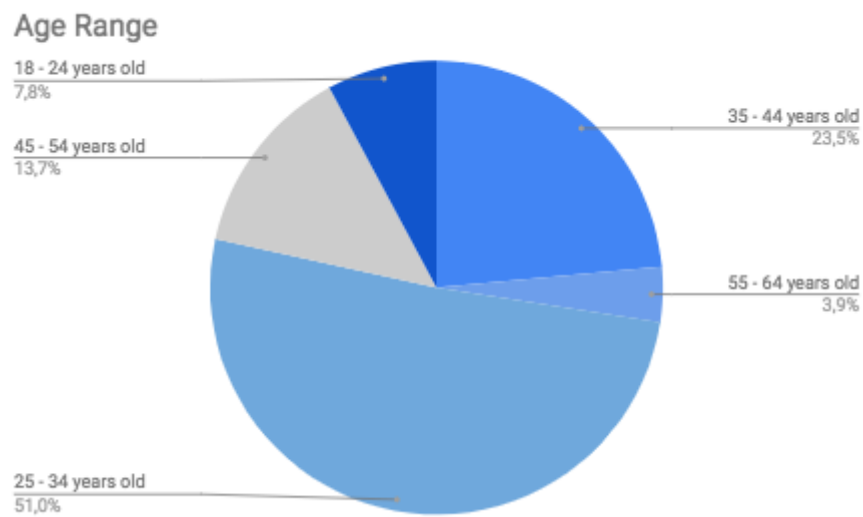


Source: Questionnaire answers (2018)

2. Age range

- a) 18 - 24 years old
- b) 25 - 34 years old
- c) 35 - 44 years old
- d) 45 - 54 years old
- e) 55 - 64 years old
- f) >65 years old

Graph XIII. Age range of the respondents



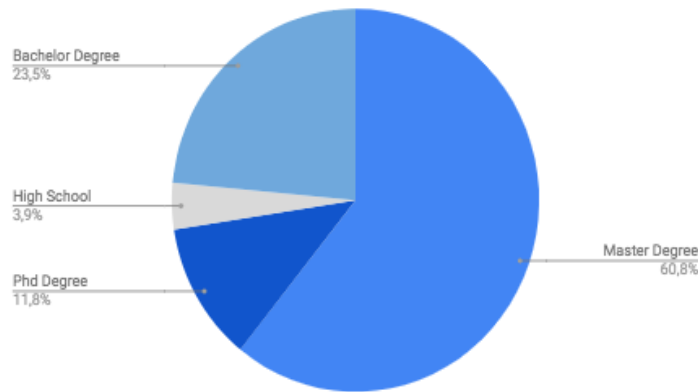
Source: Questionnaire answers (2018)



3. Academic Qualifications

- a) Middle School
- b) High School
- c) Bachelor Degree
- d) Master Degree
- e) Phd Degree

Graph XIV. Academic qualifications of the respondents

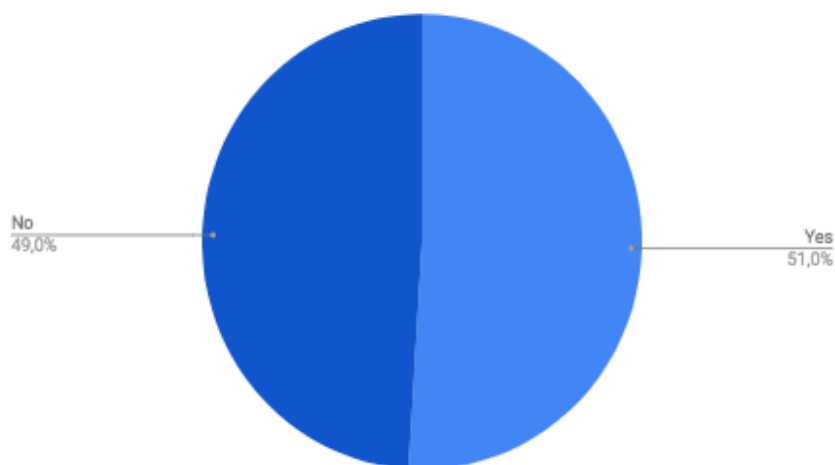


Source: Questionnaire answers (2018)

4. Have you had an entrepreneurial experience before your startup?

- a) Yes
- b) No

Graph XV. Entrepreneurial experience of the respondents

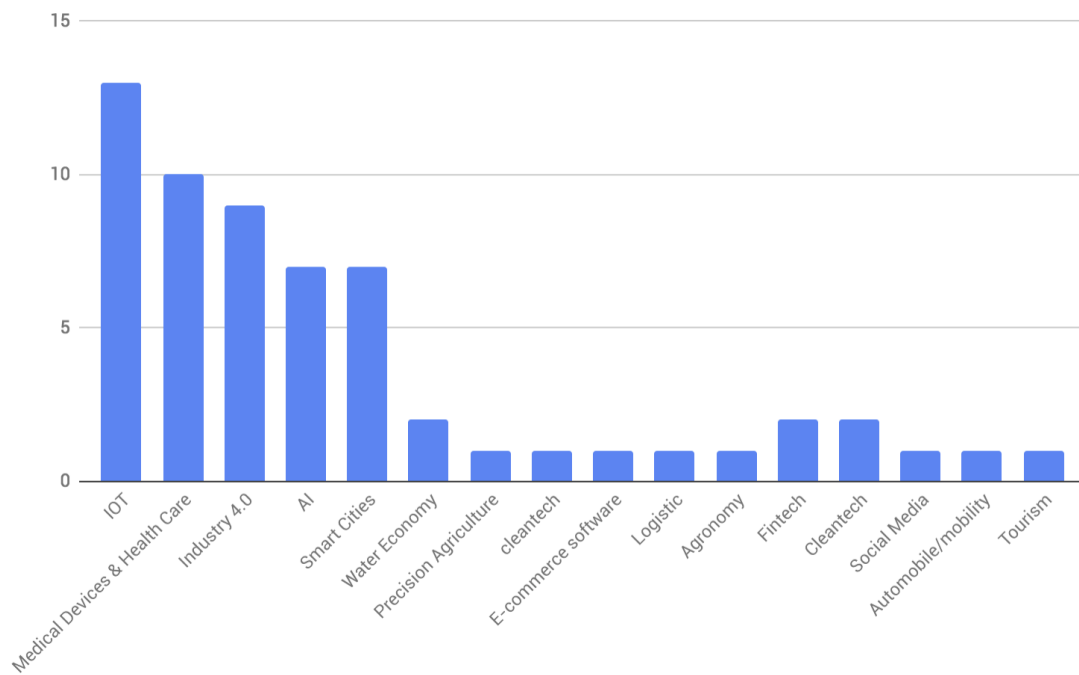


Source: Questionnaire answers (2018)

5. What is the area of your startup?

- a) Medical Devices & Health Care
- b) Smart Cities
- c) Industry 4.0
- d) Blockchain
- e) AI
- f) IOT
- g) Water Economy
- h) Other:

Graph XVI. Areas of the correspondent's startups

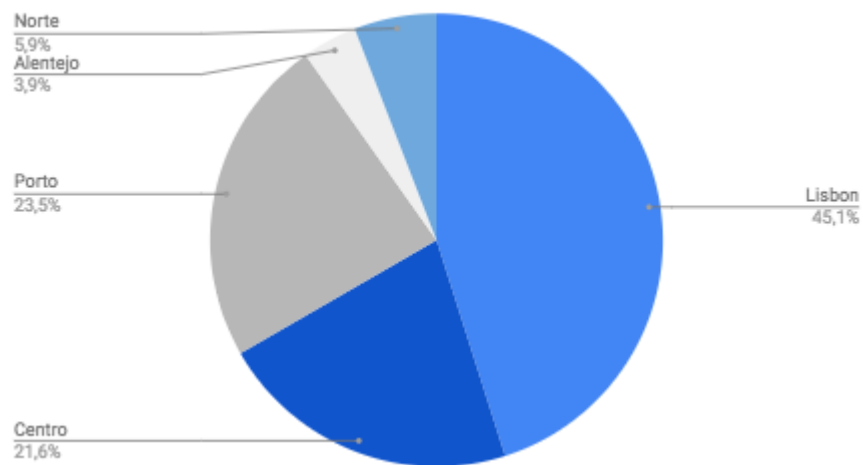


Source: Questionnaire answers (2018)

6. In what regions is your startup based?

- a) Lisbon
- b) Porto
- c) Norte
- d) Centro
- e) Madeira
- f) Açores
- g) Alentejo
- h) Algarve

Graph XVII. Regions of the respondent's startups

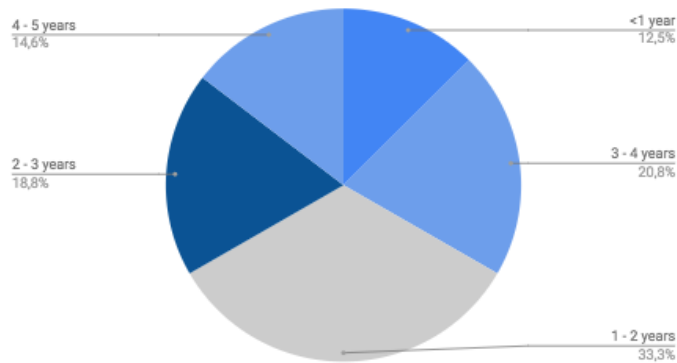


Source: Questionnaire answers (2018)

7. How old is your startup?

- a) <1 year
- b) 1 - 2 years
- c) 2 - 3 years
- d) 3 - 4 years
- e) 4 - 5 years

Graph XVIII. Years of activity of the respondent's startups

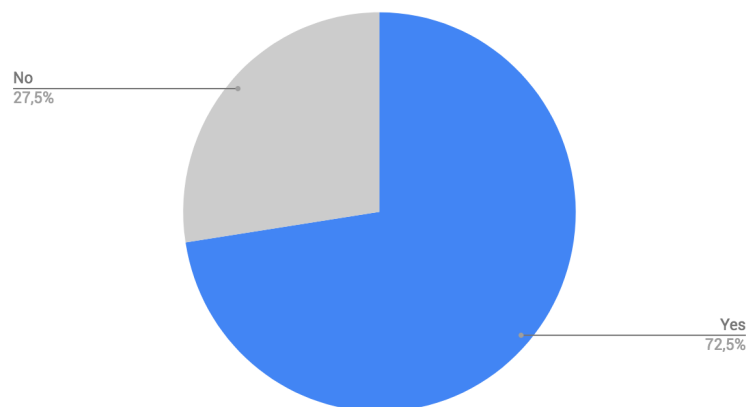


Source: Questionnaire answers (2018)

8. Is your startup generating revenues?

- a) Yes
- b) No

Graph XIX. Generation of revenues of the respondent's startups



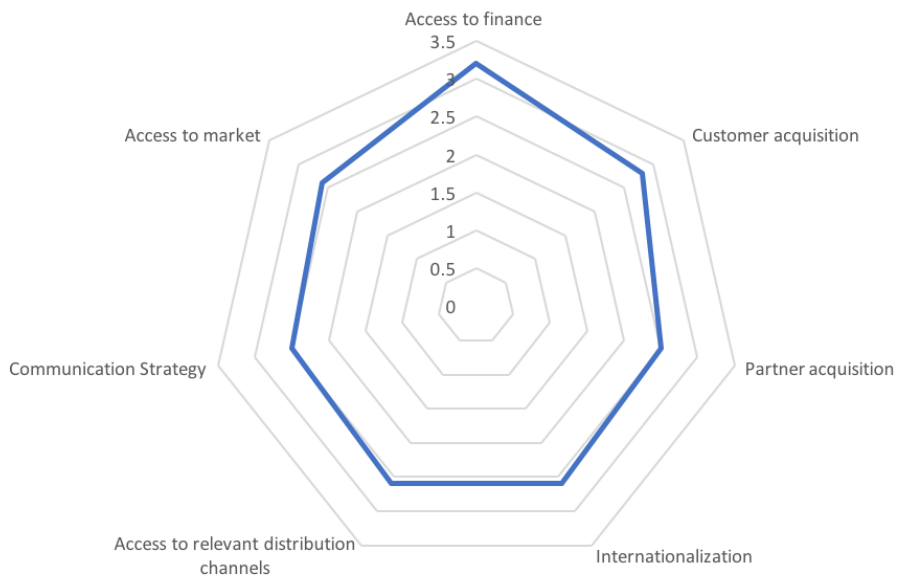
Source: Questionnaire answers (2018)

9. Which of the following areas is the biggest struggle for your startup?

Note: Correspondents were asked to rate every struggle from 1 to 4.

- a) Access to finance
- b) Access to market
- c) Communications strategy
- d) Customer acquisition
- e) Access to relevant distribution channels
- f) Internationalization
- g) Partner acquisition

Graph XX. Biggest struggles of the respondent's startups



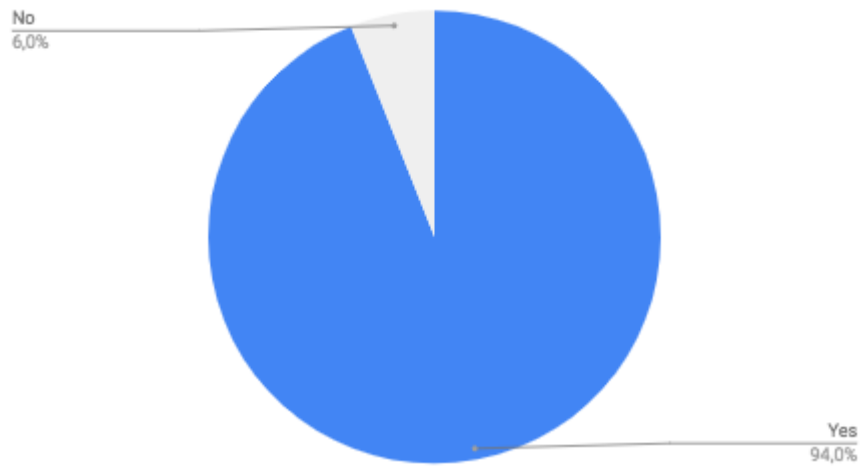
Source: Questionnaire answers (2018)

10. Did you ever participated in an acceleration program?

Note: If answer, correspondents continue questionnaire to question 11. If no, correspondents continue questionnaire to group 12.

- a) Yes
- b) No

Graph XXI. Correspondents participation in an acceleration program



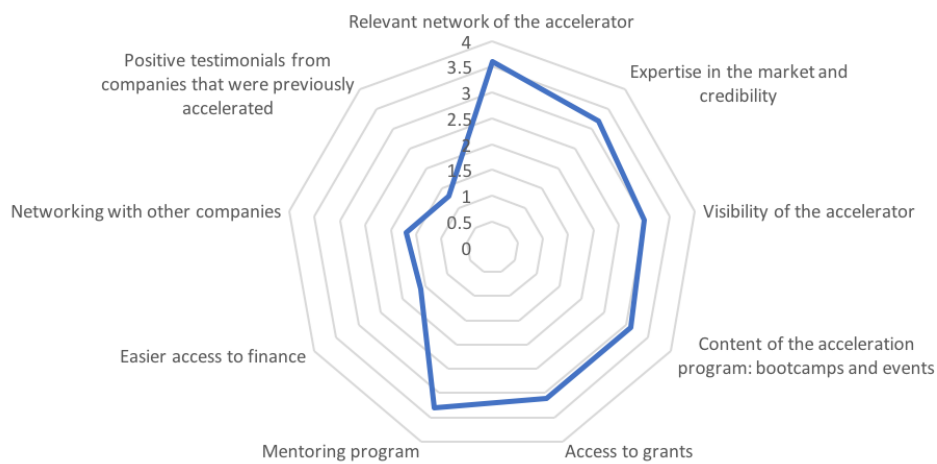
Source: Questionnaire answers (2018)

11. If you answered yes to the previous question, please tell us the reason why:

Note: Correspondents were asked to rate every reason from 1 to 4.

- a) relevant network of the accelerator
- b) Expertise in the market and credibility
- c) Visibility of the accelerator
- d) Content of the acceleration program: bootcamps and events
- e) Access to grants
- f) Mentoring program
- g) Easier access to finance
- h) Networking with other companies
- i) Positive testimonials from companies that were previously accelerated

Graph XXII. Reasons to be part of an acceleration program



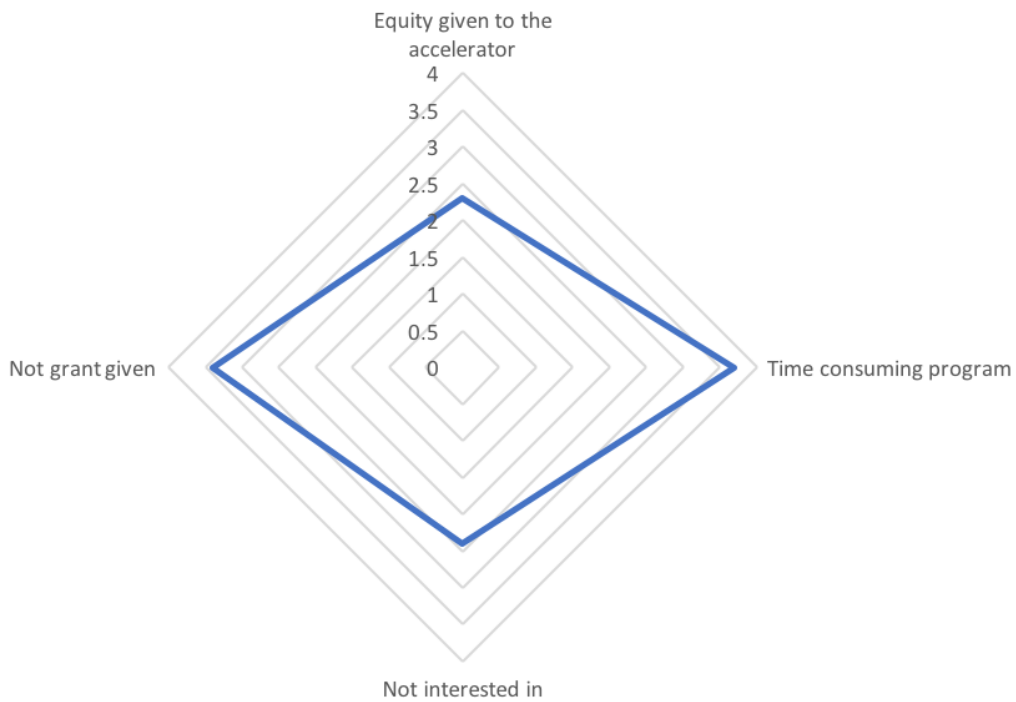
Source: Questionnaire answers (2018)

12. If your answer was negative, please tell us the reason why you have not participated in an acceleration program:

- a) Equity given to the accelerator
- b) Not grant given
- c) Time consuming program
- d) Not interest in

Note: Correspondents were asked to rate every reason from 1 to 4.

Graph XXIII. Reasons to not participated in an acceleration program



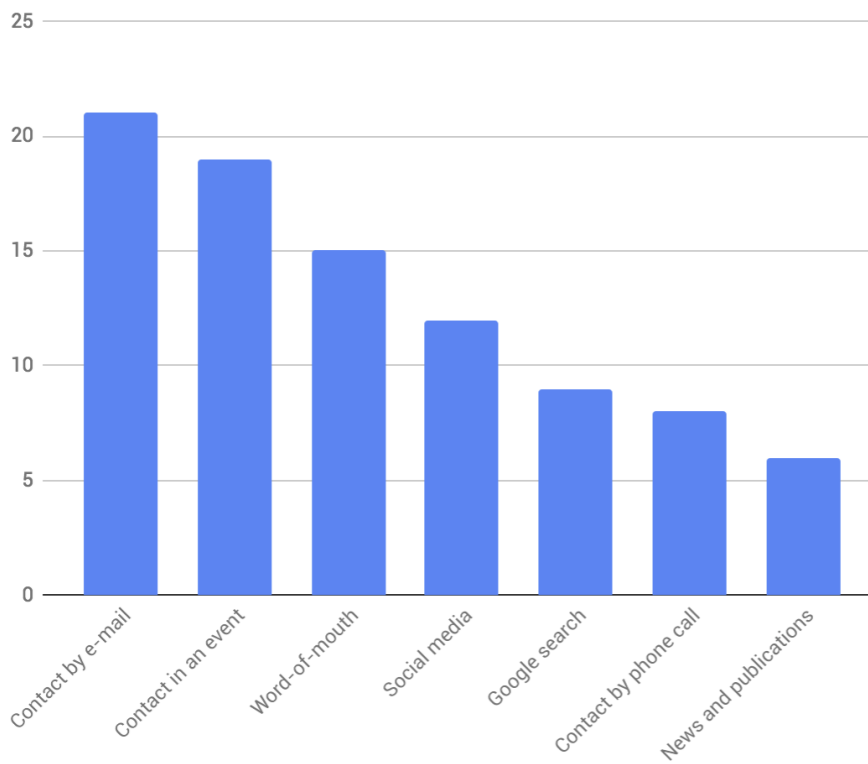
Source: Questionnaire answers (2018)



13. Please tell us how did you find out about the acceleration program:

- a) Contact by e-mail
- b) Contact in an event
- c) Word-of-mouth
- d) Social media
- e) Google search
- f) Contact by a phone call
- g) News and publications
- h) Other:

Graph XXIV. Points of contact of accelerators and startups



Source: Questionnaire answers (2018)