



**Universidade de  
Aveiro**  
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Departamento de Economia, Gestão,  
Engenharia Industrial e Turismo

**João Pedro Santos  
Costa**

**Os unicórnios no mercado atual: uma nova realidade  
para as start-ups**





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**The place of the unicorn in today's marketplace: a  
new reality for start-ups**

Dissertação apresentada à Universidade de Aveiro para cumprimento dos requisitos necessários à obtenção do grau de Mestre em Gestão realizada sob a orientação científica do Doutor Manuel Luís Au-Yong Oliveira, Professor Auxiliar do Departamento de Economia, Gestão, Engenharia Industrial e Turismo da Universidade de Aveiro



To my parents, José and Isabel, for their endless love, encouragement and support.



## O júri

presidente

Prof.<sup>a</sup> Doutora Conceição Maria Oliveira da Cunha  
professora auxiliar do Departamento de Economia, Gestão,  
Engenharia Industrial e Turismo da Universidade de Aveiro

Prof. Doutor Luís Manuel Borges Gouveia  
professor associado com agregação da Faculdade de Ciência e  
Tecnologia da Universidade Fernando Pessoa

Prof. Doutor Manuel Luís Au-Yong Oliveira  
professor auxiliar do Departamento de Economia, Gestão,  
Engenharia Industrial e Turismo da Universidade de Aveiro



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## Palavras-chave

Unicórnios, Inovação, Empreendedorismo, Tecnologia, Disrupção

## Resumo

Criar empresas de valorizações exponenciais é um objetivo comum entre empreendedores e investidores, mas subsiste a dúvida sobre como fazê-lo. Este estudo pretende contribuir para colmatar esta lacuna na literatura atual – sobre como criar os chamados unicórnios. Devido ao aparecimento crescente de empresas valorizadas em bilhões de dólares nos últimos anos, a sua compreensão, assim como a sua posição no mercado atual, e as ameaças, oportunidades e vantagens competitivas das mesmas, tornou-se um fator chave para melhor compreender o mundo dos negócios. Baseada maioritariamente em pesquisa exploratória, envolvendo entrevistas e um *focus group* com especialistas, esta dissertação pretende criar, reunir e sumarizar a informação relevante e atualizada sobre empresas de valorizações exponenciais e criar um modelo teórico para a conceção e crescimento sustentado das mesmas. Se, por um lado, o plano de negócio poderá ser menos importante do que é geralmente aceite na sociedade, e no meio académico em particular, a pesquisa aponta para fatores como a experiência, a capacidade de execução, a motivação intrínseca, a visão e sentido de oportunidade, assim como a capacidade de procurar obter feedback e aprender com os erros e não somente com os sucessos – que o empreendedor deverá ter para poder impulsionar o seu negócio para a denominação de unicórnio – ou valorização para cima de um bilhão de dólares Norte Americanos – que é uma realidade cada vez mais frequente no mundo também cada vez mais tecnológico em que vivemos.



**Keywords**

Unicorns, Innovation, Entrepreneurship, Technology, Disruption

**Abstract**

Creating enterprises with exponential valuations is a common goal of entrepreneurs and investors but the question of how to do it still remains, for the most part, unanswered. This research intends to fill this gap in the literature - about how to create the so-called unicorns. Due to the increasing emergence of highly valued, billion-dollar start-up companies in recent years, the understanding of their position in the current market and their threats, opportunities and competitive advantages, has become a key factor to better understanding the business world. Based mainly on exploratory research involving interviews and a focus groups with experts, this dissertation intends to create, collect and summarize relevant and updated information on highly valued companies and, following this, creating a theoretical model for their conception and sustained growth. If, on the one hand, the business plan may be less important than is generally accepted in society, and in academia in particular, the research points to factors such as experience, implementation capacity, intrinsic motivation, vision and timing, and the ability to seek feedback and learn from mistakes and not just from success - the entrepreneur must be able to boost his business to enter the unicorn club – meaning being valued equally or at more than one billion dollars - which is an increasingly common reality in the increasingly technological world in which we live in.



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## **Acronyms**

Chief Executive Officer (CEO)

Electronic Commerce (E-Commerce)

European Free Trade Association (EFTA)

Gross domestic product (GDP)

Internet Explorer (IE)

Initial Public Offering (IPO)

Macintosh Operating System (Mac-OS)

North Atlantic Treaty Organization (NATO)

Pequena / Média Empresa (PME)

Research and Development (R&D)



# 1. Introduction

Every living generation changes the world in miscellaneous ways. Changes and transformations in political, economic, social and technological areas shape prospects and expectations for oncoming generations. These transformations, be they planned, envisioned or accidental, have the necessary impact to guide a revolution.

Entrepreneurship cannot be defined as simply being a personality trait as entrepreneurs with different cultures, interest areas, backgrounds or academic training tend to work in similar ways (Drucker, 1985). Principally, they do not just do something better – they do it differently. They search for the unexpected (be it a failure or a success), incongruities and changes in perception, mood, meaning, demography or business environment (Drucker, 1985).

Innovation, as it might involve minor or major improvements in every area, is deeply connected to today's business and living world. Innovation, it may be said, can be alarmingly simple: creating metal containers that could be easily offloaded from a truck onto a ship, for example, does not need a lot of research and development. This standardized system of transportation around the world, however, quadrupled world trade. As one can see, even small changes can have enormous impact (Drucker, 1985). In a global context, innovation might lead to overcoming pollution problems, enlarging life expectancy or solving hunger problems; in a business context, innovation leads to more effective threats and competitive answers, efficiency improvement and, of course, the creation of sustainable competitive advantages, thus, stimulating a culture of innovation can be game-changing. Wherever individuals defy the current context, there is a scope for changing things and for making a difference (Drucker, 1985). There is a scope for innovation.

Since many of these areas that entrepreneurship takes into account are connected to society, creating companies that focus on them as their core business might be a success strategy. Unicorns – private companies valued at \$1 billion or more – tend to serve society through a global market, focusing on easy access technologies (as for example, the

World Wide Web). This, taking into account this century's globalization, might make them important players in what lies ahead.

Unicorns are a relatively new concept. Although they have existed for several decades, only recently the number of unicorns significantly increased, leading to a rise in awareness by researchers, entrepreneurs, investors and authors worldwide (Lee, 2013). Unicorns, as will be further explained in this document, are normally connected to technology bubbles, which are normally connected to disruptive innovations. They are defining the first business decades of the 21<sup>st</sup> century, as their business models, attractiveness and impact continuously grow (Lee, 2013). Unicorns, through their connection to technological products and services, might even inspire a new pillar of anthropology: digital anthropology, the study of technological and social interactions and their impact on society. It is, thus, of utmost importance to the business world and to the scientific community to decipher these companies and what involves them, as they will surely start being more common and have a more extensive impact in the coming years.

With the present document, the author explores the unicorns' world: the creation and development of unicorns, their present analytical data, their importance in the business panorama and how they affect it. The objective of this work is, thus, to create a basis for future research on the impact of these companies as well as finding the key factors to build a sustainable high value company. As a final synthesis, the author will attempt to create a model which can be used to identify and efficiently grow unicorn companies, followed by a discussion on whether it is preferred to encourage the creation of a unicorn company or focus on a lower, but more reasonable, valuation in order to diminish post-IPO (initial public offering) losses and risks (since, as will be further discussed, not all unicorns have objective valuations; some are based only on the expectations and euphoria of having dominating positions in giant companies). Due to the lack of literature reviews about unicorns, this work may be used as a source for future developments in this scientific area in order to further investigate and reveal their importance in the forthcoming century. The methodology used in this work focused on two distinct main areas: firstly, the collection, examination and summary of bibliographic data and, secondly, the conduction of individual interviews and a focus group. The contrast of information retrieved from these areas was taken into account in the results of the thesis and it helped the author to create a more stable and objective view of the unicorn phenomena.

This dissertation has nine different chapters: introduction, literary review, methodology, the model, the interviews, the focus group, a discussion of the field work, conclusions, and suggestions for future research. In the introduction, above, a concise summary of the core-theme and the work structure can be found. In the literary review, one may find multiple scientific areas such as entrepreneurship, innovation, unicorn companies and the Portuguese demographic and economic panorama. This review is followed by the work's methodology, where the author explains what criteria he used to select and summarize the primary and secondary data used in this work, as well as the main work objectives and the thesis benefits for the scientific and business community. In the research results, one may find interview and focus group results, which are later discussed. The conclusions chapter sums up the main points of the research study.

In sum, the objectives of this study are to discuss:

- What factors lead to the creation and success of a unicorn?
- Will we witness an exponential growth of unicorns?
- How important are entrepreneurs for the success of high-valuation companies?
- How is the post-IPO devaluation important for companies worldwide?



# 2. State of the art

## 2.1 Entrepreneurship

The term entrepreneurship became relevant in the business area during the beginning of the 20<sup>th</sup> century. According to Joseph Schumpeter, one of the most influential economists of the 20<sup>th</sup> century, an entrepreneur had the willingness and ability to convert ideas or inventions into successful innovations. Most importantly, entrepreneurs employed the “gale of creative destruction”: a special form of economic growth that entrepreneurs particularly bring to the capitalist system. In Schumpeter’s view, long-term economic growth would be supported mainly by entrepreneurs’ radical innovations, even if these would destroy the economic value of previously established organizations, that had some sort of monopolistic power, created by their innovative activity (Schumpeter, 1994). The concept of entrepreneurship evolved, becoming a key piece to achieve better results in social and technological endeavours, as well as in other areas, in a society continuously searching for improvement. Entrepreneurs are, thus, considered to be the seeds of modern development (Markman et al., 2005).

Among others, entrepreneurial behaviour has brought benefits by:

- Creating new solutions and developing managerial capabilities: entrepreneurs study specific problems or opportunities and identify possible solutions, choosing the best alternative through social, economic and beneficial returns. These decision-making skills result in not only new products and technologies but also as a case study of success worth learning from (Markman et al., 2005).
- Creating organizations and improving standards of living: innovative breakthroughs and coordination of physical, intellectual, human and financial resources lead to the creation of new organizations. New organizations lead to social and economic benefits in society, leading directly to an improvement of living standards (Kanelos, 2013).
- Economic growth: the creation and use of innovative ideas allied to the application of production methods aiming for the maximisation of output, with available resources, leads to economic development (Kanelos, 2013).

- Community development: entrepreneurs tend to support entrepreneurial ventures by other like-minded individuals and invest in community projects and provide financial support to local charities (including what is now known as corporate social responsibility efforts).

Nowadays, in a global economy driven by globalized commerce, effective information availability and rapid technological progress (Andreesen, 2011), both innovation and entrepreneurship are crucial factors for the growth and sustainability of organizations. The necessary condition for long term growth of business activity in an advanced industrial country is, thus, the companies' ability to innovate in all areas involving its core-activities (Kanelos, 2013).

### **Entrepreneurship: learned or genetically received?**

Entrepreneurship is a crucial factor for the development of the economy, be it local or national. If, on the one hand, entrepreneurs create new or improved goods which can revolutionize entire markets, they also strive by creating jobs and improving national wealth through their own success. Global Entrepreneurship Monitor (2008) concludes that entrepreneurs drive innovation by speeding up structural changes in markets and economies alike and by obliging companies to step-up, creating direct and indirect contributions to efficiency, productivity and economic prosperity.

The influencers of entrepreneurship have been studied throughout the times with age, education and individual characteristics (personality, culture, experience, etc.) being considered the ones which have more effect on the entrepreneurs' success (Verheul et al., 2010). Giacomini et al. (2007) conclude that age influences entrepreneurship in two different ways: it positively influences start-up creation as a self-employment option (as older people might have lower employability) but it is negatively related to "search for profit" and "social development" opportunity motivations. Concerning the entrepreneurs' personality traits, McClelland (1961) claimed the need for achievement as a major entrepreneurial personality trait, whereas Robinson (1987) asserted that self-esteem and confidence are more essential features in entrepreneurs than the need for achievement.

Education is the characteristic with more chances of being influenced by external factors out of the three stated above (Verheul et al., 2010). As written by Raposo and Paço (2011, p.456), "the educational system influences the knowledge base, the achievement of skills, competences and attitudes on which future career choices are based. Since these

decisions are essential to the future of the individual, school has the responsibility to inform and expose students to a wide range of career options, including entrepreneurship”. Education can thus be linked to entrepreneurship in six different research areas, as concluded by The Small Business Economy (2006):

- Entrepreneurial education and venture creation, supported by Van der Sluis et al. (2005) and McLarty (2005)
- Entrepreneurial education and entrepreneurial intentions, sustained in research by Peterman and Kennedy (2003) and Galloway and Brown (2002)
- Entrepreneurial education and opportunity recognition, as researched by Brännback et al. (2005) and DeTienne and Chandler (2004)
- Entrepreneurial education, entrepreneurial self efficacy and entrepreneurial orientation, based on Galloway et al. (2005) and Frank et al. (2005)
- Entrepreneurial education and need for achievement and locus of control, supported by Hansemark (1998)
- Entrepreneurial Education and Other Entrepreneurial Knowledge (Kourilsky and Esfandiari, 1997)

A good entrepreneur will understand that his success will always be connected to outside factors such as his team and idea implementation fused with the right vision and capability to predict future panoramas. Entrepreneurs work under the constraints of the environment – market characteristics and risk, politics, insecurity, demographic conditions, competition, culture, resource availability and so on. This makes it obvious that education and knowledge of all business areas are important but so are inner competences like motivation, orientation, team work and persistence. Success as an entrepreneur is, thus, connected to the ability to balance soft and hard skills, fusing the best personal characteristics with the right knowledge.

## **2.2 Portugal: turning the tide of entrepreneurial success?**

The history of Portugal dates back to the middle ages when it was a world power and one of the wealthiest nations during the “age of discovery”. Nowadays, it has a resident population of 10.5 million and a Gross domestic product (GDP) per capita of 20.772 euros (Reditus, 2015). Portugal is a member of the North Atlantic Treaty Organization (NATO), the Organisation for Economic Co-operation and Development (OECD) and the European Free Trade Association (EFTA). It entered the European Community (now the European Union) in 1986.

To analyse Portugal's entrepreneurial success, the author consulted both historical data and the Global Entrepreneurial Monitor (GEM). The GEM, as is written on its own website, is "able to provide high quality information, comprehensive reports and interesting stories, which greatly enhance the understanding of the entrepreneurial phenomenon" (GEM, 2016). GEM analysis of the Portuguese paradigm concluded that, since 2010, intensive growth of entrepreneurial activity has been registered. At the time when the data collection was performed, physical structures accessibility as well as the existing commercial and professional structures represented, in Portugal, the most favourable conditions for the continuous development of entrepreneurial activity. On the other hand, the least favourable ones were the governmental policies and the social and cultural norms (GEM, 2013). Portugal was defined by a high GEM score in perceived capabilities, fear of failure, new business ownership, established business ownership and necessity driven, while perceived opportunities and improvement driven opportunities had a low GEM score (Ávila and Amorim, 2014). It should be kept in mind, however, that the latest data for this analysis was collected in 2013, a period of economic crisis in Portugal (in 2011 there was a financial bailout by the European Commission, the European Central Bank, and the International Monetary Fund, of €78 billion, as the state had no resources to honour its agreements).

The Global Competitiveness Report also gives some insights about the Portuguese paradigm. This report published yearly by the World Economic Forum, since 2004, ranks countries based on the Global Competitiveness Index. This index is calculated through 12 pillars: "Institutions", "Infrastructure", "Macroeconomic environment", "Health and primary education", "Higher education and training", "Goods market efficiency", "Labour market efficiency", "Financial market development", "Technological readiness", "Market size", "Business sophistication" and finally "Innovation" (World Economic Forum, 2015). Through a chronological analysis of the last 5 reports (2011-2012, 2012-2013, 2013-2014, 2014-2015 and 2015-2016), we can see two different situations:

- The 2014-2015 report showed that Portugal reversed its own downward trend and had a rise of 15 places compared to the previous year. As the report said, "the ambitious reform programme the country adopted appears to be paying off as the results are starting to be seen mainly in areas related to the goods market. There is less bureaucracy in Portugal today, and its labour market is more flexible, although

much remains to be done. In addition to these improvements, the country can continue to leverage its world class transport infrastructure and highly-qualified workforce.” (World Economic Forum, 2014).

- The 2015-2016 report shows a new decrease in Portugal’s index (two places, compared to the previous year’s report). Although “Labour market efficiency” and “Technological readiness” registered an increase, “Macroeconomic environment” and “Financial market development”, made Portugal’s index decrease slightly (World Economic Forum, 2015). This decrease can be explained by the entry of a new political government with contrasting ideas and procedures combined with the country’s recent financial uncertainty.

To further analyse the paradigm, historical data must be used. In 2012, the Portuguese government created Portugal Ventures, a €450 million fund focused on innovative, scientific and technology based investments (Coleman, 2015). Incubators all around the country, both academic and professional, aligned with the growth of accelerators jumpstarted the number of Portuguese start-ups and made the Portuguese native economy transition from a manufacturing base to an innovation one. Through initiatives like the Portugal Entrepreneurship Education Platform (a virtual platform that aims to develop and implement educational entrepreneurial programs), You(th)Start Entrepreneurial Challenges (focused on teaching entrepreneurship through practical experiences to students from 8 to 17 years old), eXchange (program focused on female entrepreneurship) and JEVE, Youth for Green Entrepreneurship and Employability (supporting the development and implementation of entrepreneurial attitudes within the green economy), the Portuguese government underwent an educational reform with the objective of bringing students closer to the labour market by the time they finish their educational programs (Coleman, 2015).

With Portugal's government needing a 78 billion euro bailout of the 2011 crisis, the Portuguese economy was sinking in its worst recession for over 40 years. With the fourth highest rate of school leavers, the second lowest rate of high school completion, under average spending in R&D, within Europe (Reditus, 2014) and an internal all-time high record with regards to the youth unemployment rate (Ávila and Amorim, 2014) few would venture to say that Portugal would be able to see itself successfully through the European financial crisis to create new ideas, find new solutions and fight against all the odds. After

several years in a deep economic crisis, Portugal had a 1.6% GDP Growth, a lot due to the entrepreneurial spirit and success of its natives, which has a tendency to continue (Coleman, 2015).

### **2.3 Innovation**

According to the OSLO Manual, innovation is the implementation of a new or significantly improved product, or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations (OECD and Eurostat, 2005). It can be concluded that innovation is, thus, a method based on problem solving and finding new solutions for existing or recently discovered problems (OECD and Eurostat, 2005). The OSLO Manual goes into some detail describing the four main types of innovation: product, process, marketing or organizational.

- Product innovation represents an “introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics” (OECD and Eurostat, 2005, p.48). Product innovations can be based on new knowledge / technologies or on new uses / combinations of existing knowledge or technologies (OECD and Eurostat, 2005).
- Process innovation can be defined as the “implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software” (OECD and Eurostat, 2005, p.49). Process innovation can thus include how things are done, the technique used, or how things are delivered for example to the end customer (OECD and Eurostat, 2005).
- Marketing innovation is the implementation of a “new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing, aiming at better addressing consumers’ needs and wants, opening up new markets or newly positioning a firm’s product on the market, with the objective of increasing the firm’s sales” (OECD and Eurostat, 2005, p.49). The distinguishing feature of a marketing innovation compared to other changes in a firm's marketing instruments is the implementation of a marketing method not previously used by the firm (OECD and Eurostat, 2005). Marketing has taken on

new possibilities and increased importance, in the age of digital marketing and of Facebook and Google.

- Organizational innovation represents “the implementation of a new organizational method in the firm’s business practices, workplace organization or external relations. It involves the implementation of new methods for distributing responsibilities and decision making among employees for the division of work within and between firm activities (and organisational units), as well as new concepts for the structuring of activities, such as the integration of different business activities” (OECD and Eurostat, 2005, p. 51). For some firms having employees in open spaces (rather than closed offices) may lead to additional bonding and be considered an important organizational innovation, in some cases.

The minimum requirement for an innovation is that the product, process, marketing method or organizational method must be new (or significantly improved) to the firm (OECD and Eurostat, 2005). Innovation should be understood to include the entire value chain, from research and development to engineering, manufacturing, distribution, sales, marketing, and even facility utilization and investment strategy. Albeit, only a reduced number of innovations will be disruptive (involving significant change). Some innovation will result in incremental changes, but that doesn’t make them any less important. To better understand this, the concepts of incremental and disruptive innovation are discussed below:

- Incremental innovation “concerns an existing product whose performance has been significantly enhanced or upgraded. This again can take two forms. A simple product may be improved (in terms of improved performance or lower cost) through use of higher performance components or materials, or a complex product which consists of a number of integrated technical subsystems may be improved by partial changes to one of the subsystems” (OECD, 2015, p.12). Apple, for example, is very good at profiting from incremental innovation, providing upgrades to existing products (including iPods, iPhones, and iPads).
- A disruptive innovation provides something completely new by uprooting industry conventions and by significantly changing customer expectations and habits. It has a significant impact on a market and on the economic activity of firms in that market, with potential effects of changing the structure of the market, creating new markets or rendering existing products obsolete (OECD, 2015). When they first

appeared, the radio, the television, and the railway were all disruptive. More recently, the Internet has changed habits worldwide.

Technology is driving today's market boom: from smartphones to cloud computing, services and products based or connected on the World Wide Web are becoming a source of value (Andreesen, 2011). Software, mostly, is becoming a source of disruption of businesses, countries, and entire industries, a phenomena unparalleled since the Industrial Revolution. By having technology-based business models, unicorns (private start-ups, valued at \$1 billion or more) are venturing into new waters: they are transforming the world through speed, efficiency and convenience. And this might only be the beginning (Andreesen, 2011).

## **2.4 Open and Closed Innovation**

Until the early 21st century, most innovation occurred within the boundaries of an organization. This model, where innovation is performed by the company's own employees within its internal research and development function, is often called closed innovation (Chesbrough, 2003). Closed innovation served (and still serves) as a catalyst for innovation, since many of the greatest inventions and innovations had its beginnings with no external help or influence. As the access to education, research and a globalized world increased, the model of closed innovation lost some of its efficiency: it became significantly more difficult to maintain the best or most original ideas inside an organization. This led to a new form of creation and research, which was defined by Henry Chesbrough as open innovation.

Open innovation, in contrast to closed innovation, is "a paradigm that assumes that firms can and should use external ideas as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology" (Chesbrough, 2003, p.1). Open innovation describes an actual worldwide-phenomena, where a free sharing of ideas and work exists, through open and transparent networks for commercial or social purposes. This concept is embedded in today's society, marked by the ease of online collaboration tools and social media. In table 1, the author summarized some of the most relevant principles about both models of innovation.

**Table 1** – Approaches to innovation (based on Marques, 2013).

<i>Closed innovation principles</i>	<i>Open innovation principles</i>
Capture and maintain the best human resources	Tap into the knowledge and expertise of bright individuals outside our company
Research, discover, develop and produce internally	External research and development as a way of creating value; internal research and development as a way of capturing value (absorptive capacity)
First-mover advantage in research, development and commercialization	The order of entrance is passed over by the efficient use of the knowledge and a better business model
Success through the creation of the most and the best ideas in the company's industry	Success through the best usage of ideas, both inside or outside the company
Intellectual property should be kept safe in order to secure internal profit	The company should profit from others' use of its intellectual property and it should buy others' intellectual property whenever it advances its own business model

While in theory it is easy for a company to opt for one of the approaches, the innovative process is complex. For innovation to take place, it is essential that the optimal mixture of both approaches allows knowledge to flow, invites participation, maintains the competitive advantage and maximizes the economic value. This process is not static and must not be neglected by any organization that aims at innovative success. Principles from both models can be used. One should choose based on strategic and innovation goals (Marques, 2013).

## **2.5 Strategic Archetypes**

Not all companies need to go global to succeed. While some companies operate in niche markets without ever expanding into new markets and succeed, others strive for success through the entrance in new geographical or technological markets. The way companies plan their market-entry strategy, including the timing and peculiarities of the

new market, is unavoidably related to its success in their new venture (Lieberman and Montgomery, 1998).

Throughout the years, scholars have been distinguishing companies based on their order of entry in businesses or markets. They can be named as follows: first movers, also known as pioneers, early followers, which enter the market soon after the first movers, and late entrants, entering the market. These statuses should not be a strategy in and of itself, only the prelude to a larger and longer strategic plan (Durand and Coeurderoy, 2011).

Companies denominated first movers win competitive advantage by being the first ones to significantly enter a specific market. By significantly it should be understood that the company might not be the first one in order of entry but it was the first significant one: Amazon.com was not the first online book seller, but it was undoubtedly the first significant company to make an entrance into that specific market. Coca-Cola's example highlights one of the advantages of being a first mover: they became the psychological standard – the brand that consumers recall first and most frequently (Kopel and Loffler, 2008).

By being the first mover, a company can achieve competitive advantage through three main pillars: technology leadership, granting it an early learning curve and patenting activity, control of resources, both internal and external to the company, and buyer switching costs (Lieberman and Montgomery, 1998). These benefits can provide long-lasting first-mover advantages, however, in many industries, companies entering later can overcome them. Later entrants might be able to avoid mistakes, avail clients' awareness of the products or services or even reverse-engineering the competitors' products in order to develop competing products and services either faster, cheaper or better, negating much of the first-mover advantage. YouTube, for example, was launched significantly after Google Video; Google was the 11th online search engine. Microsoft is, in many areas, a successful follower (Word vs. Wordperfect, Excel vs Lotus, IE vs Netscape, Windows vs Mac OS) (Hall and Densten, 2002)

Timing the entrance is a complex process that should be revised carefully. Pace is essential to success, but not in itself sufficient. No advantage lasts forever, and it is much harder to keep an advantage than it is to get it in the first place. Questions such as the risk / opportunity ratio, the timing of entrance and resources needed should be taken into account: although first-mover advantages may be attractive, there are also advantages to being a follower. Company strategists need to decide which approach has the highest

potential for long-term profits given their resources and market characteristics (Durand and Coeurderoy, 2011).

## 2.6 Blue and Red Oceans

Blue Ocean Strategy is a book written by Kim and Mauborgne (2005). The critical assumption is a structural one: competition-based strategies require firms within an existing industry to compete within the confines of that marketplace (Kim and Mauborgne, 2005).

By studying 150 strategic moves used in over a hundred years and thirty different industries, Kim and Mauborgne (2005) argue that companies can succeed not by battling competitors, but rather by creating "blue oceans" of uncontested market space. There is an opportunity for growth which can be both profitable and rapid. By contrast, in red oceans (already existing markets, with often very harsh competition), companies compete by trying to reach a greater share of the market, which has a limited demand in comparison to the combined supply availability. As time passes, market space gets fuller and fuller occupation levels and the prospects for profit and growth continuously decline; products turn into commodities and increasing competition turns the ocean water "bloody" (Kim and Mauborgne, 2005). The authors define, thus, two different strategies, which are summarized in table 2.

**Table 2** - Competitive approaches to markets (based on Kim and Mauborgne, 2005)

<b>Red Ocean Strategy</b>	<b>Blue Ocean Strategy</b>
Competes in existing markets	Creates uncontested new markets
Aims at overthrowing the competition	Aims at making the competition irrelevant
Exploits the existing demand	Creates demand, capturing it afterwards
Creates a value-cost trade-off	Breaks the value-cost trade-off
Aligns the organizational activities with a strategy of differentiation or low cost	Aligns the organizational activities with a strategy of differentiation and low cost

There are two ways to create blue oceans: either to launch completely new industries (as eBay did with online auctions, or Apple has done with a variety of products, including the innovative service iTunes, which has revolutionized the online music industry) or from within a red ocean when a company expands the boundaries of an existing industry. To generate new value, a company can use one of four perspectives: eliminating, reducing, raising or creating. Simply put, create new efficiency or new innovative approaches (or both) – for example as Google has done, with online (and mobile) advertising (Kim and Mauborgne, 2005).

## **2.7 Unicorns**

As globalization continues to unfold, more and more opportunities for both entrepreneurs and venture investors are created, as technology continues to disrupt society at unprecedented rates. In the 21st century, one billion dollar private companies are a new concept which remains to be fully understood. “Unicorns” - those private companies valued at \$1 billion or more – seem to be connected to “bull” [where the trend is for growth] markets and a new generation of disruptive technology associated often to the World Wide Web (Lee, 2013; Griffith and Primack, 2015).

The term “unicorn” was popularized by the venture capitalist Aileen Lee in her highly cited article "Welcome to the Unicorn Club: Learning from Billion-Dollar Start-ups" and has become a regular feature in popular business and finance discussions (Griffith and Primack, 2015). By analysing software start-ups, founded in the 2000s, the author predicted that only 0.07% of them would reach the \$1 billion valuation (or more), thus unicorns are hard to come by (Lee, 2013). By analysing the highly influential works of Lee (2013), Austin et al. (2015), and Bradley (2015), one may conclude the following:

- The number of unicorns keeps increasing as time passes — when Lee’s article was released, only 39 unicorns existed, while as of March of 2016, 146 exist (Lee, 2013; Austin et al., 2015) (figure 1).
- Over half of the companies have their headquarters in the United States, however, this number is decreasing over the years (Lee, 2013; Austin et al., 2015).

- Over two thirds of the unicorns work in consumer internet (34 companies), software (41 companies) and E-commerce (27 companies) industries (Austin et al., 2015).
- Unicorns leverage the power of platforms like cloud services, the World Wide Web, customer relationship management and social and mobile technological improvements, to grow faster than their peers (Bradley, 2015).
- Unicorns use open innovation tactics to create, take advantage of, reinvent and develop ideas. This is due to their organizational structure adaptableness and striving for constant improvement (Bradley, 2015).
- There is little diversity among founders in the “Billion Dollar Start-up Club” (Austin et al., 2015); over three quarters had previous, extensive, start-up and tech experience (Lee, 2013).
- Inexperienced, twenty-something founders are outliers while thirty-something well-educated co-founders have the most success (Lee, 2013). Mark Zuckerberg, founder of Facebook and 2000s “big pivot”, is an outlier.
- A vast majority of the founders graduated from selective universities, but, there are also companies created by college dropouts (8 out of 38 in Lee’s article), including companies like Facebook, Twitter, Microsoft and Apple (Lee, 2013) (note however that some university education does tend to exist).
- There have been unicorns for a long time: Intel was the 1960s super-unicorn (worth over \$100 billion); Apple, Oracle and Microsoft in the 1970s; Cisco in the 1980s; Google and Amazon in the 1990s. Facebook is the 2000s super-unicorn (Lee, 2013), and Uber is likely to be the 2010s’.
- Waves of technology innovation always create one or more super-unicorns (Lee, 2013).
- Consumer-oriented unicorns (such as Facebook) seem to be more common and create more value in aggregate, albeit enterprise-oriented (business-to-business) unicorns have come to be worth more on average and have delivered a higher return on private investment by raising much less private capital (Lee, 2013).
- Unicorns focus on three main pillars to achieve rapid growth: an innovation engine (generally composed by an innovation team and a platform team which takes care of developing ideas), platform development (evaluates what assets to use to create value out of the ideas) and scaling (after the idea reaches user acceptance, the

unicorn tries to make it grow continuously and exponentially, without increasing the size of the team, in comparison) (Bradley, 2015).

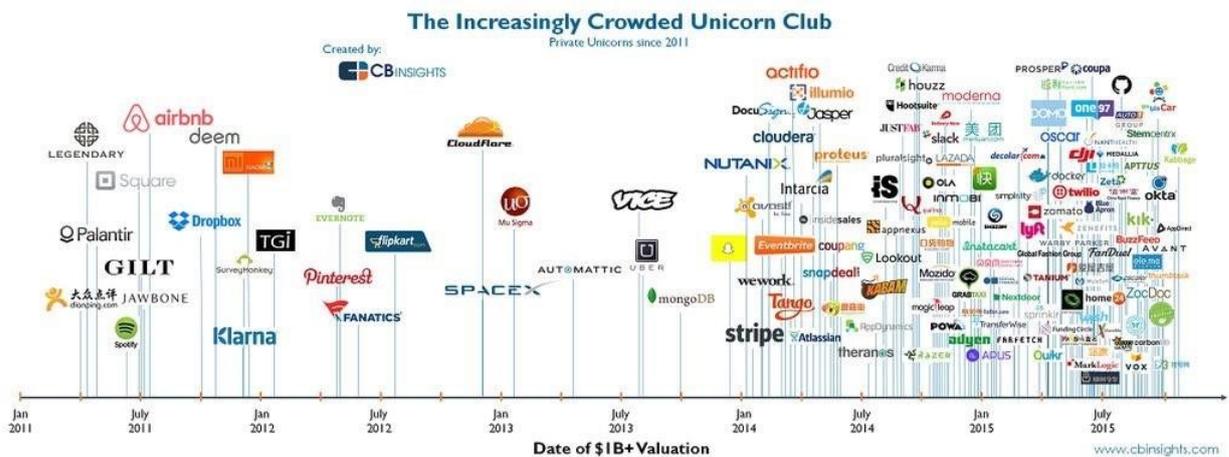


Figure 1 - “The birth of unicorns from 2011 to July 2015. As one can see, 2014 marked the beginning of the unicorn era”.

## 2.8 Today’s paradigm in the unicorn world

We are witnessing an exceptional increase in the number of unicorns in every area, with only one thing in common: technology. Even old, untested, unrealized concepts are being reformulated into billion-dollar start-up ideas that could fail instantly if not for the frenzy of investors; valuations are skyrocketing as start-ups are priced for perfect execution, going beyond last decades’ by a great amount. This valuation, even if irrational or unwise, is the price of survival for venture capital firms (Solomon, 2014).

Investors are nowadays desperately afraid of missing out on acquiring shareholding positions in possible unicorns. This is leading to a risk analysis decrease, making them act faster without completely analysing the situation, even if there is a tremendous lack of revenue or of an efficient, coherent market plan (Solomon, 2014). Of course, some of these possible unicorns might even become game-changers like Uber (possibly this decade’s most relevant super-unicorn), but the ones who won’t will have a strong, negative impact on venture capitalists who fully committed themselves to them (by frenzy, without fully analysing the situation, possibly sending them into bankruptcy), thus proving that investors must be more cautious than ever (Solomon, 2014). In fact, several unicorns are already suffering pullbacks and losing valuation as time goes by (Griffith and Primack, 2015), and

even the ones which managed to collect enough capital to survive can be hit by “mass defections and morale-killing down rounds” (Cohan, 2016).

As companies go from private to public ownership, it is of utmost importance to define and discuss the initial public offering – IPO’s – importance to their success and valuation. An IPO is a type of public offering where a company’s stock is sold to institutional investors. These investors then sell the stock to the general public. By going through this process, private companies transform themselves into public ones (Gregoriou, 2006) – this process of raising capital has made many entrepreneurs rich, after they sell their stock. While company stock can be sold according to its real value, some companies might be under- or overvalued. This occurs due to the hype around them, and is something that is happening frequently with unicorns (Cohan, 2016). As Cohan (2016) states, “time and time again during the current IPO cycle, Wall Street underwriters – egged on by ambitious CEOs, hungry venture capitalists, and favoured institutional investors – have hyped one technology IPO after another. The bankers price the offerings for perfection, watch them soar on the first day of trading to deliver the coveted first-day spike, and don’t stick around to offer an explanation after the shares plunge below the first-day price. Welcome to the world of zombie tech stocks – once-highflying IPOs wandering aimlessly in the wasteland of the public equity markets and understandably unloved by investors”. This unwelcoming, hostile public market could be keeping some unicorns private for longer than need be, due to the valuation they could get, both at the start and later on (Haggin, 2016). Of note is that stock market valuation is related to the expectation of future profits and that some unicorns warrant concern as no business model is at times yet visible, there being a total absence of revenue in some cases (e.g., the cases of Instagram and Snapchat, valued based on their audiences).

As stated above, waves of technology innovation create unicorns. This expectation is leading investors to invest greatly in technological companies, creating a potentially new investment bubble (following the recent real estate bubble, which had drastic consequences for a number of economies). While these bubbles are created through paradigm-breaking and disruptive ideas, creating dreams of billion dollar pay-outs to investors, one question must be asked: are the ideas behind these potential and actual unicorns capable of producing disruption, or is the investment bubble making investors short-sighted or blind even? Of course, Airbnb disrupted the hotel industry; Uber changed the taxi panorama;

WhatsApp made mobile operators change their service; but are many unicorns really worth their value? Should they move to an IPO or should they wait longer? (Griffith and Primack, 2015; Haggin, 2016). The history of unicorns is still unfolding, in what is considered to be an under-researched area, and time will eventually show us what technology and highly valued start-ups will bring.

## **2.9 How to respond to today's business market: taking advantage of adjacencies**

Unicorns might be becoming relevant players through their disruption in the business world but companies everywhere are already trying to compete with them. This is re-shaping today's panorama, splitting it between three main player groups: incumbents, giants and unicorns (Nahon et al., 2014). Incumbents represent pre-Internet or legacy market organizations that maintained their power throughout the times, while giants are companies which used the Internet to create their reputation and success (Nahon et al. 2014). Unicorns tend to be promising young start-ups which are based on a new business model which is very scalable, registering rapid growth, and capturing the attention of investors.

To prosper in a market filled with giants and unicorns, another concept is included by Nahon et al (2014): adjacencies, which represent possible opportunities for organizations to prosper outside of their core-business (the nuclear business area or activity of a company, where all main operations are focused on). The three main groups can (and should) compete for adjacencies, as they could bring them different benefits, as is discussed below:

- Giants' fast-reacting platform models allow them to move beyond the limits of their core businesses. This can create relevant synergies with possible adjacencies, profiting greatly from them or even broadening their core-businesses (Nahon et al., 2014). Google, for example, had a search-based core-business and profited greatly by investing in the emergent digital advertising market (a market which brought with it, for Google, in 2015, €60 billion in revenues (Nahon et al., 2014)).
- Incumbents can adapt themselves by restructuring their leadership infrastructure into a responsive one. Through the acknowledgment of today's market needs and wants, incumbents can use adjacencies to strengthen their market share, reposition or even enter new markets (Solis, 2014). Microsoft's acquisition of Skype, for

example, created synergies with its software, allowing Microsoft to continue to grow by entering the communications market.

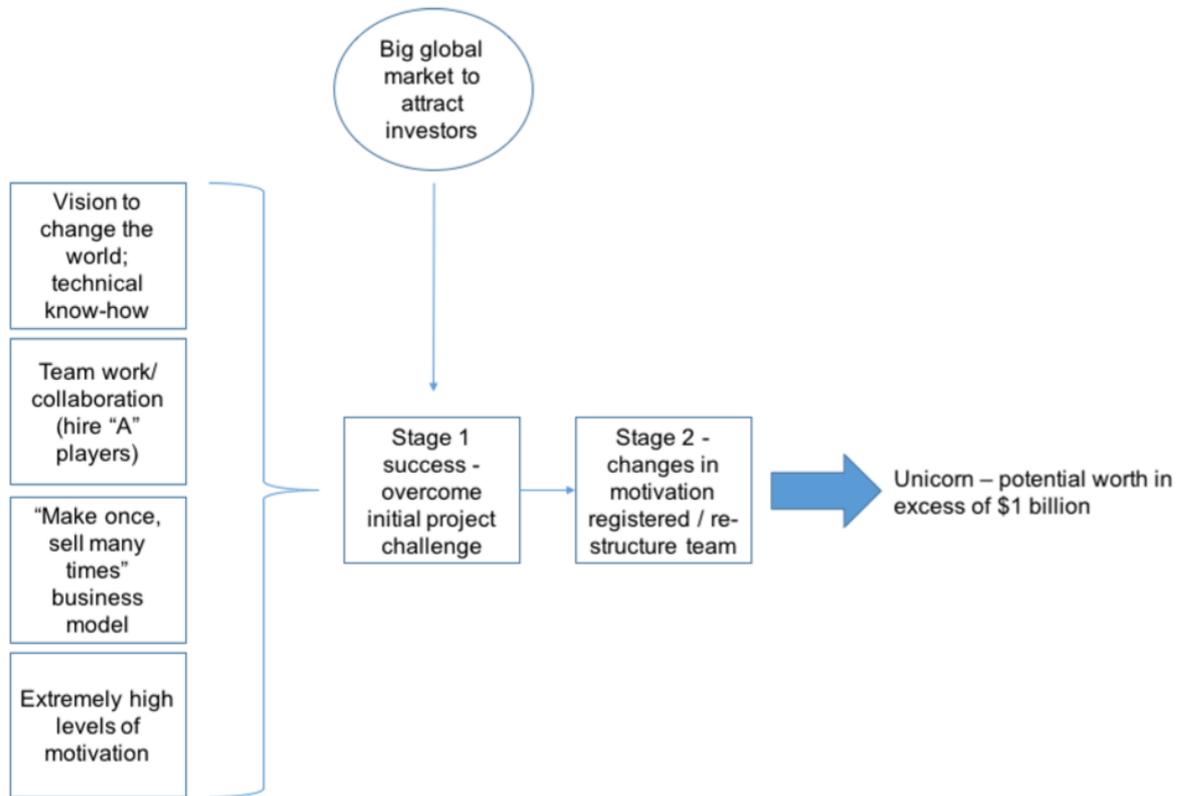
- Adjacencies create unicorns. By identifying flaws and opportunities, entrepreneurs create companies to respond to them, defining and occupying adjacencies (Nahon et al, 2014). Uber's business model is an unquestionable market success since the company managed to create a peer-to-peer service which benefitted from an intensive growth of smartphone usage.

Giants, incumbents and unicorns alike should apply one (or more, since they are not, in any way, mutually exclusive) of four adjacency-related strategies in order to strive for success, described as follows: combine opportunities (associating different components, creating new prospects), adapt to macro environmental changes (which is a reactive response to the companies' external environment), share the best practices (aligning internal processes and external opportunities in order to improve) or, finally, evolve into new markets (Nahon et al, 2014). The success of companies in today's markets will depend heavily on their capacity to recognize, appropriate and respond to external opportunities coming from adjacencies.

New strategic opportunities are arising faster than ever, resulting from the 2010's impressive technology wave. This decade will prove to be crucial to uncover unicorns' behaviour and their impact in the global market, as well as to understand how giants and incumbents will react to this start-up phenomenon (Nahon et al., 2014).

As for identifying possible unicorns, as stated by Solis (2014), "we tend to get caught up in trying to find the next thing based on historical performance, traction in the marketplace, investment dollars, investors, founder teams. But these factors aren't enough to find a Unicorn. What's going to help find a Unicorn is digital anthropology, to recognize an opportunity based on behaviour". In his own words, this is the innovator's dilemma – solving problems and creating opportunities based on unmet needs (Solis, 2014). Digital anthropology, as used by Solis (2014), is a modern concept based on the proliferation of technology over the last four decades. The study of these interactions between society and how it modifies and changes itself through technology is thus known as digital anthropology (Horst and Miller, 2012).

Au-Yong-Oliveira and Costa (forthcoming) shaped a theoretical model in which they gather the necessary conditions for the creation of a unicorn company. This model is displayed in figure 2.



**Figure 2** - “The Talkdesk case – A potential Unicorn” – A theoretical model created by Au-Yong-Oliveira and Costa (forthcoming) to understand the basis of unicorn companies.

As one can see, success is rather complex. Success involves a good idea, a successful and carefully analysed business plan and a motivated, actively engaged workforce and leadership with a common vision, but that is not all: it also involves constant reorganization and reformulation, as macro and micro environmental changes must not be overlooked (Au-Yong-Oliveira and Costa, forthcoming). This might be where digital anthropology, a possible new sub discipline of anthropology, finds its place in the business world: by helping managers and analysts recognize and take advantage of previously unused or disregarded data (Horst and Miller, 2012).

# 3. Methodology

In order to find a theme which both the author and the supervising professor agreed on, a primary, divergent, bibliographic search was made based on five major areas: “innovation”, “entrepreneurship”, “knowledge transfer”, “business incubator” and “organizational culture”. Furthermore, research for Portuguese success cases led the author to Talkdesk and Farfetch, two companies with successful backgrounds (Talkdesk became the main subject of a forthcoming article by Au-Yong-Oliveira and Costa). This research led in turn to a growing awareness about the future importance of unicorn companies, which became the main scientific area of this thesis. The author proceeded to run a new bibliographical search, this time with a convergent scope. Four main research questions were determined, due to the gap in the existing literature:

- What factors lead to the creation and success of a unicorn?
- Will we witness an exponential growth of unicorns?
- How important are entrepreneurs for the success of high-valuation companies?
- How is the post-IPO devaluation important for companies worldwide?

Secondary data was obtained through two main sources, the SCOPUS database and available online magazines, blogs and websites. While information about “innovation”, “entrepreneurship” and other generally well-known keywords was relatively easy to access, information about “unicorns” was not. This, the author considers, is due to the novelty of this keyword in articles and other scientific studies but also due to a considerable gap of existing literature on this thematic – very high valuation start-ups. Using the World Wide Web, the author searched for relevant players in this field and conducted an exploratory research using their sources and other pertinent references. This led to a conjunction of available and relevant information that can, and should, be used for future work.

The author then used his network to find both entrepreneurs and companies who could add relevant information to this study, taking into account the appropriate scientific characteristics.

While attempts of contacts were made to a wider number of persons and entities, only some of them replied and an even smaller number accepted an interview proposal.

Taking into account the author’s birthplace, Covilhã, a search for successful companies in its geographical area was made. This search conducted the author to Joalpe International, a leading company in shop fittings for the retail industry, headquartered in Tortosendo, a smaller, close-by city. Joalpe International, as written on their website, “has world-wide distribution through exports to more than 36 countries and its own distribution through branches in Portugal, Germany, Spain, France, Poland, the USA, the UK, Belgium and Holland” (Joalpe International, 2014). To their worldwide presence, they add quality certifications ISO 9001 and 14001, OHSAS 18001 and SA8000 and several awards such as “PME Excelência 2014” and “PME Líder 2014” (Joalpe International, 2014). Through personal contact with Pedro Silva, the administrator, an interview was arranged and later performed on the 22nd of April of 2016.

By exploring the author’s network and analysing relevant players within the entrepreneurship and business investment areas, another name was found: Tim Vieira. Tim is a renowned entrepreneur born in South-Africa and the CEO of Special Edition Holding, a group that brings together several companies operating in the communication and marketing industry.

Below, table 3 has the names, reasons of choice and some background information about the interviewees.

**Table 3** – General information about the interviewees.

Name	Reason of Choice	Professional Information
Pedro Silva	Convenience (geographical) General Manager of Joalpe International	Administrator of Joalpe International and KOIOS – SGPS, SA  Former counsellor of Covilhã’s city council
Tim Vieira	Renowned Business Angel Serial Entrepreneur	CEO of Special Edition Holding  “Shark” from the Portuguese edition of “Shark Tank”

Furthermore, a focus group was performed in order to better discuss the nuclear themes of this research. This discussion had the duration of around 1 hour and 05 minutes and was performed at the University of Aveiro, Portugal, on the 18<sup>th</sup> of May of 2016 and started at 10:00am. It had four participants, excluding the author: Manuel Oliveira (the author's dissertation teacher, who acted as a moderator), Pedro Falcão, Rui Falcão and Pedro Bandeira. All of these participants were invited after the author had done an extensive database research, followed with a research effort on specialists in investment and entrepreneurship. Some important information about these persons can be found in table 4.

**Table 4** – General information about the focus groups participants.

Name	Reason of Choice	Professional Information
Pedro Bandeira	Business Angel	CEO and Founder of REDangels Founder of ABAC - Aveiro Business Angels Club Founder of Simpiens – Online course platform Founder and Consultant of Shape2Up – Impulse for the Entrepreneur
Pedro Falcão	Business Angel	Managing Partner of LC Ventures CEO of Best Horizon Investment Director of Novabase Capital Marketing Director of OutSystems and TIMWE
Rui Falcão	Business Angel	Business Angel with REDangels Member of the Board of Directors of ABAC - Aveiro Business Angels Club Member of the Board of

		Directors of Plux, Biosystems Engineering Founder of I-Zone SGPS Founder of Smart Equity SGPS lda
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Two interview scripts were used – one for the interviews and one for the focus group. Both of the scripts can be found in the annexes.

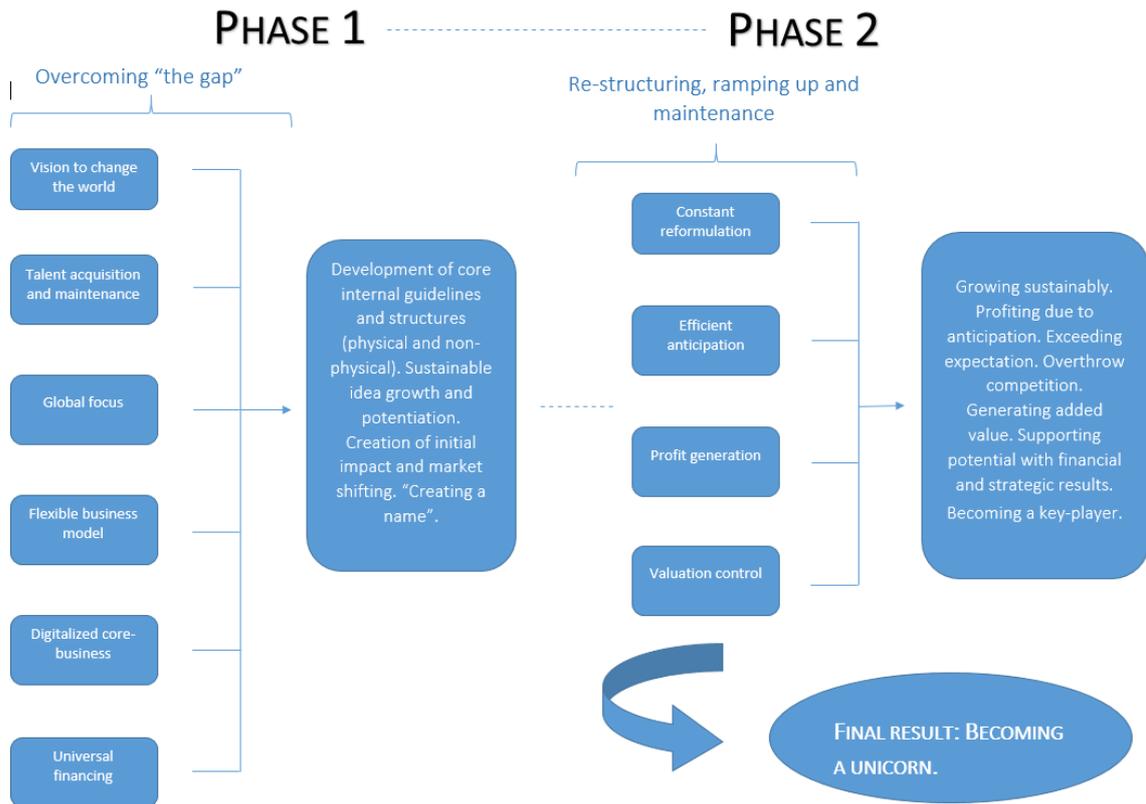
This thesis' main research objectives are as follows:

- Gathering and organizing the available, and most relevant, information about unicorn companies
- Finding the key factors of success of unicorn companies
- Determining how disruptive innovations influence a unicorn's creation
- Creating a model which could be used to identify and grow unicorn companies.

The data collection continued until data saturation occurred, that is, until a point where no new information was being collected (following the interviews and focus group).

# 4. Results: The model

Taking into account the author’s previous experience, fused together with the literary review and the interviews and focus group results, a model for the foundation and sustainable growth of unicorns was created, as seen below (figure 3). After this, a simple yet objective explanation of each factor included in the model can be found.



**Figure 3** - Hypothetical model for the creation of a unicorn company (own elaboration).

## 4.1 Overcoming “the gap”

The following bullet points explain the components found in figure 3 – relative to overcoming the gap (phase 1):

- Vision to change the world: Unicorns are based on global change, as disruption must be generalized to be efficient. The capacity to recognize, appropriate, respond and foresee opportunities is a major key factor for success.
- Talent acquisition and maintenance: generating and consolidating a team with the necessary technical know-how and awareness.

- Global focus: internationalization is not a step, being born global is. Mass markets are the key piece to become a unicorn.
- Flexible business model: “make once, sell many times” model which is mutable according to specific market conditions or demographic pre-requisites.
- Digitalized core-business: winning strategies within marketing, digital data and social media analysis will help unicorns to create more efficient processes based on customer experience and marketing technology.
- Universal financing: taking advantage of the geographically global market in order to attract investors and be consolidated worldwide.

#### **4.2 Re-structuring, ramping up and maintenance**

The following bullet points explain the components found in figure 3 – relative to re-structuring, ramping up and maintenance (phase 2, following the creation of a name and initial impact):

- Constant reformulation: having the necessary elasticity to be repositioned or redefined quickly and efficiently in order to better respond to the market needs and possible major disruptive changes.
- Efficient anticipation: the entrepreneur must understand that he must take actions for the next step and merely be aware of the following step, as the market will most likely shift its conditions and characteristics.
- Profit generation: most unicorn companies crash due to their “money-burning” nature. Generating returns and adding value is a must to sustain the company’s ambitions and potential.
- Valuation control: most companies suffer from intense post-IPO valuation decline. Growing sustainably is of utmost importance for the company since investors are more and more aware of the unicorn phenomena and the risks associated to it. One should aim at reasonable valuations.

In sum, becoming a unicorn means becoming a key player in the industry, while overthrowing the competition in the process.

# 5.Results: Interviews

## 5.1 Tim Vieira

Through the use of his network, the author managed to interview Tim Vieira, a renowned entrepreneur. Tim's curriculum is very impressive: he is the CEO of one of the most important media groups in Portugal, he was the biggest overall investor on Shark Tank Portugal and he created and owns companies in Portugal, South Africa, Mozambique and Ghana.

Of note is that Tim Vieira answered an interview script sent by e-mail by the author. The answers were sent back on the 18<sup>th</sup> of May 2016.

In the semi-structured interview script, the author asked Tim Vieira several important questions to which Tim answered based mainly on his experience. First of all, and focusing on success as the core-subject, Tim started by choosing experience as the most important ingredient to be a successful entrepreneur, while admitting that the mix of motivation, education, intelligence, learning and experience can create different types of entrepreneurs and lead to different "types" of success. Furthermore, Tim emphasized that most of these factors have one thing in common: a vision, which is the most important inner engine. Based on his career, Tim admitted that the starting point is the hardest one to pass through and that the challenge to strive, aligned with a vision, is crucial to succeed. Tim believes that both the idea potential and the entrepreneurs' motivation and expertise are the most relevant issues when it comes to success: *"A good idea with a weak team has 0% success rate. The opposite, however, is an incognita. My way of thinking is 90% team, 10% ideas"* (quote taken from the interview with Tim Vieira).

While speaking about crucial factors, Mr. Vieira stated that human resources are undoubtedly the key factor behind a highly valuable tech company. Not only should teams be able to understand the business and all the affected areas (technological, marketing and sales knowledge are seen as key factors in Tim's opinion), but they should also be able to associate the products to the right customers at the right time. The key to success, Tim states, isn't having a disruptive idea but to be able to withstand and hold it. To do so, the human resources, as described above, are unbelievably important.

The author also questioned Tim about the origin of creativity. Following Tim's ideals, creativity has no specific origin: it comes from everywhere, although it can be perfected. Mr. Vieira gave two different examples to explain his point of view:

- Uber came from someone who wasn't happy with the service he was receiving. By perfecting not only an existent service but also reshaping its core idea, to be aligned with today's technology and day-to-day gadgets, Travis Kalanick managed to create a leading company and, in all probability, most-likely the most prominent unicorn company of the decade.
- Facebook, on the other hand, was disruptive from the start. In Tim's opinion, what makes Facebook a "monster" to its competition is that they are thinking two steps ahead while taking into account the ever shifting business market. Facebook not only keeps improving and growing, it also has a business model which is free for their users and supported by interested parts. This, in Tim's opinion, will always be very hard to beat.

While discussing inner entrepreneur competences, the author asked Tim which was his biggest motivation. Tim's motivation, he answered, is not about the money but about adding value, creating change and getting and giving experience and knowledge. Tim, in his own words, is into working with talented people, and that is what "makes his clock tick".

Taking unicorns into account, Tim stated: *"Fazer um milhão de milhões não é a mesma coisa que fazer um milhão. Há um milhão de milhões de razões"* (To make a million from millions is not the same thing as making a million [starting with nothing]. There is a million of millions of reasons) and he has no doubts that unicorns will change the global paradigm. They are disruptive by nature and they will disrupt today's ideals and status quo.

In Tim's opinion, Portugal needs to witness the birth of a national unicorn since it will be the disruption the country so desperately needs in terms of private companies (of note is that Farfetch – a one-stop, online marketplace for luxury clothing – is currently the most prominent Portuguese start-up and has been valued at more than one billion USD by some analysts). However, entrepreneurs have to keep in mind that unicorns should be seen as a real, unpredictable change which does not affect only a specific country: they move the whole world. 80% of unicorns, Tim states, do not create any real economic benefits but they draw a lot of cash to themselves and the Portuguese culture would not allow a large

investment in a product or idea which would burn a lot of money before succeeding. However, he believes Portugal just needs one good example (perhaps Farfetch?) to hold on to in order to alter the paradigm.

Tim deeply believes we will be witnessing the creation of a Portuguese unicorn very, very soon. The company's plan, he states, would be to leave Portugal, settle in Silicon Valley and then go global. He admits that it would be very unlikely for any company to become a unicorn by staying permanently in Portugal (the case of Farfetch, in fact, as it is based in the UK, despite having a Portuguese founder and CEO) due to the insufficient investment conditions (there are, for example, no relevant angel investors or crowdfunding activities) but for early stages (like incubation) Portugal is very attractive due to the very low investment burn rates.

Taking into account the importance of well-defined business plans for the success of start-ups, Tim believes that business plans are not that important in early stages. Reshaping, redefining or even radically changing business and strategic areas happens too frequently with unicorns (due to their ever-changing nature) and other start-ups alike. What is important, he states, is having the right resources, both financial and human. Specifically focusing on unicorns, Tim believes that a unicorn's success depends on "*a billion things*": a great idea implemented not too ahead of its time and not a second too late and, again, the right human resources with a variety of cultures, knowledge and experience. Furthermore, unicorns must see technology as something more than just a utility as – in Mr. Vieira's opinion - 99% of the unicorns will be connected to technological markets. Technology is the key to adaptation: even though they might not be based on technology – Uber for example is about cars and MBNB is about hotels and rooms – it is definitely the way for global success.

The author questioned Tim about how investors reacted to the exponential growth of unicorns in such a short period of time. Tim believes that many investors are afraid to lose dominant positions with relevant companies, which definitely ruptured their behaviour, making them invest based on feelings of fear. Investing due to fear, he states, creates investment bubbles and these bubbles tend to exponentially influence the creation of companies. Tim believes that, in one or two years, investors will be much more careful while investing because they will learn and adapt to the new reality.

As concerns the competition and market disruption, Tim starts by referring that giants (such as Microsoft and Google) must be always aware of changes in the market

since if they skip an opportunity, they will lose their advantage in relation to the competitors. Simultaneously, Mr. Vieira believes them to be the unicorns' biggest hopes since they are the main investors in the big emerging ideas. Tim believes that giants will eventually lose their lead to all other companies and that unicorns will take advantage of that workflow.

Finally, the author asked Tim Vieira what were his thoughts on digital anthropology. Tim argues that digital anthropology is the best way to understand and deal with modern society which, in his opinion, has been proven countless times over the last few years. He has no doubts that this is a subject which will gain awareness and importance in times to come. Furthermore, the digital world, backed up by cognitive systems and the Internet of things, is drastically changing business too. *“Adapt or die”*- Tim stated in the interview – *“companies should rethink how they can develop their business taking into account this digital era, since everything is based in digital data nowadays”*. Tim believes, however, that something disruptive will change the paradigm in a very short time, which will revolutionize the world as we know it. *“We can't always manage by feeling: we must rely on data”* he concluded.

## **5. 2 Pedro Silva**

As stated in the methodology, the author performed research on successful companies around his birth city (Covilhã, in Portugal). Interviewing someone from a company which has been in the market for a longer period of time would bring value to the study due to its different perspective on success, which is more pondered and strategic and takes into account longer periods of time and a more carefully thought-out approach. After the author found, analysed and finally contacted Joalpe International, Mr. Pedro Silva quickly accepted to be interviewed.

The interview, for about one hour, with Pedro Silva, was done in person, by the author, at the headquarters of Joalpe, in Tortosendo, the industrial zone of Covilhã, in Portugal. The interview was performed on the 22<sup>nd</sup> of April 2016.

Joalpe International's core-business is about injection and extrusion of plastic products. The company was created in 1985, by José Alves Pereira, and currently has 78 employees, for sales of over 10 million euros (in 2015), having grown 9% from 2014 to 2015 (Joalpe Annual Report, 2015). The founder José Alves Pereira took advantage of the synergies between his experience and knowledge (retrieved from years working with

plastics in Canada) and the sourcing opportunities from the geographical area of Covilhã (according to the interviewee Pedro Silva). Through a strategic decision in the early 2000's (due to his son's experience with B2B – business-to-business – businesses), the company started focusing on B2B products. Today, over 90% of the companies' sales are to B2B clients.

Taking into account personal success, Mr. Silva believes motivation levels to be the most important key factor as people must find a way to keep fighting through the ups and downs of success and failure (which makes experience an outcome and not a reason). Furthermore, Pedro, in agreement with Mr. Vieira, believes people are the key point for success in any company or industry although factors like experience, know-how and business awareness can make the difference between succeeding or failing. Furthermore, Mr. Silva believes that success is also connected to the growth of a common organizational culture by the company's leaders and the never ending technological adaptation.

The author asked Mr. Silva about his entrepreneurship, to which he responded that it is an inner reaction to the company he is working in: in Pedro's opinion, entrepreneurship is not related to biological reasons but can be conditioned by other factors such as education (stating that the Portuguese education system does not focus on entrepreneurship as being a main education area, being seen rather as a "hot topic" only) or, in his case, the day-to-day challenges he faces. Based on his expertise, the opportunity to develop himself within Joalpe International was exactly what triggered his motivational levels. By learning through doing and by being put to test on his everyday job, Mr. Silva learned that success will come by being different, more specific or more detailed than the competition. That is what Joalpe International does: they apply sustainable innovation principles together with a never ceasing research on actual and potential products, so the consumers will be more satisfied.

Since innovation was discussed, the author asked Mr. Silva about Joalpe International's innovation culture. Pedro took into account the patented products and product designs they possess, however, Pedro states that innovation is not imposed: it is a natural process within Joalpe International because of its presence in totally differentiated markets where constant change is the necessary input for efficient product development. Joalpe International has, thus, a global innovative thinking process, based on specific markets and clients. In Pedro's opinion, *"the most interesting and challenging in terms of innovation is to be one step ahead of what the markets need, since keeping up is not even*

*close to enough and being two steps ahead might lead to unexpected failure*". To succeed, Joalpe International focuses on internal product development but also tries to be as close to the consumer as possible, by being represented in sectorial meetings and through the traditional distribution channels, which defines Joalpe International as a company which uses both open and closed innovation. Mr. Pedro recognizes that product development and research is a main area for the company's success, however, he also states that companies must also specialize in sales and client-reaching and communication. *"Joalpe International's success is based on innovation, design, product and brand quality but also on being able to efficiently understand and serves its' clients taking into account their specifications"*. Joalpe International, it should be kept in mind, is certified through international regulations, which is a big benefit for the market it operates in.

After speaking about success, Mr. Silva spoke about the company's environment, specifically about its competitors. Joalpe International has two main competitor types: firstly, the assured-quality brands and products (HDL Display being the biggest competitor) and, secondly, the low-cost producers. To better succeed and compete with both groups, Joalpe will promptly implement divided product segments in order to be able to compete in two different key areas: quality and price. This bold strategic move can help Joalpe International compete on two different fronts, while having a well-structured background, assuring the company can manage the risk properly.

Finally, the author asked Mr. Silva if Joalpe International was currently aware of the importance of digital data for companies. Mr. Silva responded by stating that Joalpe International was aware of it and, although the final customers' needs and wants are analysed, they prioritize and focus on the intermediate customer specifications (the B2B companies they do business with). Joalpe International scrutinizes and takes into account the final customer behaviour in order to give advantage or efficiency to the intermediate part by modifying their products accordingly. This, Mr. Pedro concludes, is the key for Joalpe International's strategic success.

## 6. Results: Focus group

This focus group (with a duration of 1 hour 5 minutes), as previously explained in the methodology, was done with the help of a network contact, David Carvalhão. David was to be present and to be part of the focus group too but for personal motives his presence was, in the end, not possible. Mr Pedro Bandeira, Mr. Rui Falcão and Mr. Pedro Falcão, all of them known and successful entrepreneurs, were together with the author and the dissertation supervisor, Dr. Manuel Au-Yong Oliveira and discussed all types of subjects based on a semi-structured group script.

As for the group interview, the focus group started by discussing the key competences of entrepreneurs. Mr Bandeira started by pointing out experience, not only the positive and profitable occasions but also the failures and the continuous trying. As Mr. Bandeira explained, learning occurs with both success or failure. Pedro Bandeira considered that education, as well as biological aspects, have no “real” impact on the entrepreneur’s way of working. Instead, Mr. Bandeira believes that there is a “cause” to be a successful entrepreneur. The transformation must have a key point and he believes that it is learning by doing, either by succeeding or failing (despite stories of failure not being as popularized as stories of success, however fleeting this success may be). Resilience and commitment are key competences.

Rui Falcão divided successful factors into being internal and external and followed-up by stating that success is based on the speed of learning and execution (one person can have the right ideas but he, or his team, must be able to put them into practice in the due time; being late means impact will either diminish or be neutral; no execution capability is fata), mixed together with the right time and market conditions and characteristics. Rui Falcão calls it an unyielding mission: one must be very focused on one objective, not only during work hours but always (having an emotional drive which motivates and energizes the person to follow their dreams). However - Rui added - commitment shouldn’t be seen as blind ambition. It is a mixture between being resilient but also to read and acknowledge the situation in order to efficiently and rapidly change strategies and adapt to new contexts.

Pedro Falcão, concluding the topic, considered that the companies help the entrepreneurs have success by “building” them. In his opinion, by being “thrown” at sharks, the entrepreneurs must learn how to react, how to listen and how to anticipate if

they want to survive and strive for victory. Critical acceptance, feedback gathering and analysing, the ability to listen, the selection and gathering of information for decision making and, above all, being motivated and not giving up are key competences one must have. Entrepreneurs, Mr. Falcão concluded, are not perfect, they transform little by little. Being good is not enough in Pedro's opinion: one must have the capability to accept the objectives and pursue them with nails and teeth, hence, commitment is an absolute must-have. Taking into account the types of competences, Hard Skills vs Soft Skills, Mr. Bandeira believes that a company needs people who dream, who risk, who read and act with haste. However, having pragmatic people who are able to transform ideas to financial success is a must aswell. In Mr. Rui Falcão's opinion, the core competence for any leader should be motivating and uniting his team in a common objective and direction.

Discussing success as a whole (instead of an entrepreneur-based view), Mr. Bandeira identified the entrepreneur as the success factor of a company. People are the one reason for success according to him: in his view, every market has its' opportunities and the success of any company depends on how its' leader finds, analyses and reacts to those opportunities. Markets, especially today, change in incredible rhythm, which makes Mr. Bandeira acknowledge that the market is not a key-factor for a company's success. *"If the team cannot see a business plan, or part of it, is wrong, they are not a good team"* – Mr. Bandeira said - human resources must adapt and thrive throughout changes and opportunities, making the entrepreneur and his team the only factor one should focus in his opinion. Furthermore, Mr. Bandeira argues that, in early stages, a business plan is not the main thing as the entrepreneurs must "experience" the market and the key core-processes in order to have real knowledge about them (as theoretical knowledge has often gaps, misinformation or even wrong perceptions of what happens practically in the business world) and take decisions according to reason and data. This opinion is backed-up by Rui Falcão, who agrees and believes that (based on his experience) it might be even harmful for the company as they might be too clingy on following plans or guidelines when they should adapt their assets in order to maximize growth. *"A business plan often transforms an entrepreneur in a manager which can have negative effects: in early stages, the entrepreneur must continue testing, learning, risking. He must learn to comfortably work in chaos since, many times, opportunities arise from it. The great benefit of a start-up company against big companies is that they can adapt to opportunities: by being very rigid, they can lose their competitive advantage"*.

Rui Falcão believes that Mr. Bandeira's vision about Human Resources as the core-factor for success by calling it "*too perfect to be true*": people would be the only success key factor in an ideal world but, in today's business world, more factors must be taken into account. In Mr. Falcão's opinion, even though people are very important for value creation and destruction, other factors like economics, politics (market protection, monopolies, incentives, market "history"), the company's environment, the investors and the distribution network of the company must be taken into account on a start-up success.

To conclude this topic, Mr. Pedro Falcão reinforced that human resources, especially the core-team, has the deepest impact in any project, be it a big or a small one. However, he believes that enterprises need a consistently adapted business plan behind them since sometimes business plans are good and solid but it is not the right time for them to profit from them, or other conditions are not gathered: strategic partnerships, investors, financial sustainability, network conditions, etc. These factors will impact directly how fast and how well companies will grow.

Personal motivational factors, aligned with their importance to personal and professional success, were discussed in order to better understand what makes entrepreneurs' "tick". Discussed based on their personal experience, the participants of the focus group individualized experience as being the predominant piece. Mr. Rui Falcão, taking into account his own profession, stated that his motivation comes from how much he likes his job (intrinsic motivation), as he believes he would never be successful in a field for which he had no involvement and no passion whatsoever. He further added that personal balance is important for success: success, in his view, is a consequence and not an objective because it comes from every single aspect of human life. Mr. Pedro Falcão, curiously following the same logic as Rui, stated that making his own start-up grow was the key to his success: he started risking not only his but also other people's investments, which made him more aware; he had to study the market and benchmark companies with ideas he would never think of, which made him more open minded; he had to manage different business areas and people which helped him become more wise. Mr. Bandeira, finally, concluded that the non-stop challenges rising every day, which lead to non-stop learning and growing, are his biggest motivation to keep improving and risking on a daily basis. He concluded by stating that people "*tend to evaluate success as an objective-for-the-masses where everyone wants exactly the same*", be it personally or professionally, however differences exist, namely whether people work for external motivational factors

(e.g. money) or for more intrinsic motivators (e.g. pride and satisfaction in one's job). The message here is that one should have intrinsic motivation.

Focusing on a business perspective, the author asked the participants how much success is rigidly connected to innovation. Mr. Pedro Falcão, referring to real examples, concluded that non-innovative companies can be successful (such as, for example, companies which have had the same business model for several years) in different ways than disrupting companies, created on a small, simple idea which revolutionized a specific market. Taking into account his experience, he stated that *“a lot of companies in Portugal are created based on great ideas and, because the necessary funding is not achieved, they go bankrupt and disappear”*, which clearly confirms that innovation is not the only factor to take into account. Based on the discussion, conclusions can be drawn, namely that the country (its risk inclination, financial status and even the business culture) is essential for the success of innovative ideas due to the investors' investment capability and willingness but also related to how the country raises and stimulates innovative behaviours and patterns with its inhabitants. Mr. Pedro Bandeira completed Mr. Falcão's argument by taking into account that taking an existing product or process to a new market (geographic, demographic, etc.) or adapting an existing product or process instead of creating one from scratch, is also innovation and, thus, total disruption is not the only way of achieving success.

Discussing unicorn companies, Mr. Bandeira considered that unicorns have a bigger support from investors than most companies since they risk more and, as such, they try to support the company in every single aspect they can (not only financially but also strategically and through networking, among others). Furthermore, their financial help “works” faster than money incoming from clients and sales. *“A start-up objective should be to create a monopoly”* - he stated – *“so they need to grow fast and faster than everyone else”* (based on an economic perspective only). Mr. Bandeira also added that investors, especially in early stages, request certain requirements which the entrepreneur often fails to see since he is too busy or focused on growing the idea and having success. These requirements are able to transform the company by themselves. Interestingly, Mr. Rui Falcão, alongside Mr. Bandeira, believe it is impossible to find a certain unicorn in early stages as there are too many situations to be taken into account. *“It is like playing on the lottery”*, they stated. The number of variables and exceptions (from market to market, core-business to core-business), both internal and external, makes finding a unicorn too

complex – which would theoretically make raising a unicorn an easier quest than trying to discover one. The easiest way to find a unicorn – Mr. Bandeira finalized – would be to focus on building monopolistic types of markets: in these markets, the status-quo would be stable in comparison to normal business markets. The risk is greater, but so can be the reward.

Mr. Rui Falcão believes other factors like the product, distribution channels, core-processes and the idea are important and investors help companies refine those factors based on external views and experiences. This view takes into account the growing process, seen from a non-exclusive economic perspective and viewpoint. As Mr. Falcão said, “*Growing in an organized way or growing chaotically will not have the same results*”. This post-creation start-up phase identified by Rui is exactly where the investors’ managerial competences are required. Furthermore, he distinguished financial investors (who, in his opinion, add no other value except for money) and the smart-money investors. Mr. Pedro Falcão, contrary to Rui’s view, believes that financial investors add some value by making the entrepreneur and the team focus on previously established objectives, agreed with the investors. Smart-money investors bring ideas, networking capabilities, strategies, forecasts etc., which he believes to be as important as the first type. Mr. Rui Falcão explained that business angels and general investors are looking for different factors when they choose to invest in a start-up or an idea (be it financially or through knowledge sharing): if it is in an early stage, the entrepreneur and his team might be the differentiating factor (due to their capability to grow and potentiate the idea or company). In more advanced stages, the business plan and the strategies implemented and in progress will have a bigger impact on the investor’s choices (since once the processes and guidelines have been implemented, having the sustainable background for it must be taken into account).

To conclude, the participants discussed the characteristics of Portugal (cultural, financial and educational) as a possible incubator or obstructer for business in general. Mr. Pedro Falcão started by stating that “young” companies in Portugal are achieving big valuations (even if not as big as unicorns) which, in his opinion, is more important than having a handful of unicorn companies. Mr. Rui Falcão further added that it is very important for the country to have well-valuationed, efficiently growing companies since they will catapult other companies to success: unicorns, as well as other successful companies, have positive effects on investment through its stimulation and by “obliging” investors to

accept risks (due to the fear of losing important shareholder positions in possible high-valuation companies) they wouldn't do otherwise. Taking into account the educational approach, Rui said that universities tend to "create" successful people with a multinational profile: they focus on efficiency, numbers, guidelines and improvement processes at the expense of innovation, risk and entrepreneurship which is why, in his opinion, Portugal does not have high ratios of innovation: it is not stimulated. This was verified by Dr. Manuel Au-Yong Oliveira who stated that, financially speaking, university start-ups generate less sales. The participants present in this focus group believed it to be due to the universities' "mass-formatting" their students, which makes them become more rigid and less alert or open to outside opportunities. By following inflexible processes and patterns in early stages, these companies tend to grow slower. "*Universities teach people to be good technically, which doesn't mean they will be good entrepreneurs*", Rui Falcão finalized.

## 7. Discussion of the field work

It was stated in the interviews that human resources are undoubtedly the key factor behind a highly valuable tech company. One might consider how countries with a wealth of natural resources do not lead to widespread wealth for their citizens – e.g., Angola, Brazil, and Venezuela, on the negative side, as they are tremendously advantaged by their natural resources, not corresponding however to advanced development levels; or take Switzerland, Singapore and Germany, on the positive side of development, despite lacking in natural resources – one is thus tempted to agree that human resources and their motivation and know-how is the most important factor for development and commercial success. People must find a way to keep fighting through the ups and downs of success and failure, which makes experience all the more important. Factors like experience, know-how and business awareness can make the difference between succeeding or failing. Success will come, it was stated, by being different, more specific or more detailed than the competition. Learning will have to occur not only from the positive and profitable occasions, but also from the failures and the continuous trying. Education, as well as biological aspects, were seen to have no “real” impact, though. Entrepreneurs will need to seek feedback and have the ability to listen, wisely selecting and gathering information for decision making. Intrinsic motivation will be key - success will come in a field for which one has involvement and passion.

On the other hand, business plans are not as important, especially in the early business-development stages of start-ups, as perhaps may be thought in society in general. What is important is having the right resources, both financial and human. One needs a great idea implemented not too ahead of its time and not a second too late, as one interviewee stated. Furthermore, unicorns must see technology as something more than just a utility – as most unicorns will be connected to technological markets.

Pedro Silva on the topic of innovation stated that: *“the most interesting and challenging in terms of innovation is to be one step ahead of what the markets need, since keeping up is not even close to enough and being two steps ahead might lead to unexpected failure”*. This is testimony to the necessary balance one needs.

Finally, many investors are however motivated by fear, which can be very negative for the industry. Investors are afraid to lose dominant positions with relevant companies, making them invest based on feelings of fear. Investing due to fear creates investment bubbles and these bubbles tend to exponentially influence the creation of companies. Perhaps in future regulating bodies may guard against this, as bubbles tend to have negative and far-reaching effects. The benefits of unicorns, in job and wealth creation, at the national level, are however very positive, and peripheral countries like Portugal need them – for self-esteem purposes, but also as they set the standards higher and make entrepreneurs dream – ambitious visions may reap long-term results, if some of the aforementioned items are taken into account and applied.

## 8. Conclusions

The first conclusion one can take of this thesis is that unicorns are indeed a reality. Companies with previously unimaginable valuations overcame expectations and became important players in today's marketplace. Based on secondary data (even taking into account the bibliographic gap in this thematic), we can assuredly provide evidence that these companies are not mythical anymore, with technology being a main factor contributing to the exponential growth in numbers. From Lee's 39 unicorns in 2013 to 2016 Techcrunch's 229, unicorns are now a force to be reckoned with.

Based on the literary review, followed up by the focus group and interviews, one can also conclude that the unicorn euphoria is passing by. Investors, learning from previous mistakes, are creating more objective valuations and they are not "throwing" money at companies anymore. Consequently, this is having an impact on a lot of companies: Square, previously valued at \$6 billion, had its valuation drop to \$3 billion. Snapchat, previously valued at \$16 billion, saw its valuation fall by 25 percent. Gilt Groupe, previously valued at \$1.1 billion, was sold for \$250 million. Good Technology, previously valued at \$1 billion, was sold for \$425 million (Techcrunch, 2016). This fact, however, doesn't mean that "real" unicorns won't keep increasing: it means simply that the market has adapted and knows now how to identify real unicorns. Companies with solid and coherent business plans will continue to grow in valuation, while companies which grew in valuation due only to expectations and euphoria will have serious problems in maintaining their valuation expectations.

Unicorns' success depends on their capacity to recognize, appropriate and respond to external opportunities coming from adjacencies. As Au-Yong-Oliveira and Costa (forthcoming) further conclude, success involves a good idea, a successful and carefully analysed business plan and a motivated, actively engaged workforce and leadership with a common vision, but also involves constant reorganization and reformulation, as macro and micro environmental changes must not be overlooked. This is where the unicorn belongs in today's marketplace: profiting greatly by identifying and quickly and efficiently adapting to adjacencies.

The birth of companies based on technologies comes from the need to create, store and process information as a key-resource (Daradkeh et al., 2016). By evolving towards a

new vision of technological and informatics background, enterprises are now able to rely and operate based on the collected and analysed data (Daradkeh et al., 2016).

As one can conclude, the success of unicorn companies is more complex than firstly thought, though we did find evidence supporting our theoretical models (figures 2 and 3). Not only do unicorns face early challenges such as, for example, the structuring of a common vision, the acquisition of the needed resources (both financial and non-financial) and the need to be born global, they also have to constantly reformulate themselves in order to be able to compete with giants and incumbents alike and to manage stakeholders' expectations in ever-shifting, elastic markets. The development of internal guidelines and structures, alongside with the creation and sustainable growth of its' core-business, is, thus, of utmost importance for the achievement of challenging objectives such as the ones pursued by these companies.

The unicorn euphoria seems to be passing by and one can expect that the number of new unicorns will perhaps diminish over the next few years. Initial public offerings, due to their strong negative impact on previously arising unicorns, were a changing point for the tendency to create high-value enterprises. Nowadays, companies do not suffer euphoria-based abrupt valuation changes anymore. The business world is undergoing a phase of analysis, with investors being more thoughtful and aware of the risk-benefit ratio of these companies, making pre-IPO valuations more rational and objective and post-IPO valuation drops less common and much less accented. Markets are slowly adapting to the existence of unicorns and, as such, competitors are now more aware of the need to anticipate or acquire potential entrants in order to maintain their advantage. Unicorns are now a force to be reckoned with because of their numbers and disruption in the business environment.

Entrepreneurs are the game changers of unicorns: internally, he or she is the core-piece of the company by having the idea, the motivation and the vision to move onwards; externally, investors rely on the entrepreneur to grow that idea and to find the right talents to help him or her do so, being indispensable to gather the so much-needed resources. By creating a common identity within the company, with a widely shared value framework and motivation, this will determine the outcome of the company in both early and late stages of its life.

Quoting interviewee Mr. Falcão, entrepreneurs are not perfect, they transform situations little by little. The author hopes with this study to also have made a small

contribution to the topic of high-valuation start-ups, or unicorns, as they are now more commonly known.



# 9. Suggestions for future research

Suggestions for future research include the following:

1. Measuring the importance of digital data in today's business world.
2. Finding how the business world will be affected by giants, incumbents and unicorn interactions, with regards to the years to come.

Digital data, online, is ever more important in today's world. Never before has there been so much data we can access and the consequences for companies are very significant. How will this affect unicorns, in the future? Also, more research is necessary, into giants, incumbents and how they interact with the increasingly present unicorns. We hope with this study to have provided some groundwork to aid future research in the area.



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# Appendix A

## Interview questions

João Pedro Costa, Manuel Au-Yong Oliveira  
University of Aveiro, Portugal

1. What is more important to success as an entrepreneur (choose one and justify please):

Motivation levels \_\_\_\_

Higher education institution you go to \_\_\_\_

Intelligence which you are born with \_\_\_\_

Being “street savvy” which is acquired with experience \_\_\_\_

2. Which are the main factors behind the successful building up of a highly valuable technological (or other) organization?
3. Where does creativity come from (the idea for a radically new business such as Uber, Facebook or eBay)?
4. Can creativity be improved upon?
5. Is the key to success the execution of those radical ideas, which not all are capable of doing?
6. What motivates you and where does your creativity come from?
7. Is there a culture of innovation around the company?
8. How important is research and development in the company?
9. What type of innovation does the company use – open or closed?

10. Do all the ideas come from the company's resources?
11. What is the company's age and core-business?
12. Why was this company created?
13. What main intellectual competences does it involve?
14. What is your company's competitive advantage?
15. Approximately, what is the company's valuation?
16. Is the company on the stock exchange?
17. Is the company's market saturated?
18. How does your organization see its competitors?
19. How can the analysis of digital data (e.g. consumer behaviour, wants and needs, feedback), from sources like Facebook and Google Analytics, contribute to business performance improvement?

# Appendix B

## Interview questions – Tim Vieira

João Pedro Costa, Manuel Au-Yong Oliveira  
University of Aveiro, Portugal

1. What is more important to success as an entrepreneur (choose one and justify please):

Motivation levels \_\_\_\_

Higher education institution you go to \_\_\_\_

Intelligence which you are born with \_\_\_\_

Being “street savvy” which is acquired with experience \_\_\_\_

2. Which are the main factors behind the successful building up of a highly valuable technological (or other) organization?
3. Where does creativity come from (the idea for a radically new business such as Uber, Facebook or eBay)?
4. Can creativity be improved upon?
5. Is the key to success the execution of those radical ideas, which not all are capable of doing?
6. What motivates you and where does your creativity come from?
7. How can we identify a possible unicorn and make the organization become one?
8. Do you think that we will witness the birth of a Portuguese unicorn in the next few years?

9. What is the importance of a well-studied, efficient business plan for a possible unicorn?
10. What is behind the success of a unicorn?
11. Would you say that this new trend of unicorn companies has decreased the quality of investors' risk analysis (as one could miss out on acquiring shareholding positions)?
12. Must unicorns be linked to technology markets?
13. How can companies worldwide (from giants like Microsoft and Google to small technology companies) compete with unicorns?
14. Is digital anthropology becoming a relevant subject in today's technological world?
15. In what way do you think unicorns will affect the global market in the next 10 years?
16. What do you look for when you are investing in a business idea? E.g., the idea itself or the entrepreneurs behind it?
17. How can the analysis of digital data (e.g. consumer behaviour, wants and needs, feedback), from sources like Facebook and Google Analytics, contribute to business performance improvement?

# Appendix C

## Focus Group – Base questions

João Pedro Costa, Manuel Au-Yong Oliveira  
University of Aveiro, Portugal

1. What is more important to success as an entrepreneur (choose one and justify please):

Motivation levels \_\_\_\_

Higher education institution you go to \_\_\_\_

Intelligence which you are born with \_\_\_\_

Being “street savvy” which is acquired with experience \_\_\_\_

2. Which are the main factors behind the successful building-up of a highly valuable technological (or other) organization?
3. How can investors and taking the right actions in due time condition the birth and growth of unicorns?
4. Where does creativity come from (the idea for a radically new business such as Uber, Facebook or eBay)?
5. Can creativity be improved upon?
6. Is the key to success the execution of those radical ideas, which not all are capable of doing?
7. What motivates you and where does your creativity and success come from?
8. How can we identify a possible unicorn and make the organization become one?

9. Do you think that we will witness the birth of a Portuguese unicorn in the next few years?
10. Why do unicorns suffer from big post-IPO valuation losses?
11. What is the importance of a well-studied, efficient business plan for a possible unicorn?
12. What is behind the success of a unicorn?
13. Would you say that this new trend of unicorn companies has decreased the quality of investors' risk analysis (as one could miss out acquiring shareholding positions)?
14. Must unicorns be linked to technology markets?
15. How can companies worldwide (from giants like Microsoft and Google to small technology companies) compete with unicorns?
16. Are unicorns directly connected to technological bubbles?
17. In what way do you think unicorns will affect the global market in the next ten years?
18. Is digital anthropology becoming a relevant subject in today's technological world?
19. What do you look for when you are investing in a business idea? E.g., the idea itself or the entrepreneurs behind it?
20. How can the analysis of digital data (e.g. consumer behaviour, wants and needs, feedback), from sources like Facebook and Google Analytics, contribute to business performance improvement?

# Appendix D

## Interview answers – Pedro Silva

Mr. Silva believes motivation levels to be the more important key factors for success as an entrepreneur, as every entrepreneur must find a way to keep fighting through the ups and downs of success and failure. In his opinion, entrepreneurship is not related to biological reasons but can be conditioned by other factors such as education (stating that the Portuguese education system does not focus on entrepreneurship as a main educational area, rather it is a “hot topic” only).

Pedro, in accordance with Mr. Vieira, believes that people are the key point for success. Key factors like expertise, experience, know-how and business awareness can make the difference between succeeding or failing. Furthermore, Pedro believes that success is also connected to the growth of a common organizational culture created by the company’s leaders and the never ending technological adaptation.

Pedro’s entrepreneurship is connected to the company he is working in. In his opinion, the opportunity to develop himself within Joalpe International was exactly what triggered his motivational levels. By learning through his own experience and by being put to the test on his everyday job, Mr. Silva learned that success will come by being different, more specific or more detailed than the competition because that is what Joalpe does: they apply sustainable innovation principles together with a never-ceasing research on actual and potential products, so that the consumers will be more satisfied.

Joalpe has its own innovation culture – they have patented products and product designs. However, Pedro states that innovation is not imposed – it is a natural process within Joalpe because of its presence in totally differentiated markets where constant change is the necessary input for efficient product development. Joalpe has, thus, global innovative thinking, based on specific markets and clients. In Pedro’s opinion, “the most interesting and challenging in terms of innovation is to be one step ahead of what the markets need, since keeping up is not even close to enough and being two steps ahead might lead to unexpected failure”. To succeed, Joalpe focuses on internal product development but also tries to be as close to the consumer as possible, by being represented in sectorial meetings and through the traditional distribution channels.

Joalpe uses open and closed innovation in order to be able to cover all potential interest areas. Its core-business is about injection and extrusion of plastic products. The company was created in 1985, by José Alves Pereira, who saw synergies between his experience and knowledge (gained from years of working with plastics in Canada) and the sourcing opportunities in the geographical area of Covilhã. Through a strategic decision later on (due to his son’s experience with B2B businesses), the company started focusing on B2B products. Today, over 90% of the companies’ sales are to B2B clients.

Pedro recognizes that product development and research is a main area for the company's success. However, he states, more than ever companies must also specialize in sales and in reaching and communicating with clients. "Joalpe's success is based on innovation, design, product and brand quality but also on being able to efficiently understand and serve its' clients taking into account their specifications". Joalpe, it should be kept in mind, is certified through international regulations, which is a big benefit for this market.

Joalpe has two main competitor types – first, the assured-quality brands and products (HDL display being the biggest competitor) and secondly the low-cost producers. To better succeed and compete with both groups, Joalpe will promptly implement divided product segments in order to be able to compete on two different key areas: quality and price.

By being a B2B company, data (and digital data) analysis must be done in a different way. Joalpe is aware of it and, although they care about the final customers' needs and wants, they prioritize and focus on the intermediate customer specifications (the ones they do business with). Joalpe analyses and takes into account the final customer behavior in order to give an advantage or gain in efficiency to the intermediate part. This, Pedro concludes, is the key for strategic success.

# Appendix E

## *Questões e respostas de entrevista / Interview questions and answers* – Tim Vieira

João Pedro Costa, Manuel Au-Yong Oliveira

Universidade de Aveiro, Portugal

### **1. O que é mais importante para o sucesso como empreendedor? (escolha uma opção e justifique, por favor):**

Níveis motivacionais \_\_\_\_

Instituições de educação / formação superior frequentadas \_\_\_\_

Inteligência “recebida” à nascença \_\_\_\_

Conhecimento ganho com experiência profissional \_\_\_\_

Tim Vieira: Acredito que o mais importante para o sucesso como empreendedor é o conhecimento ganho com a experiência profissional. A experiência dá-nos vantagens e neste mundo as vantagens são tudo. Tanto as experiências boas como as más vão fazer com que tenhamos mais conhecimento no futuro e mais conhecimento significa mais vantagens e mais vantagens significa maior ganho. Por isso dou extrema importância à experiência e ao facto de não se ter medo de tentar coisas novas e de aprender coisas novas.

Fazendo referência às outras opções mencionadas acima, como o nível de educação, é importante ressaltar que tudo depende. Há empreendedores que não têm níveis de escolaridade elevados, mas que conseguem ser tão bons comunicadores, bons com *soft skills*, graças à experiência que foram adquirindo. Relativamente à inteligência, às vezes há pessoas inteligentes que desistem muito rapidamente.

O empreendedor deve antecipar/sonhar com o resultado final e é essa visão de sucesso futuro que vai ajudá-lo a manter a motivação e determinação para ultrapassar os inúmeros obstáculos e tempos difíceis que irá encontrar pelo caminho. Como dizem, o primeiro milhão é o mais difícil de fazer! Curiosamente, a vontade de ganhar muito dinheiro, as competências de gestão ou o desejo de poder costumam ocupar os últimos lugares da tabela.

## **2. Quais são os fatores chave por trás da construção de uma organização tecnológica (ou outra) altamente valorizável?**

Tim Vieira: Um dos fatores mais importantes para a construção de uma organização é a equipa. É importante ter uma boa equipa que entenda do negócio, uma boa equipa que perceba de marketing, vendas, que consegue pôr a tecnologia adequada ao serviço da empresa e a tecnologia que as pessoas querem. Para além de se ter uma boa equipa, é fundamental ter um bom produto e depois também ter um líder que consiga abrir as portas e fazer com que as coisas aconteçam. Sempre que os tempos forem cinzentos devemos acreditar que vão vir tempos bons.

## **3. De onde vem a criatividade (a ideia por trás de um negócio revolucionário tal como a Uber ou o Facebook? Pode a criatividade ser aperfeiçoada?)**

Tim Vieira: Hoje em dia há ideias para tudo. A Uber e o Facebook são negócios que estão a mudar o mundo. No caso da Uber, recorre a um produto que já existia há muito tempo, fez uma disrupção e começa a dar aos clientes um produto melhor, com mais eficiência, melhor preço, melhor serviço, pelo que é difícil dizer às pessoas para não usarem a Uber quando o que a Uber propõe é uma melhoria do serviço já existente. Como surgiu esta ideia? A ideia da Uber veio de alguém que não estava contente com o serviço prestado, acreditou que conseguia fazer melhor. A vantagem desta ideia é que há muitos utilizadores que acreditam que o táxi tradicional já não é o melhor meio de transporte e começaram a usar a Uber pelas suas vantagens.

Em relação ao Facebook, esta rede social conseguiu revolucionar a forma como as pessoas comunicavam até então. Há muitos produtos e ideias semelhantes ao Facebook, mas os números de utilizadores falam por si. Eu acho que o Facebook veio para ficar e está a tornar-se num «monstro». É o dono do WhatsApp e de outras apps como o Instagram e mostra que está já a pensar não só no Facebook de agora, mas como será o Facebook no futuro. O modelo é espetacular, porque é grátis, quem paga é quem quer anunciar para os utilizadores, pelo que acho que tem tudo para continuar a crescer. Se será bom ou mau, não sei! Vamos ver!

## **4. A chave do sucesso é a execução dessas ideias disruptivas (o que nem todas as organizações conseguem fazer)?**

Tim Vieira: A vantagem é conseguir fazer algo disruptivo. Há muitas indústrias que não precisam de ser disruptivas. Não é só ter as ideias, mas sim conseguir concretizá-las. Não é fácil, é muito difícil. Quando falamos de casos de sucesso reparamos que há também um milhão de casos de insucesso. A verdade é que quando as pessoas acreditam que têm uma ideia que vai revolucionar uma indústria têm de acreditar e têm de ter os fatores que referi anteriormente: a equipa certa, uma equipa de marketing, uma equipa de vendas... Não é

fácil, mas se tiver uma boa ideia e uma equipa por trás acredito que ainda há muitas coisas que vão ser disruptivas e vão existir muitas oportunidades para as pôr em prática.

### **5. O que o motiva? De onde vem o seu espírito criativo e empreendedor?**

Tim Vieira: Eu acho que o que me motiva é gostar de criar coisas novas, gostar de trabalhar com pessoas que têm talento, mas principalmente de gostar de acreditar nas pessoas. Não é fácil, porque por vezes dececionam-me, mas no geral prefiro ser dececionado porque quando corre bem e há sucesso esqueço todas as coisas que correram mal. Não sei bem de onde vem a motivação. Posso garantir que não é do dinheiro, mas sim do poder de mudar, de acrescentar valor, conhecimento e experiência a quem trabalha comigo. Sinceramente, acho que está dentro de mim.

### **6. Como podemos identificar um possível unicórnio? Como podemos fazer uma organização tornar-se num?**

Tim Vieira: Isso é uma *billion dollar question*! Fazer um milhão de milhões não é a mesma coisa que fazer um milhão. Há um milhão de milhões de razões. A verdade é que precisamos de unicórnios portugueses porque quando aparecerem os primeiros vamos ter a receita de sucesso e vamos acreditar que é possível. Neste momento há empresas que podem criar unicórnios, mas para se ser um unicórnio tem de se ter uma grande ideia, uma ideia que não mude só um país, mas que mude o mundo ou uma grande parte do mundo.

O mais difícil é o caminho para chegar até lá. 80% dos unicórnios não fazem *cash* e basicamente só sugam *cash*. A cultura portuguesa não permite que sejam feitos investimentos em produtos e ideias que queimam *cash*. As pessoas gostam de ter um plano de negócios que comece a fazer *cash* rapidamente. Por isso, acho que vai ser difícil termos unicórnios, mas acredito que com o sucesso de um unicórnio outros seguirão o seu exemplo. Há países pequeninos que já tiveram vários unicórnios; por exemplo, Israel, a Coreia do Sul, Singapura, países que conseguem trazer ideias que transformam o mundo e eu acho que nós também conseguimos fazer isso. Precisamos é de acreditar e de ter bons exemplos para irmos atrás e fazermos história.

### **7. Na sua opinião, iremos presenciar a criação de um unicórnio Português nos próximos anos?**

Tim Vieira: Eu quase garantia que sim. Eu acho que vamos assistir à criação de um unicórnio, cuja ideia vai começar cá, mas daqui vai ser transportada para Silicon Valley e de Silicon Valley vai chegar ao sucesso de um unicórnio. Acredito que vai ser difícil fazer o trabalho todo isolado cá em Portugal porque ainda não temos os *angels investors*, o crowdfunding, ou seja, o que é preciso para estar por trás de um unicórnio. Um unicórnio não é só termos a ideia certa e as pessoas certas. Há muito mais à volta disso. É encontrar

*cash-flow* que ajude o projeto a andar para a frente até ao ponto de fazer o clique e de começar a gerar lucro. O que temos de bom em Portugal é que o *burn rate* para começar uma empresa é baixo, pelo que conseguimos ir mais longe com o dinheiro que temos. Mas também temos de ser realistas e acreditar que para dar um grande passo é preciso quase que atravessar um oceano.

#### **8. Qual é a importância de um modelo de negócios eficaz e bem delineado para um potencial unicórnio?**

Tim Vieira: É difícil! Muitos destes unicórnios começaram a fazer coisas diferentes e mudam-se quase duas ou três vezes por semana até começarem a perceber onde está a grande vantagem do que estão a fazer. Mais do que ter algo muito delineado e fechado, é importante ter dentro da equipa pessoas com experiência que já fizeram as coisas acontecer no passado. Portugal é muito limitado. A maioria das pessoas que já tiveram sucesso ou fizeram parte de unicórnios não estão cá para começar a ser mentores. E é por isso e não só pelo dinheiro que vamos ter de ir para Berlim, Londres ou para os EUA porque é aí que estão essas pessoas que querem dar a volta e fazer o próximo unicórnio. Por isso eu acho que mais do que ter tudo estudado e planeado, é importante ter pessoas com experiência que percebam do assunto, saibam como fazer, como encontrar sinergias, parcerias ...tudo isto é importante.

#### **9. O que está por trás do sucesso de um unicórnio?**

Tim Vieira: Um milhão de milhões de coisas. Uma grande ideia, não estar muito à frente no *timing* nem um segundo atrás. É ter pessoas na equipa com experiência que ajudem a transformar uma ideia num unicórnio. Por isso, digo há um milhão de milhões de razões. Eu até agora não encontrei as razões para se ter sucesso e fazer um unicórnio. Acredito que vou fazer parte de um unicórnio, mas não sei bem quando. Estou disponível para esperar!

#### **10. Considera que esta nova onda de empresas híper valorizadas fez diminuir os níveis de análise de risco dos investidores (devido ao receio de não assumirem posições de *shareholders*?)**

Tim Vieira: O que acontece é que muitos investidores têm medo de perder o comboio e uma grande oportunidade de não serem valorizados. Normalmente quando se começa a investir por motivos de ter medo de falhar e de não fazer parte de uma oportunidade começa-se a criar bolhas. De momento a bolha está controlada, mas há muitas ideias a surgir e o financiamento vai estar mais limitado - não pelo facto de as pessoas terem medo de quando virá a próxima bolha, mas por surgirem tantas ideias. Dentro de um ou dois anos os investidores vão fazer mais perguntas do que as que fazem agora, vão querer acreditar que o projeto vai chegar a um ponto de fazer retorno. Mas agora deve-se tentar e procurar investidores que assumam o risco.

### **11. Os unicórnios têm que estar ligados a mercados tecnológicos?**

Tim Vieira: Acho que 99% deverão estar ligados a mercados tecnológicos. A vantagem agora é a tecnologia e a velocidade de conseguirmos adaptar a tecnologia para termos um melhor produto. Há mais probabilidade de termos unicórnios de tecnologia do que unicórnios relacionados com uma rede de hotéis ou negócios tradicionais. As pessoas que estão a criar unicórnios estão a usar produtos, infraestruturas e coisas que já receberam biliões de investimentos e estão a conseguir fazer a sua parte. Estou a pensar objetivamente no MBNB, que não construiu nenhum hotel, nenhum quarto, mas é a maior rede de aluguer de quartos do mundo. Se o fizesse da maneira tradicional, seria impossível de o fazer no tempo recorde e de obter os resultados que está a conseguir. Com a Uber aconteceu a mesma coisa. A Uber não é dona de táxis, mas conseguiu oferecer um serviço que se pauta pela vantagem da tecnologia.

### **12. Como podem outras organizações (desde gigantes como a Microsoft e a Google até às pequenas e médias empresas de tecnologia) competir com unicórnios?**

Tim Vieira: Eu acho que a Microsoft e a Google têm tantos riscos que têm de estar sempre com os olhos bem abertos e atentas ao futuro. Se falharem uma oportunidade e surgir uma empresa que faça melhor, é fácil as pessoas mudarem e a Microsoft e a Google perderem a luta. No entanto, e ao mesmo tempo, a Microsoft e a Google serão sempre investidores nos novos unicórnios e não podem estar a dormir. São as empresas que mais investem em novas ideias. Se eu acho que estas empresas vão sempre conseguir? Acho que não. O mundo está tão competitivo, mas ao mesmo tempo vamos ter de aceitar que a Microsoft e a Google estão cá para investir e muitas vezes os unicórnios sabem que o *workflow* será para uma delas. Vamos ver como vai correr nos próximos cinco anos.

### **13. Considera que a Antropologia Digital (isto é, o estudo das relações entre os humanos e a tecnologia da era digital) está a tornar-se numa disciplina importante para o sucesso empresarial?**

Tim Vieira: A tecnologia está a mudar radicalmente o modo como interagimos e de forma mais rápida do que em qualquer outro momento da história. Tradicionalmente, como análise central da Antropologia, a Etnografia oferecia um olhar de como funciona uma cultura como um todo. Já a Antropologia Digital observa nessa cultura as mudanças ao longo do tempo e usa essa análise para entender as ramificações de nossa condição cibernética. A Antropologia Digital é o melhor caminho para entender a sociedade moderna. O desenvolvimento da Antropologia Digital tem sido crescente nos últimos anos, devido ao notável protagonismo das tecnologias digitais no quotidiano e em todos os domínios da vida social. E não nos podemos alhear desta realidade.

**14. Como acha que os unicórnios vão afetar o mercado global na próxima década?**

Tim Vieira: Os unicórnios vão mudar o mercado mundial. Há empresas com muitos empregados que já estão estabelecidas, mas que vão desaparecer por causa de surgirem unicórnios. Os unicórnios vão mudar o que já existe e vão fazer uma disrupção. Uma empresa que se transforma num unicórnio é uma empresa que faz algo diferente e que conseguiu ter sucesso. Quando se faz algo diferente muda-se tudo à volta. Eu acho que os unicórnios vão afetar muito o mercado global.

**15. O que considera mais relevante quando investe numa ideia de negócio? A possibilidade da ideia se transformar num sucesso ou as capacidades e motivação dos empreendedores por trás dela?**

Tim Vieira: As duas coisas! Eu acredito que os empreendedores conseguem transformar uma boa ideia num projeto real. Encontrar boas ideias em equipas fracas pode ter um desfecho: insucesso. No entanto, uma equipa boa que tem uma ideia que não é linear tem probabilidades de a adaptar e melhorar. Costumo dizer que uma boa ideia trabalhada por uma equipa muito fraca tem 0% de sucesso. Já uma ideia trabalhada por uma equipa muito boa tem mais probabilidade de ter sucesso. O raciocínio é o seguinte: 90% equipa e 10% a ideia.

**16. Como é que os dados digitais (tais como o comportamento do consumidor, preferências, feedback, etc.) recolhidos através de fontes como o Facebook e o Google Analytics contribuem para uma melhoria da performance empresarial?**

Tim Vieira: O mundo digital, influenciado por aceleradores como os sistemas cognitivos e a *Internet of Things*, está a mudar e os negócios também. Quem não se adaptar, perde o futuro. Neste novo ciclo económico as empresas começam a repensar a forma como poderão desenvolver o seu negócio no futuro e a estratégia deve incorporar o digital. O tema da transformação digital entrou na agenda dos decisores máximos e gestores.

Tudo agora baseia-se em dados digitais! Todas as decisões são tomadas com base em números e na análise daquilo que fazemos. Um cenário que veio para ficar. Mas prevejo que vai aparecer algo disruptivo que vai mudar o que atualmente existe. E quem encontrar uma ideia melhor terá uma *big idea*. As coisas mudam! Tudo tem o seu tempo. Ainda não se consegue perceber o que é que vai ultrapassar o Facebook, mas como tudo na vida as coisas mudam e se surgir uma grande ideia que chegue aos clientes de forma mais eficiente, o cenário muda. Atualmente os dados que recebemos são muito importantes, pois estão a ajudar na tomada de decisões. Não gerimos nada por *feeling*, mas sim através de dados.

# Appendix F

## Group interview / Focus group answers

Experience is taken as the key factor for success by Pedro Bandeira. Not only the positive and profitable occasions but also the failure and the continuous trying. Learning is done within success or failure. Pedro Bandeira considers that education, as well as biological aspects, have no “real” impact in the entrepreneur’s way of working.

Rui Falcão divides successful factors into internal and external. He considers that success is a duality: firstly, pace in learning and executing (one person can have the right ideas but he, or his team, must be able to put them into practice in due time. Being late means that the impact will either diminish or be neutral. No execution capability is fatal).

Pedro Falcão believes that companies help the entrepreneurs have success by “building” them. By being “thrown” at the sharks, the entrepreneur must learn how to react, how to listen and how to anticipate if he wants to strive. Critique acceptance, feedback gathering and analysing, being able to listen, select and gather information for decision making and, above all, being motivated and not folding his arms, are key competences one must have. Entrepreneurs are not perfect and they transform little by little. Furthermore, being good is not enough in Pedro’s opinion: one must have the capability to accept the objectives and pursue them with nails and teeth, hence, commitment is an absolute must-have.

Rui Falcão concludes that it is an obstinate mission: one must be very focused on one objective, not only during work hours but always (having an emotional drive which motivates and energizes the person to follow their dreams).

Pedro Bandeira believes there is a “cause” to be a successful entrepreneur. The transformation must have a key-point and he believes that it is learning by doing, either by succeeding or failing. Resilience and commitment are key competences. Rui adds that commitment shouldn’t be seen as blind ambition. It is a mixture between being resilient but also of being able to read and acknowledge the situation in order to efficiently and rapidly change strategies and adapt to new contexts.

The success of a company is its entrepreneur. People are the one reason for success according to Pedro Bandeira: every market has its opportunities and, for Pedro, the success of any company depends on how its leader finds, analyses and reacts to those opportunities. Markets, especially today, change at an incredible rhythm, which makes Pedro Bandeira believe that the market is not a key-factor for a company’s success. It depends on the human resources of the company to adapt and thrive throughout changes and opportunities and that is why the entrepreneur and his team is the only factor one should focus on.

Rui Falcão believes Pedro Bandeira’s vision is “too perfect to be the truth” and, although people would be the only success key factor in an ideal world, there are more factors. Even though people are very important for value creation and destruction, other factors like

economics, politics (market protection, monopolies, incentives, market “history”), the ecosystem, the investors and the distribution network of the company must be taken into account for a start-up’s success.

Mr. Pedro Falcão reinforces that human resources, especially the core-team, are a must, however, he believes that companies need a consistently adapted business plan behind it. He is promptly interrupted by Pedro Bandeira who says that “if they can’t see the business plan is wrong, they are not a good team”. Pedro Falcão then explains that sometimes business plans are good and solid but it is not the right time for them to profit from them, or other conditions are not gathered: strategic partnerships, investors, financial sustainability, network conditions, etc. These factors will impact directly how fast and how well companies will grow.

Pedro Bandeira believes unicorns have a bigger support from investors than common companies since they risk more and, as such, they try to support the company in every single aspect they can (not only financially but also strategically and through networking, for example). Furthermore, their financial help works faster than money incoming from clients and sales. “A start-up objective should be to create a monopoly”, he states, “so they need to grow fast and faster than everyone else” (based on an economic perspective only).

Rui Falcão believes other factors like the product, distribution channels, core-processes, the idea, are important and investors help companies refine those factors based on external views and experiences. “Growing in an organized way or growing chaotically will not have the same results”. This is where the investors’ managerial competences are required. Pedro Bandeira also adds that investors, especially in early stages, request certain requirements which the entrepreneur fails to see since he is too busy or focused on growing the idea and having success. These requirements are able to transform the company by themselves.

Rui Falcão also points to differences between the financial investors (who, in his opinion, add no other value except for money) and the smart-money investors. Rui Falcão believes financial investors add some value by making the entrepreneur and the team focus on previously established objectives, agreed with the investors. Smart-money investors bring ideas, networking capabilities, strategies, forecasts, etc. and he believes these are as important as the first type.

Rui Falcão states that his motivation comes from how much he likes his job. He believes he would never be successful in a thing he would have no involvement and no passion for whatsoever. He believes that personal balance is important for success. He believes success to be a consequence and not an objective because it comes from every single aspect of human life (also referring that other people’s success should count as a personal success in case he had impact on it).

Pedro Falcão believes that growing up his own start-up was the key for his success: he started risking not only his but also other people’s investments, which made him more aware; he had to study the market and benchmark companies with ideas he would never think of, which made him more open minded; he had to manage different business areas and people which helped him become wiser.

Pedro Bandeira believes success is too relative to be discussed because it goes according to each one's ambitions. "We tend to evaluate success as an objective-for-the-masses where everyone wants exactly the same". He then adds that the non-stop challenges, which lead to non-stop learning and growing, are what motivates him to work every day.

Pedro Falcão has also spoken about innovation as success: some companies are not innovative and they are successful and some other companies are created based on a small, simple idea which revolutionizes a specific market. In his personal case, he stated that "a lot of companies in Portugal are created based on great ideas and, because the necessary funding is not achieved, they go bankrupt and disappear". We thus conclude that the country (and its' risk inclination) is elemental for the success of innovative ideas due to the investors' investment capability and willingness but also due to how the country raises and stimulates innovative behaviours and patterns to its' inhabitants.

Pedro Bandeira discusses the several types of innovation and remembers that taking an existing product or process to a new market (geographic, demographic, etc.) or adapting an existing product or process instead of creating one from scratch, is also innovation and, thus, disruption is not the only way of achieving success.

Rui Falcão explained that business angels and general investors are looking for different factors when they choose to invest in a start-up or an idea: if it is in an early stage, the people, the entrepreneur and his team, might be the differentiating factor (due to their capability to grow and potentialize the idea or company). In more advanced stages, the business plan and the strategies implemented and in progress will have a bigger impact on the investors' choices (since the processes and guidelines are implemented, having the sustainable background for it must be taken into account).

Pedro Bandeira argues that, in the early stages, a business plan is not the main thing as the entrepreneurs must "experience" the market and the key core-processes in order to have real knowledge about them (as theoretical knowledge has often gaps, misinformation or even wrong perceptions of what happens practically in the business world) and make decisions according to reason and data. Rui agrees and believes that (based on his experience) it might be even harmful for the company as they might be too "clingy" on following plans or guidelines when they should adapt their assets in order to maximize growth. "A business plan often transforms an entrepreneur into a manager which can have negative effects: in the early stages, the entrepreneur must continue testing, learning, risking. He must learn to comfortably work in chaos since, many times, opportunities arise from it. The great benefit of a start-up company against big companies is that they can adapt to opportunities: by being very rigid, they can lose their competitive advantage".

Rui then follows his argument by stating that universities tend to "create" multinational-successful people: they focus on efficiency, numbers, guidelines and improvement processes at the expense of innovation, risk and entrepreneurship. That is why, in his opinion, Portugal does not have high ratios of innovation: it is not stimulated. This is verified by Manuel Au-Yong Oliveira: financially speaking, university start-ups grow less than other start-ups. The experts present in this focus group believe it to be due to the universities' "mass-formatting" of its' students, which makes them be more rigid and less alert or open to outside opportunities. By following inflexible processes and patterns in

early stages, these companies tend to grow slower. “Universities teach people to be good technically, which doesn’t mean they will be good entrepreneurs”, Rui finalizes.

The example of Novabase – a Portuguese IT company established in 1989, with over 2,500 employees and where Pedro Falcão and Rui Falcão worked at – is given as an achievement. By being different from the standardized Portuguese companies, Novabase triggered success through a combination of a growing business and technological area with the right human resources and mindset behind it.

Pedro Falcão recognizes that recent companies in Portugal are achieving big valuations (even if not as big as unicorns) which, in his opinion, is more important than having a couple of unicorns. Rui Falcão states that it is very important for the country to have well-valuated, efficiently growing companies since they will catapult other companies to success. Rui Falcão believes that unicorns, as well as other successful companies, have positive effects on investment through its stimulation and by “obliging” investors to accept risks they wouldn’t take otherwise (due to the fear of losing important shareholder positions in possible high-valuation companies).

Rui Falcão, together with Pedro Bandeira, believe it is impossible to find a certain unicorn in early stages as there are too many situations to be taken into account. “It is like playing in the lottery”, they state. The number of variables and exceptions (from market to market, core-business to core-business), both internal and external, makes finding a unicorn too complex – which would theoretically make raising a unicorn an easier quest than trying to discover one. However, Pedro Bandeira adds that investing in monopolistic types of markets helps find possible unicorns: in these markets, some companies will strive while others will fall down. The risk is greater, but so can be the reward.

The question of Hard Skills vs. Soft Skills is raised by Manuel Au-Yong Oliveira. Pedro Bandeira believes that, in order to have a balance, we need to have people who dream, who risk, who read and act with haste. However, having pragmatic people who are able to transform ideas into financial success is a must as well. In Rui Falcão’s opinion, the core competence for any leader should be motivating and uniting his team towards a common objective and direction.