A Work Project presented as part of the requirements for the award of a Masters Degree in Finance from Nova School of Business and Economics

A Venture Capitalist's Screening and Selection Process

How to compare, analyze and decide on potential investments

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Abstract: This paper aims to study the decision-making criteria that weight on the Portuguese Venture Capital firm's investment decision, as well as to create a framework which may enable the comparison between different projects as what regards their potential given eighteen selected criteria. The framework's development was supported by previous literature and the collection of primary data, gathered throughut interviews and inquiries conducted with twelve players of the Portuguese Venture Capital industry. In line with the findings of Hisrich and Jankowicz (1990), Kaplan and Strömberg (2000) and Kaplan, Sensoy and Strömberg (2009), this paper confirms the dominant importance for the Portuguese Venture Capital firms of the criteria Management Team and Product and Market Opportunity over the remaining selected criteria, when faced with an investment decision.

Keywords: Venture Capital; investment; performance; decision-making; criteria; returns;

Acknowledgments: Before starting to write my Master's Thesis, I started an internship at BiG Start Ventures, an early-stage Venture Capital firm investing in B2B startups innovating in Fintech, Insurtech and Cybersecurity. It was proposed to me to do a research project that would enable this firm to measure, through a scale-methodology, the potential of the startups they had on pipeline and portfolio such that it could become comparable. Taking up on this challenge, I started to get to know the world of Venture Capital and inevitably became more and more fascinated.

As a Finance student, it was surprising to understand that business's valuation as I knew it, which inevitably narrowed down to a quantitative financial analysis, weighted very little in the decision process of investments in startups. It surprised me even more to realize that Venture Capital investors make such uncertain and illiquid investments in ideas that sometimes have not even been tested. That led me to reflect on how Finance is not restricted to quantitative analyses, and the qualitative appraisal can sometimes be more indicative of a business future than current performance for example, which is definitely the most common case in Venture Capital.

This thesis is the result of a research question proposed by an internship, and a healthy curiosity about how decisions are made in the Venture Capital landscape.

I must thank the team who accompanied me through this study, Margarida, Simão and, obviously, João who has taught me through his vast experience. Obviously, I am also very grateful to my company tutor Tiago who was always there to push me into doing better than what I thought I could do.

I must also thank my advisor, Prof. Melissa Prado, who was there to guide me, enabling me to do a thesis that would answer the research question proposed but also be academically relevant.

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I. Introduction

Venture Capital is a form of corporate financing aimed mostly to early-staged businesses, startups or small companies, which allows to suppress the current needs of capital these firms have and provide incentives, as well as supporting means, to innovation and entrepreneurship enabling these businesses to scale. The investment is pointed at projects which are either at a starting or expansion phase and which are believed to have long-term growth potential. According to Zider (1988), the interactions of the industry are as follows.

Venture Capitalists (General Partners) receive money from Private Investors (Limited Partners) to invest in Entrepreneurs' ideas which benefit either consumers, corporations or Government entities. With the support of the investors, Entrepreneurs are able to scale and generate returns through IPOs or strategic sales in most common cases.

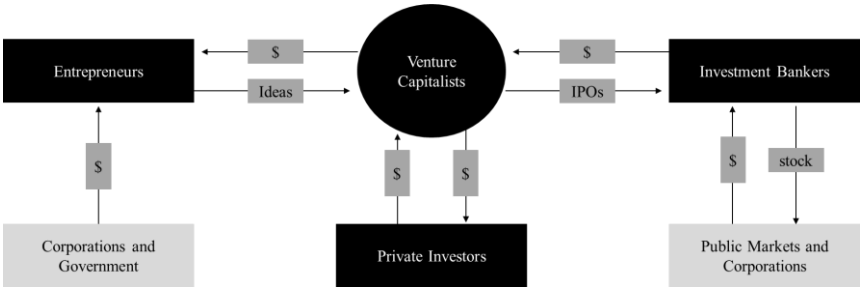

Figure 1- How the Venture Capital industry works – Zider (1988)

In the 1990's the *Dot.Com* era was being fomented by Venture Capital, as new firms were emerging, internet was revolutionizing, and financing was keeping up until the bubble eventually burst (2001-2002) causing heavy losses. History has shown that there is a large sensitivity of Venture Capital activity to economic cycles, as major recession events are highly correlated with peaks in investment write-offs[1].

[1] Investment Write-offs refer to reductions in the value of the investment.

Venture Capital activity has gained more relevance in recent years. Globally, in 2017, the aggregated value of deals made totaled $182 bn as *Figure 2* illustrates, and the compounded annual growth rate of the number of deals made between 2007 and 2017 was 15%. This popularity could be related with the stories of success that the world has come to know, as for example *Instagram*[2], or *Revolut*, one of the 306 unicorn[3] companies in 2018 (CB Insights, 2018).

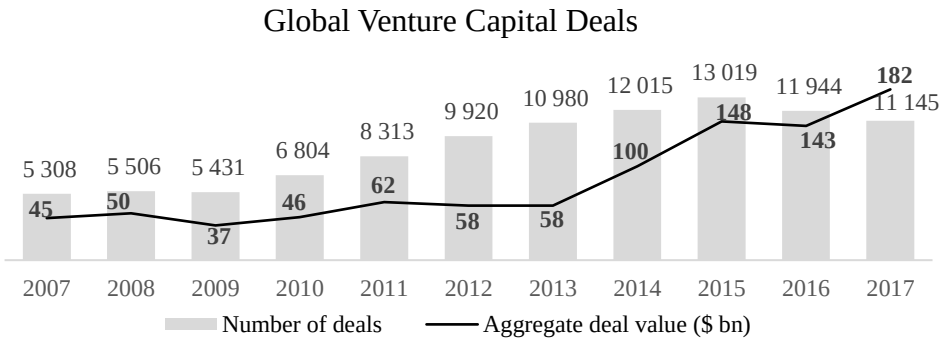

Figure 2 – Global Venture Capital Deals in Number and Value - 2018 Preqin Global Private Equity & Venture Capital Report

For any Venture Capital firm, returns are concentrated in very few deals, such that "(…) the actual distribution of returns in such ventures has a low median value but very high variance" (Scherer and Harhoff, 2000; Hall and Woodward 2010). Accordingly, historical performance of Venture Capital shows that, in general, the main source of revenue of a Venture Capital firm comes from few top deals, and the others either pay the upfront investment or result in a sunk cost. This implies that there is a huge pressure to be able to access those high potential deals and additionally to recognize its potential when analyzing the innumerous proposals that come in.

[2] Instagram raised a Series B round of funding in 2012 with a post-money valuation of $500 million, subscribed by Sequoia Capital, Baseline Ventures, Benchmark and Greylock Partners. On that same year, Instagram was sold to Facebook by $1 billion – the valuation doubled (Crunchbase, 2018).
[3] Unicorn is the common name given to a private company which has reached a valuation over $1 billion.

When a firm is at an early stage, its operational performance may be inconclusive relative to the future performance, therefore success is uncertain. In the most common cases there hasn't been enough experimentation such that a natural selection of successful business through market competition can take place. When the opportunity to act in the market is dependent on the decision of a Venture Capitalist as the best idea to invest in, the determinants of success will not arise from the market, but they will be subjective (Kerr, Nanda and Rhodes, 2014), which is an evidence on how important the decisions of Venture Capitalists are such that the projects which receive funding, hence are given the opportunity to operate in the market, should be the ones which will bring more efficiency to the Sector they are inserted in.

Moreover, Venture Capital investment is inherently related with a principal-agent problem, i.e. the extent to which the interests of the agent, entrepreneur, are not aligned with those of the principal, Venture Capital firm, resulting in a conflict of interest. The information asymmetry existent between the principal and the agent poses more weight on this problem – the Venture Capitalist may be dealing with a dishonest entrepreneur who is in position to reveal only the desirable information on his project, or one who pursues short-term interests. In any case, as Sahlman (1996) puts it "*without conflict, there is no interest*", thus this only augments the responsibility of the Venture Capital firm in conducting a deeper analysis prior to an investment, and on a post-investment phase, in fostering an environment that enhances cooperation.

So, how do Venture Capital firms analyze potential investments? How do they screen and how do they choose? Motivated by the factors previously described, namely the implications of a Venture Capitalist's decision on the ecosystem and how the success of a Venture Capital firm depends on choices made upon scarce information, this study was conducted on an attempt to answer the research question "**How to compare, analyze and decide on potential investments?**".

To do so, this study will firstly understand how the industry has evolved and what can be learned from it, secondly look at what is currently done in the Portuguese industry using it as proof-of-concept and, finally, create a comparative framework, the *Decision Tool*, which can be used to score potential investments based on simple criteria. The *Decision Tool* was then applied to a set of portfolio companies of BiG Start Ventures[4] and one potential investment.

II. Literature Review

The activity of Venture Capital has been increasing as the industry grows and becomes more popular (*Figure 2*). Consequently, one can observe a rising interest of Literature on the subject, which has been focusing predominantly on the value of Venture Capital for society and for its portfolio companies (Kotrum and Lerner, 2000; Fitza, Matusik and Mosakowski, 2009; Anghel-Enescu, 2013; Burżacka and Gąsiorowska, 2016; among others), as well as the criteria and processes that support a Venture Capitalist's investment decision which is where this study is inserted.

According to the research conducted, the first contribution to Literature on Venture Capitalists' decision-making process dates back to 1974, written by Wells, which studies a sample of Venture Capitalists in Pittsburg. Followingly, several researches were conducted, mainly resorting to the same methodology.

Hisrich and Jankowicz (1990) try to study the intuition behind a Venture Capitalist's decisions, and the phycological nature behind it. Recurring to a "*repertory grid*" technique, Hisrich and Jankowicz were able to identify that drivers of Venture Capitalists' decisions were divided into three main areas: **management**, **unique opportunity** and **appropriate returns**.

In 1994, Fried and Hisrich published "*Towards a Global Model of Venture Capital Investment Decision Making*". Supported by eighteen Venture Capital firms which provided data and

[4] BiG Start Ventures is the company where the internship which originated this study took place.

insights on both the process and the generic criteria of their investment decisions. Regarding the generic criteria, Fried and Hisrich deepen the three areas found by Hisrich and Jankowicz (1990), explaining them in more detail: (i) they define the management area as a composite of personal integrity, experience from prior jobs, ability to identify risk, level of commitment, flexibility, understanding of the business, and leadership and management skills; as for (ii) unique opportunity, they indicate the potential for earnings' growth, the idea of the product itself, the competitive advantages, and capital requirements; and for (iii) appropriate return, they refer the exit prospects and potential for high return. Additionally, a model of decision-making is created, describing six main moments that precede the decision to invest, process which consumes on average 97.1 days.

Through the study of the investment analysis, legal contracts and business plans produced by ten US Venture Capital firms for fourty-two investments, Kaplan and Strömberg (2000) attempted to study the process of screening and investment choice of Venture Capitalists. According to their analysis, the most important characteristics to these investors are the **opportunity** - market size, strategy, technology, customer adoption and competition - the **management team** and the **deal terms**. They conclude that 64% of Venture Capitalists consider the management team as the main reason to invest, while only 26% of them consider favorable performance to date to be decisive. Low valuation or favorable contractual structure is also considered attractive. The study describes that although Venture Capitalists invest in opportunities they see as attractive, they understand the risks associated and adjust the contractual structures accordingly, through performance sensitive compensation and control rights. Additionally, the authors are able to map expectations of Venture Capitalists towards market size and growth, as they identify that the median size of the market for the sample of portfolio companies gathered is $6.5 billion (the average $25.1 billion) and the median portfolio firm is expected to grow from sales of $0.2M and EBIT of -$0.2M to sales of $63M and EBIT

of $6M in only four years. They also conclude that ventures with strong management teams are almost three times more likely to exit through an IPO than the remaining, besides obtaining more attractive contracts and yielding superior performance on average which suggests that management teams' appraisal is crucial.

Kaplan, Sensoy and Strömberg (2009) address in their study the long-lasting debate considering the relative importance for Venture Capitalists of the quality of the **management team** (the jockey) and **business idea** (the horse) when deciding to invest. Through the study of the life-cycle of 50 Venture Capital-financed companies, the research concludes that although revenues and market value tends to increase dramatically through time, the scope of the business remains roughly the same. Additionally, as firms evolve the relevance of the expertise of the management tends to decrease and the turnover is substantial. The conclusion to which Kaplan, Sensoy and Strömberg reach is that Venture Capital investors should give greater importance to the business due diligence rather than the management one, because the management is more likely to change. However, the interviews conducted and analysis of other contributions to Literature disagree, pointing at the management team as the most important characteristic.

In 2009, Chemmanur et. al. use the Longitudinal Research Database of the U.S. Census Bureau to study the efficiency gains that a Venture Capital firm can generate in its investments, concluding that overall the efficiency is higher in Venture Capital-backed firms. In their study, they discover that 21% of efficiency increases in Venture Capital-backed companies are related with screening effects and 35% with monitoring. Their research also indicates that Venture Capitalists can be rather similar when selecting their investments, but the value that each is able to generate through monitoring activities is quite discrepant.

Rajan (2010) tries to understand if the superior performance of Venture Capital portfolio companies is driven by the characteristics prior to the investment or by the contribution of the

Venture Capital firm. To do so, Rajan also investigates the drivers and process of an investment in the industry. According to his research Venture Capital funds commonly have focuses, in sector or stage of financing, which contribute to an initial segmentation of potential deals and these are often related to the experience of the Venture Capital team, since apart from providing capital they also try to contribute with their own expertise in the industry or networks, to improve business models and access to market. Rajan concludes that the performance of a Venture Capital portfolio company is boosted by both the selection and value addition effects.

Considering the Literature analyzed, it was found that the most common molds in which researchers study the decision-processes of Venture Capital firms is to conduct surveys and/or interviews with focus groups, gathering information on the analysis performed previously to an investment, its monitoring and exit details on a framework. There has been great interest in studying the screening and selection process of Venture Capitalists in terms of the characteristics which are of higher importance or which better predict the success of an investment. However, to dive further and develop a framework that can assist Venture Capitalists and entrepreneurs to better assess quantitatively Early-staged businesses, even if only in relative terms, has also been a frequent approach.

The managing director of the Phoenix office of Cayenne Consulting, Akira Hirai created the *Valuation Calculation tool* which allows high-tech, seed and early stage firms to estimate the pre-money valuation by answering twenty-five questions [Annex 1]. Although the resulting valuations are intended to support entrepreneurs while assessing their business, the intuition behind the questions relates to relevant criteria for Venture Capital investors.

Also, Villalobos, Payne and Lipper (2007), present a Valuation Worksheet [Annex 2] with a discrimination of the factors that affect the value of a company and respective impact. As described in the article, "no two investors will value a company the same", however, as a

guidance tool the Worksheet is of great relevance to Venture Capitalists, as well as to entrepreneurs.

III. The Portuguese Venture Capital Industry

In Portugal, by definition, there is not a clear distinction between what is Venture Capital and how it is different from Private Equity as there is in the US, both concepts are incorporated under the term "*Capital de Risco*" (hereinafter referred as "*Risk Capital*"). According to Anghel-Enescu (2013), the US term Venture Capital is referred to seed, startup and expansion investments whereas Private Equity is referred to Buy-outs, but in Europe the concept Private Equity encompasses Venture Capital, hence seed, startup and expansion investments, as well as Buy-outs.

The activity of any *Risk Capital* is regulated by *CMVM* (*Comissão do Mercado de Valores Mobiliários*) where firms that want to perform Venture Capital and/or Private Equity activities have to be registered in, as well as the funds managed. There are currently 46 registered entities with 110 active funds registered at CMVM [Annex 3].

However, players in the industry such as the ones of the sample studied, recognize that even though these numbers may be accurate in terms of registry, in practical terms there are considerably fewer active entities. With effect, according to data from *Invest Europe*[5] there are currently twenty-five Private Equity firms operating and headquartered in Portugal, of which only **eleven** are Venture Capital firms [Annex 4] – this source is more likely to capture the current activity of the market.

After the 2008 financial crisis and respective repercussions in the industry, Private Equity and Venture Capital activity in Europe has been recovering, with a 2.2% compounded annual

[5] *Invest Europe* is the association representing Europe's private equity, venture capital and infrastructure sectors, as well as their investors, formerly known as European Private Equity and Venture Capital Association (EVCA).

growth rate from 2008 until 2017. Analyzing *Figure 3*, one can depict that the level of activity in 2017 has surpassed 2008's records.

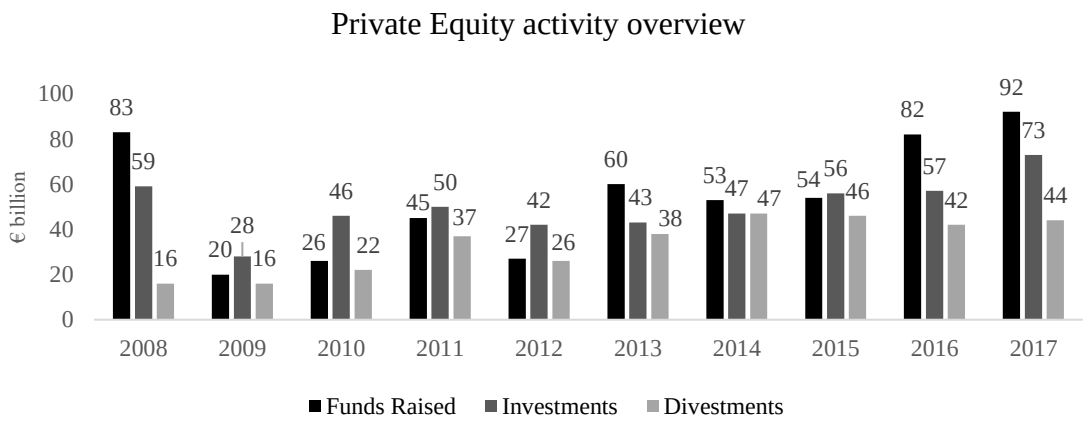

Figure 3 – Overview Fundraising, Investment & Divestment with data on more than 1,250 European Private Equity firms, the 2017 statistics cover 89% of the €640 bn capital under management in Europe – Invest Europe (2017)

As *Figure 3* evidences, there has been rise of the amount of funds raised by European private equity firms from 2015 until 2017. This is a reliable indicator that these companies have been successful throughout its operations such that investors (Limited Partners) continue to allocate funds to Private Equity firms.

IV. Methodology

As previously discussed, this Work Project entails two main goals. On the one side, it aims to understand the criteria which better determine the future success of potential investments at an initial appraisal of the company. On the other side, it aims to build a framework which can attribute a quantitative, even though relative and inevitably subjective, scoring to any potential investment which being analyzed by an investor.

With that in sight, the study was built such that, firstly, with a critical judgement and the help of BiG Start Ventures, it was withdrawn from past studies the criteria that could be simple and

observable on the first interactions that a Venture Capital firm has with a potential investment. This selection is further explored in chapter *VI. Analysis and Results*.

Secondly, through the collection of data from a sample of Venture Capital firms which have been successful – and for simplicity it was assumed that the ability to raise funds characterizes the Venture Capital firm as successful – the framework selected, was calibrated in terms of the weight that each criterion has on the decision to invest considering the importance that, on average, the sample of Venture Capital investors give to that criterion. This allowed the construction of the *Decision Tool*, a comparative framework that comprises all the criterion selected and enables Venture Capital investors to reach a relative scoring of a potential investment from 0 to 5 (such that 0 is not invest and 5 is invest) by attributing a grade to each criterion considering the characteristics of the company being analyzed.

Lastly, the *Decision Tool* was applied using information of a set of companies of the current portfolio of BiG Start Ventures as what regards their scores on each criterion at the time of the investment in. This was compared with the score resultant of a second application of the tool to a potential investment pointed out by BiG Start Ventures. The conclusions are described on chapter *VI. Analysis and Results*.

V. Data

The data gathered was collected, as previously mentioned, through interviews and inquiries conducted with a sample of players the Portuguese Venture Capital Industry.

There were in total twelve answers analyzed, categorized in *Figure 4* according to respective claims of business activity.

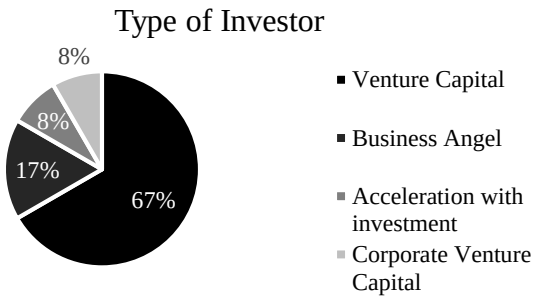

Figure 4 – Type of investors – Own

As illustrated in *Figure 5*, one can recognize that despite few variations, this sample of Venture Capital firms is more focused on early-stage B2B solutions.

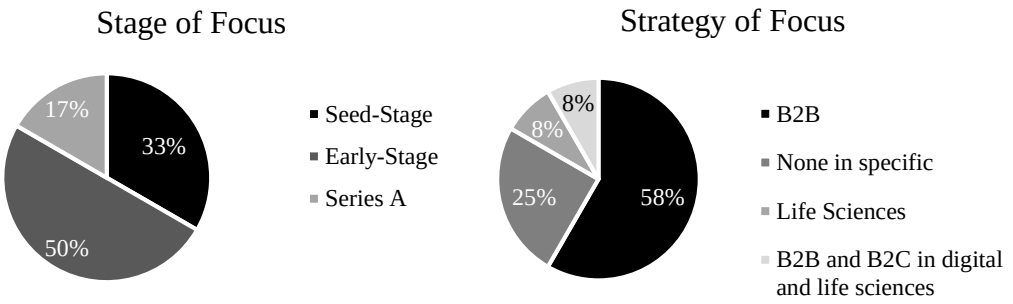

Figure 5 – Stage and Strategy of focus – Own

Additionally, *Figure 6* suggests that the ticket size is predominantly small (between 0 – 250 €K for almost 50% of the firms).

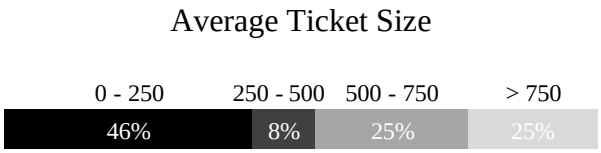

Figure 6 – Average Ticket Size in € thousands – Own

On average, these firms manage 2 funds, comprising 14 companies in portfolio, and have performed 4 exits in the market since inception.

The characterization of the sample previously described is coherent with the fact that the Portuguese market is still small. According to data from Invest Europe relative to 2017, the total amount invested in *Risk Capital* in Portugal was 115 million euros corresponding to only

0.16% of the total investment in Europe (73.5 billion euros), whereas in Italy it was 2.3 billion euros, in Spain 2.5 billion euros and in the UK 29 billion euros.

The average amount of projects received per year by this group of Venture Capital is 440 – more than one project a day, in a market which is still on the rise – moreover 100% of them reported that they run the analysis process internally, which substantiates the claim of Macmillan, Siegel and Narasimha (1985) that Venture Capital firms, which tend to be constituted by small teams, are overloaded with proposals to screen and analyze, an activity which by itself is extremely time-consuming and mostly non-profitable. This demonstrates the importance of the *Decision Tool*, as an auxiliary tool that supports investors in the prioritization of future analysis.

VI. Analysis and Results

Criteria

The general criteria that weights on an investment decision are broadly accepted. What differs between investors is the relative importance that each criterion plays on the final decision (Hisrich and Jankowicz, 1990). That may depend on the Venture Capital firm and its specifications (market focus, investment strategy, among others) as well as the individuality of the investor, his attitude towards risk and former experience.

After analyzing several frameworks or sets of criteria available from past researches [Annex 5], the eighteen criteria selected to integrate in the *Decision Tool* fell under the following categories: (i) Management Team, (ii) Product and Market Opportunity, (iii) Financial Plan, (iv) Exit Prospects and (v) Deal Terms. The selection was made considering that the criteria had to be simple and easy to assess without the need of extensive knowledge about the target company considering the goal of the *Decision Tool* is to compare potential investments in a

pre-due diligence phase where usually information is not fully accessible and complete. The criteria (in bold) are below described.

(i) **Management Team**

The Management Team is numerous times reported as the most important factor in the decision of investing (Macmillan, Siegel and Narasimha, 1985). A Venture Capitalist usually invests in a project carried through by the management team, even if he has the ability to guide these persons or eventually replace them, it is important for the investor to be able to rely on these individuals as professionals and as human beings. Within the several characteristics of the team which may contribute to higher probability of success, three of them stand out as easy to perceive. Firstly, the entrepreneurial spirit and will of the management can be measured through the **ambition** revealed, as mentioned throughout the interviews conducted,

Secondly, as Fried and Hisrich (1994) mention, their knowledge and **expertise of the industry** necessary to a good strategy – do they understand the market? How do they relate to it? This influences the ability to understand the problem they are solving and to adapt their solution to the reality. Within this criterion, their experience is also relevant, whether in the industry, as a previous entrepreneur, or both. In fact, several studies conducted reveal that founders which have previously performed an exit and succeeded are more likely to succeed on another exit (Gompers et al, 2006).

Lastly, it is important for the investor to be able to recognize the **ability to execute** in the management team, which comes from its **quality** and **complementarity between the members**. For example, one of the Venture Capitalists interviewed claimed that, from his experience, the ideal team of founders was composed by two individuals, a sales-person and a tech-person such that their complementarity could drive results more efficiently.

(ii) **Product and Market Opportunity**

The Product and Market Opportunity is also highly mentioned in past Literature (Sahlman, 1996; Villalobos, Payne and Lipper, 2017; among others). It is relevant that the **product or technology is attractive** in such a way that it is differentiable (Rajan, 2010), captures the consumer's attention, and is not easily imitated. Venture Capital investors are also known to be attracted by **large and growing markets** (Rajan, 2010) and ideas that can be efficiently scalable and drive large revenues. A favorable **competitive position** is desirable because, as Kerr, Nanda and Rhodes (2014) explore, when the product goes to market it is likely to go through a Darwinian experimentation where the market will choose the best provider causing only differentiated and competitive players to survive. This is linked with the **likelihood of customer adoption**, which is an indicator of the revenues' potential (Kaplan and Strömberg, 2000).

Another criterion that is more subjective in terms of determining the future success but was found to be very important to Venture Capital investors through the interviews conducted, is the **positive intuition** that the investor develops towards the company, the product and its purpose. If the investor believes in the idea, he is confident that others will as well. Additionally, as discussed by Macmillan, Siegel and Narasimha (1985), it is relevant that the company's product comes to either stimulate an existing market or create a new one, hence, that it is to fill in a "*gap*" to the extent that the product it brings results with a **relevant solution to an unmet need**.

(iii) **Strategy and Plans**

The strategy and plans indicated by the company are indicative of the path that the company will take, hence the way these plans are structured indicates what the first steps of the company will be.

The **Financial plan** plays an important role (Kaplan and Strömberg, 2000), not restrictive to the numbers given *per se*, or the performance to date, but also enabling to recognize the ability that the management team has of projecting their idea to the future, which is a good indicator of a defined path and objective milestones. Hence, it is important that the financial plan reflects a knowledge of the applicable and commonly used metrics in the industry and a realistic view on the potential performance of the product. On the other hand, the **Marketing plan** allows the investor to understand how the product will be promoted and how it will attract new customers, which is an important concern for Venture Capitalists (Sahlman, 1996). As indicated by the Venture Capitalists studied, the **roadmap** defined is also decisive in measuring the strategy of the company as it defines the **go-to-market strategy** and the developments, either operational or technical, that the team expects in a given period of time.

The **favorable performance to date** (Macmillan, Siegel and Narasimha, 1985) and **traction** will also play an important role in terms of analyzing how is the product working, how it is being accepted and how the market demand is quantitatively evident.

(iv) **Exit Prospects**

Exit prospects are an important factor to consider as the potential for a high return can only come from exit prospects (Fried and Hisrich, 1994). At an early stage, the investor can investigate, for example, if the idea is inserted in a hot place for M&A or if there is a potential strategic buyer.

(v) **Deal Terms**

The Deal Terms may not be completely disclosed at first; however, these are also very important (Sahlman, 1996). For the purpose of the *Decision Tool*, this category will be measured through two criteria. Firstly, through syndication potential, which can be objectively quantified if **other VCs have invested** or are interested in investing. Secondly, through the amount of funding

required (Villalobos, Payne and Lipper, 2007) which can also be objectively quantified in a **low valuation**.

Figure 7 and *Figure 8* exhibit the average importance that the sample of Venture Capital investors studied attributes to each criterion and category.

Average Weight of Categories

Management Team	**5.00**
Market and Product Opportunity	**4.64**
Exit Prospects	**3.82**
Deal Terms	**3.36**
Strategy and Plans	**2.39**

Figure 7 – Average weight attributed to each category as a result of the inquiries made – own

Average Weight of Criteria

Ambition of Management	4.45
Management expertise in the industry	4.18
Quality, ability to execute and Complementarity	4.58
Large Market size and growth	4.82
Attractive product and/or technology	4.55
Highly likelihood of customer adoption	4.09
Favorable competitive position	3.82
Use of recent technologies	3.00
Positive intuition towards the company	3.00
Relevant solution for an unmet need	2.50
Other VCs have invested	2.73
Low valuation	2.45
Financial Plan	1.00
Favorable performance to date	3.91
Marketing Plan	2.45
Traction	2.08
Go-to-market strategy and roadmap	2.50

Figure 8 – Average weight attributed to each criterion as a result of the inquiries made – own

Decision Tool

The *Decision Tool* has the final purpose of attributing a comparative score to a potential investment given a set of eighteen criteria and the importance that those criteria weight considering the practices of the sample of Venture Capitalists studied. Hence, one could define that final scoring as a function of the eighteen criteria grouped into the five categories previously defined. The following equation illustrates the function:

$$Final\ Score = \beta_1 MT + \beta_2 MPO + \beta_3 SP + \beta_4 DT + \beta_5 EP \quad (1)$$

Where *MT* refers to Management Team, *MPO* to Market and Product Opportunity, *SP* to Strategy and Plans, *DT* to Deal Terms and *EP* to Exit Prospects; and the betas are calculated as:

$$\beta_i = W_i * S_i \quad (2)$$

Where W_i is the weight of category *i* and S_i is the score of category *i*, which in turn is calculated as the weighted average score of the criteria that compose it.

The *Decision Tool* was built so that each criterion can be scored from 0 to 5 (grey area in *Figure 9*) considering the specifications of the potential investment in analysis. The final score of each potential investment will also be a value in the same scale (0 to 5). The *Decision Tool* will weigh the attributed scorings to the criteria with the weights of *i)* (each criterion on the category), and *ii)* (each category on the final score).

Decision Tool

	Weights (out of 5)	Attributed punctuation (out of 5)		Weights (out of 5)	Attributed punctuation (out of 5)	
Management Team	**26%**	0,00	Exit Prospects (is it a hot space)	**20%**	0,00	
Ambition of Management	34%	0		100%	0	
Management expertise in the industry	32%	0				
Quality, ability to execute and Complementarit	35%	0	Deal Terms	**18%**	0,00	
			Other VCs have invested	53%	0	**Final Scoring**
Market and Product Opportunity	**24%**	0,00	**Low valuation**	47%	0	0,00
Large Market size and growth	19%	0	Strategy and Plans	**12%**	0,00	
Attractive product and/or technology	18%	0				
Highly likelihood of customer adoption	16%	0	**Financial Plan**	8%	0	
Favorable competitive position	15%	0	**Favorable performance to date**	33%	0	
Use of recent technologies	12%	0	**Marketing Plan**	21%	0	
Positive intuition towards the company	12%	0	Traction	17%	0	
Relevant solution for an unmet need	10%	0	Go-to-market strategy and roadmap	21%	0	

Figure 9 – Decision Tool – own

Application to Real Data

The final score that an investor reaches, alone, cannot lead to a solid conclusion since this is a relative tool where one needs to compare the results of a set of companies in order to be able to

draw conclusions about the potential of each investment. Hence, in order for BiG Start Ventures to be able to use the *Decision Tool*, it first scored nine of the current investments in portfolio, the ones pointed out as relevant for this purpose, with data relative to the time of the investment decision. This allowed to define a *threshold* that represents the average score at which BiG Start Ventures has invested in the past, enabling the comparison of the final score of a potential investment relative to the current portfolio. *Figure 10* illustrates the results reached.

Score of nine BiG Start Ventures Portfolio Companies

	Final Score
Portfolio Company 1	4.33
Portfolio Company 2	4.29
Portfolio Company 3	4.16
Portfolio Company 4	4.09
Portfolio Company 5	3.90
Portfolio Company 6	3.76
Portfolio Company 7	3.71
Portfolio Company 8	3.65
Portfolio Company 9	3.34
Average	3.92

Figure 10 – Score of BiG Start Ventures' Portfolio – Own

The *threshold* is at 3.92, hence BiG Start Ventures should target at investments that score above 3.92 according to the *Decision Tool*.

For the purpose of the *threshold* calculated, the arithmetic average was chosen as it is the measure of central tendency which incorporates each value in the sample equally weighted, hence not benefiting or harming some values to the detriment of others but reaching a value that represents the entirety of the sample. Nonetheless, considering the median of the scores in this case, 3.9, is very close to the average, 3.92, the distribution of the scores is close to a symmetric distribution.

It was proposed by BiG Start Ventures to evaluate one of the companies in *pipeline*[6], hereinafter mentioned as Pipeline 1. An introduction to the company and the description of the application of the *Decision Tool* will be followingly presented, as well as the main conclusions drawn.

Pipeline 1 is a *Pre-Seed* startup company currently managed by one person, to whom two other co-founders will join soon, gathering in total three skills: management, sales and tech. The company has met with BiG Start Ventures one time, after a flow of emails explaining the main idea. The following hypothesis support the scores attributed to each criterion.

As what regards the management team, the ambition is evidenced in the plans of largely expanding the business. Additionally, there is relevant expertise both in the industry, where the founder has worked before for an incumbent institution, and in the entrepreneurial space, given that he has created a successful startup which was sold to a strategic player. However, there is no experience in the combination of both. The background and expertise of the management team seem to combine well although there is no relevant information on how they work together, and BiG has only met one of them.

The market is considerably large, with high potential of scalability – the market value in 2017 for Western Europe according to the *Euromonitor International* was approximately 14 billion euros. The company will start by targeting only the B2B segment of small to micro enterprises, and then ideally grow into medium and larger corporations and even the B2C segment. The solution is relevant and evidently solves an unmet need but given that this is a hot space on the rise, the user-experience must be differentiating such that Pipeline 1 can place itself in a favorable competitive position.

[6] *Pipeline* is the common designation of a set of companies with which the investor has had contact and is or will soon be analyzing.

Pipeline 1's product would very easily be acquired by an incumbent institution hence the exit prospects are evident. On the other hand, the current pre-money valuation of the company is expensive when compared with other peers at this stage of development.

The plans of the company are robust, although some assumptions are still to be verified pending on the materialization of a set of partnerships that highly impact the financial plan and go-to-market strategy. Lastly, concerning the performance to date, it translates only to small product developments, with no traction yet.

The final scoring obtain is presented in *Figure 11*.

Application of the *Decision Tool*

	Weights (out of 5)	Attributed punctuation (out of 5)		Weights (out of 5)	Attributed punctuation (out of 5)	
Management Team	**26%**	4,16	**Exit Prospects** (is it a hot space)	**20%**	5,00	
Ambition of Management	34%	4		100%	5	
Management expertise in the industry	32%	4,5				
Quality, ability to execute and Complementarit	35%	4	**Deal Terms**	**18%**	1,42	
			Other VCs have invested	53%	0	**Final Scoring**
Market and Product Opportunity	**24%**	4,43	**Low valuation**	47%	3	3,77
Large Market size and growth	19%	4	**Strategy and Plans**	**12%**	2,98	
Attractive product and/or technology	18%	5				
Highly likelihood of customer adoption	16%	5	**Financial Plan**	8%	4	
Favorable competitive position	15%	4	**Favorable performance to date**	33%	3	
Use of recent technologies	12%	4	**Marketing Plan**	21%	4	
Positive intuition towards the company	12%	4	Traction	17%	0	
Relevant solution for an unmet need	10%	5	Go-to-market strategy and roadmap	21%	4	

Figure 11 – Scoring of Pipeline 1 – Own

The final score of Pipeline 1 is 3.77, thus is below the *threshold* previously defined for BiG Start Ventures. The low score is a reflection of the very early stage at which Pipeline 1 stands, considering that the product is not yet developed, and important partnerships are required for the business model to sustain.

However, one must point out that the *Decision Tool* was calibrated with investors that focus on Early-Stage investment, but not necessarily Pre-Seed investments which would require a

different approach, given that zero was attributed to some of the criteria which cannot be measured drawing the score down.

Considering the limitation previously mentioned, and the fact that BiG Start Ventures has already invested at an inferior scoring, it is advisable that the fund continues to follow-on conversations with *Pipeline 1*, in order to better understand the evolution of some of the criteria and reevaluate at a posterior time period.

VII. Conclusions

This study examines the process of screening and selection in Venture Capital, depicting the most important characteristics a Venture Capital investor looks for when analyzing potential investments. This enabled to create the *Decision Tool*, which can be used by BiG Start Ventures to objectively compare potential investments among each other and/or with the portfolio companies.

In accordance with the findings of Hisrich and Jankowicz (1990), Kaplan and Strömberg (2000) and Kaplan, Sensoy and Strömberg (2009), a unanimous and maximum importance is given to the Management, followed by the Market and Product Opportunity and the Exit prospects.

In this study, it was also observed a general concordance as what regards the criteria, as well as a similar profile of the Venture Capital investors as what respects strategies. This reflects that the sample of Venture Capitalists tends to screen in a similar manner in concordance with the findings of Chemmanur et. al. (2009).

The *Decision Tool* was applied to a set of BiG Start Ventures' portfolio companies, which allowed the definition of a *threshold* at 3.92 such that BiG Start Ventures should ideally target at companies that are scored above the *threshold*. This is, evidently, only an indicative score that is subject to the limitations of the *Decision Tool*.

The application of the *Decision Tool* to a company in the pipeline of BiG Start Ventures, resulted in a score below the threshold but above the minimum score at which BiG Start Ventures has invested. The conclusion was, then, that a follow-up of further was required in order to more accurately quantify the performance of that company in terms of the chosen criteria.

VIII. Limitations and Further Recommendations

One limitation of this study concerns the methodology of inquiries. As discussed by Hudson and Evans (2005), inquiries can be deceiving to the extent that the inquired investor could be influenced by his perception of what would be an ideal answer more than his real doings or could even believe to act differently from what he acts in reality. This would skew the results obtained towards the ideal perception of the decision process. However, this limitation does not invalidate the results obtained, as the ideal decision process is relevant when considering the probability of higher success.

One way to possibly mitigate this would be to monitor the Venture Capitalist in his daily activity and study his practices through a closer analysis. Furthermore, the ideal study of a successful screening and selection process of Venture Capital firms would be to monitor closely a wide number of investments from the point where the startup enters the Venture Capitalist's radar until its exit. With such information, one could extrapolate the screening and selection processes that relate with the success of Venture Capitalists through econometric studies, understanding how each characteristic valued by the Venture Capitalist at the time of the investment was decisive for its performance and exit and eliminating possible biases along the way. However, to reach such information one would have to open up the scope of the study either to Europe or the US in order to have a considerable sample of investments that Venture Capitalists would be

willing to provide information on. Moreover, this methodology would imply a much longer time-frame.

With regards to the *Decision Tool* created, one must recognize two very important limitations followingly described.

Firstly, the *Decision Tool* cannot be determinant for an investment. As acknowledged by Kerr et al. (2014) "Entrepreneurship is fundamentally about experimentation because the knowledge required to be successful cannot be known in advance or deduced from some set of first principles". In their paper they calculate the raw correlation between the scores attributed by the partners of a successful Venture Capital firm at the time of the investment and the return multiple, reaching a correlation of 0.1. *Figure 12* illustrates the results.

Correlation between scores and return multiples

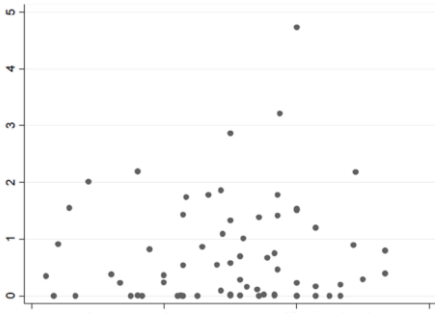

Figure 12 – Correlation between scores and return multiples of a successful US Venture Capital firm's investments – Kerr et al. (2014)

Because there is no one-size-fits-all, the *Decision Tool* can only be a tool that helps to compare potential investments and potentially indicate topics for further analysis which are relevant for investors. Nonetheless, one must consider that not all the specificities of each are taken into account by the *Decision Tool*.

Secondly, considering the calibration of the model was made with a sample of Venture Capital investors, the characteristics of their strategies of investment are limitations for the analysis.

For example, one of the Venture Capitalists interviewed claimed that he expected less in terms of financial plan from an Early-stage startup than from one obtaining Series A financing, hence the weight of that criterion would vary according to the stage of the investment.

Considering the *threshold* defined for BiG Start Ventures, one must point out that the use of the arithmetic average is not the most accurate approach, as it assumes that some of the investments made by the firm are below its target score without taking into account their performance after the investment. Furthermore, a more accurate method would be to look at the scores of successful investment decisions made by the firm, as well as scores of the decisions to not invest, and encompass this information into a more realistic *threshold*. However, without such information and taking a conservative more conservative position, the arithmetic average will be used as the *threshold* until there is enough information to define a more accurate one.

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Appendix

Annex 1 – "Startup Valuation Calculation" – Akira Hirai – Cayenne Consulting, 2001

1. My product or service is:
    a. An idea that I've been toying for a while;
    b. Currently under development, backed by solid market research and a business plan;
    c. Finally, a working prototype being tested by potential customers;
    d. Now generating revenues;
2. My industry is:
    a. Something that has to do with selling to the general public (retail, food, entertainment, etc.) or to the government;
    b. A field that nobody yet recognizes as being an industry, because my product is so cutting edge;
    c. One that was in fashion among investors a few years ago (telecommunications, Internet, B2Anything, etc.);
    d. One that is currently in fashion among investors (medical devices, nanotechnology, proteomics, security software, money-saving enterprise software, etc.);
3. My product or service will:
    a. Have some novelty value (i.e., there is only minor demand for the product in the marketplace);
    b. Make life a bit easier or more enjoyable for many people, but not solve any fundamental problems (i.e., a "nice to have" but not a "must have" for most buyers);
    c. Help a lot of people or companies do what they do a bit better, faster, and cheaper (i.e., the product addresses a fairly substantial need in the marketplace);
    d. Save lots of lives and/or money (i.e., the product is urgently needed in the marketplace);
4. Global annual revenues in the sub-sector of the market I am competing in is:
    a. Under $500 million;

   b. $500 million to $1 billion;
   c. $1-5 billion;
   d. Over $5 billion;
5. My market is:
   a. Flat or shrinking;
   b. Growing by under 10% per year;
   c. Growing by 10-30% per year;
   d. Growing by more than 30% per year;
6. My primary competitors (others who are competing for the same consumer dollar by satisfying the same consumer need) are:
   a. Nonexistent, since customers are not spending money to satisfy the need that I think they have;
   b. Large companies with big R&D and marketing budgets and existing distribution channels (i.e., I'm entering a mature industry dominated by large competitors);
   c. Other startups that I may or may not know about (i.e., I'm entering a fairly new market being explored by other startups);
   d. Substitutes (e.g., the word processor is a substitute for the typewriter, which in turn is a substitute for pen and paper - in other words, what I offer is new and doesn't have a direct competitor yet, but customers have other ways to satisfy these needs);
7. My customers (or potential customers) have:
   a. Not been identified;
   b. Expressed interest in what I am doing;
   c. Helped my team develop the product specifications and have placed pre-orders;
   d. Purchased and raved about my product, and have placed repeat orders;
8. My sales and marketing plan is:
   a. If I build it, they will come;
   b. If I build a website, optimize my keywords, and submit it to Google, they will come;
   c. I will hire a bunch of salespeople on commission only to go sell my product;
   d. I have an extensive, well-researched sales and marketing plan that includes a mix of proven, cost-effective sales and marketing tactics;
9. My revenues over the past 12 months were:
   a. $0-$999,999;
   b. $1,000,000 - $4,999,999;
   c. $5,000,000 or more;
   d. $10,000,000 or more;
10. My revenues over the next 12 months are expected to be:
   a. $0-$999,999;
   b. $1,000,000 - $4,999,999;
   c. $5,000,000 - $9,999,999;
   d. $10,000,000 or more;
11. My revenues 5 years from now are expected to be:
   a. Under $9,999,999;
   b. $10,000,000 to $29,999,999;
   c. $30,000,000 - $79,999,999;
   d. $80,000,000 or more;
12. My strategic partnerships consist of:
   a. A few emails exchanged with this guy I met at a local networking event;
   b. A letter of intent drafted by a potential distributor for my product;

   c. A handful of legitimate signed partnerships and more in the works;
   d. Exclusive R&D, licensing, supply, and distribution partnership agreements signed with a dozen Fortune 2000 companies;
13. My intellectual property includes:
   a. All this stuff in my head;
   b. A provisional patent application I prepared and filed myself;
   c. Pending patents filed a couple of years ago;
   d. Multiple issued patents in the U.S. and other major countries in Europe and Asia, comprising a total of 300 claims that broadly cover the entire value chain of my invention, along with various trademarks and service marks to protect my brand;
14. The highest level of entrepreneurial experience achieved by anybody on my team consists of:
   a. Reading Inc. and Fast Company magazines;
   b. Running a successful small business or franchise;
   c. Working as a co-founder or early employee in a successful high-tech startup;
   d. Establishing, growing, and selling or IPOing a number of companies that many would recognize by name;
15. I developed my expertise in this market by excelling at senior positions in the industry for:
   a. Never;
   b. Under 2 years;
   c. 2-5 years;
   d. Over 5 years;
16. The number of Ph.D.s that have been working for me full time for at least three months is:
   a. None;
   b. 1 to 4;
   c. 5 to 9;
   d. 10 or more;
17. The number of sales/marketing/ business development experts who understand and have extensive contacts within my industry who have been working for me full time for at least three months is:
   a. None;
   b. 1 to 4;
   c. 5 to 9;
   d. 10 or more;
18. My business plan:
   a. Does not exist;
   b. Suffers from quite a few of the mistakes described in "Why Business Plans Don't Get Funded";
   c. Looks pretty near perfect in my eyes;
   d. Looks pretty near perfect in the eyes of the advisors, attorneys, accountants, and investors who have seen it;
19. I have invested _____ hours of my own time into this venture.
   a. 0 – 999;
   b. 1,000 - 1,999;
   c. 2,000 - 3,999;
   d. 4,000 or more
20. I have invested _____ of my own funds (from savings, credit cards, second mortgage, selling blood, etc.) into this venture.

   a. $0 - $24,999;
   b. $25,000 - $99,999;
   c. $100,000 - $249,999;
   d. $250,000 or more;

21. My corporate attorney is:
   a. My cousin Sal, who got his law degree at the local community college law school;
   b. A small local firm that normally specializes in personal injury suits;
   c. A small-to-medium sized local firm that works with a lot of startups;
   d. One of the nationally recognized corporate law firms with many connections in the venture capital community;
22. My intellectual property attorney is:
   a. Did I tell you about my cousin Sal?
   b. A small local firm that claims to be an intellectual property generalist;
   c. A small-to-medium sized local firm that works with a lot of startups;
   d. One of the nationally recognized intellectual property law firms staffed with attorneys who worked in R&D in my field before going to law school;
23. If a Fortune 500 company decided to put their resources behind competing with my startup tomorrow, my startup would be:
   a. Toast;
   b. Happy that the market is being validated by a major player, but would have to settle for a smaller market share;
   c. Able to stay a step ahead through innovation, agility, and speed;
   d. Delighted to partner with them and license our proprietary technology to them, since there's no way they can get in this market without infringing on our rock-solid patents;
24. Once my product is on the market, my marginal gross margins - a new dollar of revenue minus the cost of producing that revenue - will:
   a. Huh?
   b. Essentially be flat, like a service business;
   c. Increase gradually, like a hardware business;
   d. Increase rapidly, like a software business;
25. Other startups in my industry raising venture capital at a similar stage of development (product, management team, revenues, partnerships, prior funding, etc.) are getting pre-money valuations of:
   a. Under $1 million;
   b. $1-2 million;
   c. $2-5 million;
   d. Over $5 million;

Annex 2 – "Valuation Worksheet" – Luís Villalobos – Villalobos, Payne and Lipper, 2007

Area	Impact	Characteristic	
Strength of management team	+	Many years of experience	Founder's experience
	++	Experience in the business sector	
	+++	Experience as a CEO	
	++	Experience as a COO, CTO, CFO	
	+	Experience as a product manager	
	-	Experience only as a sales person or technologist	
	--	Straight out of school	
	deal killer	unwilling	Is the founder willing to step aside if necessary, for a new CEO?
	-	difficult to convinve	
	0	neutral	
	+	willing	
	++	key part of the plan	
	0	Yes	Is the founder coachable?
	deal killer	No	
	--	Very incomplete (none identified)	How complete is the management team?
	-	Somewhat incomplete	
	0	Good start	
	+	Rather complete team	
	++	A complete and experienced management team	
Size of the opportunity	deal killer	<$50,000,000	What size is the specific market for the company's product/service?
	0	$100,000,000	
	++	>$500,000,000	
	deal killer	<$30,000,000	What is the potential for revenues in 5 years?
	0	$50,000,000	
	++	>$100,000,000	
Competitive Landscape	0	Trade secrets only	What is the status of Intellectual Property?
	+	Core patents pending	
	++	Patents issued	
	+++	Complete patent estate	
	--	Very strong	What is the strength of competition in this marketplace?
	-	Strong	
	0	Fragmented	
	+	Weak	
	++	Very weak	
	--	Very low	How large are the barriers to entry?
	-	Low	
	0	Modest	
	+	High	
	++	Very high	
Sales channel	--	Haven't ever considered	What channels of sales are in place?
	-	Many possibilities identified	
	0	Narrowed to one or two challenges	
	+	Initial challenges verified	
	+++	Channels established	
Business stage	--	Only have a plan	In what stage is the business in the company
	-	Writing code/in product development	
	0	Product ready for customer evaluation	
	++	Positive, verifiable customer acceptance by beta site	
	+++	Customer lined up	
Funding required	++	$250,000 to $750,000	What amount of funding is required
	+	$750,000 to $1,500,000	
	0	$1,500,000 to $20,000,000	

Annex 3 – List of Venture Capital Firms registered at CMVM – CMVM (2018)

Sociedades de Capital De Risco
Agrocapital - Sociedade de Capital de Risco, SA
Alpac Capital - Sociedade de Capital de Risco, S.A
Armilar Venture Partners - Sociedade de Capital de Risco, SA
Atena Equity Partners - Sociedade de Capital de Risco, S.A.
BCP Capital - Sociedade de Capital de Risco, SA
Bem Comum - Sociedade de Capital de Risco, SA
Beta - Sociedade de Capital de Risco, SA
BIZ Capital - Sociedade de Capital de Risco, SA
Blue Catching - Sociedade de Capital de Risco, SA
Bluecrow - Sociedade de Capital de Risco, S.A.
BPI Private Equity - Sociedade Capital de Risco, SA
Bright Ventures Capital, SCR, S.A
Busy Angels, SCR, S.A
Caixa Capital - Sociedade de Capital de Risco, SA
Capital Criativo - Sociedade de Capital de Risco, SA
Celtis Venture Partners - Sociedade de Capital de Risco, SA
Change Partners - SCR, SA
Core Capital - Sociedade de Capital de Risco, SA
Crest Capital Partners - Socidade de Capital de Risco, S.A.
Critical Ventures - Sociedade de Capital de Risco, SA
EDP Ventures- Sociedade de Capital de Risco, S.A
ERIGO - Sociedade de Capital de Risco, SA
Explorer Investments - Sociedade de Capital de Risco, SA
FASTTRACK VC, SCR, S.A.
Fund Box - Sociedade de Capital de Risco, SA
Grande Enseada Capital Partners, Sociedade de Capital de Risco, SA
Growth Partners Capital - Sociedade de Capital de Risco, SA
Haitong Capital - SCR, S.A.
HCapital Partners, SCR, SA
Hovione Capital, Sociedade de Capital de Risco, S.A.
Iberis Semper- Sociedade de Capital de Risco, S.A
ÍNDICO CAPITAL PARTNERS - SOCIEDADE DE CAPITAL DE RISCO, S.A
Inter Risco - Sociedade de Capital de Risco, SA
ISQ - Sociedade de Capital de Risco, SA
Lean Company Ventures, SCR, S.A.
Lince Capital, SCR, S.A
Menlo Capital - Sociedade de Capital de Risco, S.A.
Naves - Sociedade de Capital de Risco, SA
Novabase Capital - Sociedade de Capital de Risco, SA
ONETIER PARTNERS, SCR, SA
Optime Investments - Sociedade de Capital de Risco, SA
PHYXIUS, SCR, S.A.
Portugal Capital Ventures - Sociedade de Capital de Risco, SA
Quadrantis Capital - Sociedade de Capital de Risco, SA
Vallis Capital Partners - SCR, SA
2BPARTNER - Sociedade de Capital de Risco, SA

Annex 4 – Number of Privat Equity Firms in Portugal – Invest Europe (2017)

[2017]	# Headquarted in Portugal	Capital under management (€ million)
Total Private Equity Firms	25	3,762
venture capital firms	11	289
buyout firms	3	199
generalist firms	11	3,274

Number of private equity firms in existence: firms with at least one office in Europe, and that manage at least one direct investment programme/fund

Annex 5 – Criteria withdrawn from Past Literature – own

Macmillan et al., 1985		
	The entrepreneur's personality	Capable of sustained intense effort
		Able to evaluate and react to risk well
		Articulate in discussing venture
		Attends to detail
		Has personality compatible with mine
	The entrepreneur's experience	Thoroughly familiar with the market targeted by venture
		Demonstrated leadership ability in the past
		Has a track record relevant to the venture
		The entrepreneur was referred to me by a trustworthy source
		I am already familiar with the entrepreneu's reputation
	Characteristics of the product/service	The product is proprietary or can otherwise be protected
		The product enjoys demonstrated market acceptance
		The product has been developed to the point of a functioning prototype
		The product may be described as "high tech"
	Characteristics of the market	The target market enjoys a significant growth rate
		The venture will stimulate an existing market
		The venture is in an industry with which I am familiar
		There is little threat of competition during the first three years
		The venture will create a new market
	Financial Considerations	I require a return equal to at least 10 times my investment within 5-10 years
		I require an investment that can be easily made liquid (e.g. taken public or acquired).
		I require a return equal to at least 10 times my investment within at least 5 years
		I will not be expected to make subsequent investments
		I will not participate in latter rounds of investment (requires my participation in initial round of investment)
	The Venture Team	The venture is initiated by one person with the relevand experience to his idea
		The venture is initiated by more than one individual, each having similar relevant experience
		The venture is initiated by more than one individual, the individuals constituting a functionally balanced management team
		None of the above are essential for the venture to go forward.
Hisrich and Jankowicz, 1990		
	Concept	
	Management	
	Returns	
Fried and Hisrich, 1994		
	Concept	Significant potential for earnings growth
		Business idea
		Substantial "competitive advantage"
		Reasonable overall capital requirements
	Management	Personal Integrity
		Performance in prior jobs
		Realistic ability to identify risk
		Hardworking and flexible
		Thorough understanding of the business
		Leadership
		General Management expertise
	Returns	Exit opportunity
		Potential for high rate of return

Professor William A. Sahlman, 1996	
People	Who are the founders? What have they accomplished in the past? What directly relevant experience do they have for the opportunity they are pursuing? What skills do they have? Whom do they know and who knows them? What is their reputation? How realistic are they? Can they adapt as circumstances warrant? Who else needs to be on the team? Are the founders prepared to recruit high quality people? How will the team respond to adversity? Can they make the inevitable hard choices that have to be made? What are their motivations? How committed are they to this venture? How can I gain objective information about each member of the team including how they will work together? What are the possible consequences if one or more of the team members leaves?
Opportunity	Is the total market for the venture's product or service large and/or rapidly growing? Is the industry one that is now or can become structurally attractive? What are the appropriate analogies? If a venture is successful, what will it look like? Who is the customer? How does the customer make decisions? To what degree is the product or service a compelling purchase for the customer? How will the product or service be priced? How will the venture reach the identified customer segments? How much does it cost (time and resources) to acquire a customer? How much does it cost to produce and deliver the product or service? How much does it cost to support a customer? How easy is it to retain a customer? When do you have to buy resources (supplies, people, etc.)? When do you have to pay for them? How long does it take to acquire a customer? How long before the customer sends you a check? How much capital equipment is required to support a dollar of sales?
Competition	Who are the current competitors? What resources do they control? What are their strengths and weaknesses? How will they respond to our decision to enter the business? How can we respond to their response? Who else might be able to observe and exploit the same opportunity? Are there ways to co-opt potential or actual competitors by forming alliances?
Context	First, I want to see that the entrepreneurial team is aware of the context and how it helps or hinders their specific proposal. Second, and more importantly, I look for sensitivity to the fact that the context will inevitably change. If so, how might the changes affect the business? And, what can management do in the event the context worsens? Finally, are there ways in which management can affect context in a positive way? For example, can management have an impact on regulation or on setting industry standards? What new information would dramatically change your perception of the likelihood of success for a given venture?
Deal	What are the incentive effects of the allocation? Who will be attracted by the terms offered? What are the logical implications if the parties to a deal behave in their own perceived best interest? From whom should the money be raised? How much money is needed and for what purpose? scenarios?

Kaplan and Strömberg, 2000
Market Analysis - size and growth
Technology
Customer/ Adoption
Competition
Management Team
Financial projections and Exit strategies

Luís Villalobos, 2007	
Strength of Management team	Founder's experience Is the founder willing to step aside if necessary, for a new CEO? Is the founder coachable? How complete is the management team?
Size of the opportunity	What size is the specific market for the company's product/service? What is the potential for revenues in 5 years?
Competitive Landscape	What is the status of Intellectual Property? What is the strength of competition in this marketplace? How large are the barriers to entry?
Sales channel	What sales channels are in place?
Business stage	In what business stage is the company?
Funding required	Amount of funding required

Rajan, 2010
Great entrepreneurial team
Large and fast growing markets
Differentiated value proposition
Feasibility of Exit opportunities