

MASTER IN FINANCE

MASTERS FINAL PROJECT

DISSERTATION

WHEN DO STARTUPS HIRE A CEO?

ANA MARGARIDA MARTINS DE ALMEIDA

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GUIDANCE:

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Abstract

This study evaluates the factors that drive a founder to hire a Chief Executive Officer

(Professional CEO) for its start-up. Previous literature have studied CEOs and start-ups,

separately, being the study topic itself ignored. We aim to contribute to the literature by

researching in which moment the startups decide to hire a Professional CEO and the

transformations that from there will occur. The literature review refers to: startups hire or

not a Professional-CEO, which are the determinants to hire him/her and finally, which

are the characteristics of a Professional-CEO.

To enlighten this investigation, we use data collected through a semi-structured interview

and complement it with secondary sources. Our sample includes startups incubated in the

region of Lisbon, which hired a Professional CEO or remained with the initial founders

in the role of CEO (Founder-CEO). The objective of the interviews is to perform a study

case alongside an analysis of the results on a startup, in which one has acquired a

professional CEO and the other has not. The study indicates that the situations that lead

startups to hire a Professional-CEO are the need to add value and a new direction to the

company, the start of the internationalization process or obtain financing.

In addition to understand how startups would respond to the need to hire a Professional

CEO, the results from the interviews suggest that the majority of the startups do not hire

a Professional-CEO. Our major findings indicate that as Founder-CEO have unmatched

leadership skills and are crucial in the life of a startup, in the long-term, the ventures

usually remain with them in the role of Chief Executive Officers.

JEL classification: L26, L29; M13; M51

Keywords: Chief Executive Officer, Founder-CEO, Professional-CEO, Startups

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Resumo

Este estudo avalia os fatores que levam um fundador a contratar um Director Geral

(Gestor Profissional) para a sua empresa. A literatura anterior tem vindo a estudar os

Directores Gerais e as startups separadamente, sendo o tema de estudo ignorado.

Pretendemos contribuir para a literatura ao pesquisar em que momento as startups

decidem contratar um Gestor Profissional e as transformações que daí ocorrerão. A

revisão da literatura refere: se as *startups* contratam ou não um Gestor Profissional, quais

os determinantes para o contratar e, por fim, quais as características de um Gestor

Profissional. Para esclarecer esta investigação, utilizamos dados recolhidos através de uma

entrevista semi-estruturada e complementa-mo-la com fontes secundárias. A nossa amostra

inclui startups incubadas na região de Lisboa, que contrataram um Gestor Profissional ou que

permaneceram com os fundadores iniciais no papel de CEO (Gestor Fundador). O objetivo

das entrevistas é realizar um estudo de caso, juntamente com a análise dos resultados, com

uma startup que tenha um Gestor Profissional e outra startup que não tenha um Gestor

Profissional, tirando depois as conclusões. O estudo indica que há fatores que levam as

startups a contratar um Profissional-CEO, tais como a necessidade de a empresa agregar valor

e obter uma nova direcção, o início do processo de internacionalização ou obter financiamento.

Para além de entender como as startups responderem à necessidade de contratar um Gestor

Profissional, os resultados das entrevistas sugerem que a maioria das startups não contrata

um Gestor Profissional.

A nossa principal conclusão indica que o Gestor Fundador tem habilidades de liderança

incomparáveis e ao ser crucial na vida de uma startup, a longo prazo, as empresas geralmente

permanecem com estes no papel de Director Geral.

Classificação JEL: L26, L29; M13; M51

Palavras-chave: Director Geral, Gestor-Fundador, Gestor Professional, Empresas

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All errors remain my own.

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1. Introduction

Founders are the venture creators and are responsible for the appearance of the organization, its structure, culture and strategy. The role of a founder consists of holding a vision of what they outlined for the organization to be. The founder is irrefutably essential to a working capitalist economy (Nelson, 2003) and there could be single or multiple founders per organization.

Previous literature suggests that founders possess unique and intrinsic attributes which are extremely valuable for the venture as they imprint their values on the structure, strategy and culture of organization (Conyon & He, 2012). Founders remain associated with their ventures for a lifetime, usually serving as an example for other decision makers, due to their knowledge and experience (Nelson, 2003). According to Barker & Mueller (2002), a CEO is an organisation's principal decision-maker and has the greatest power to make strategic decisions. As a result, CEOs' choices contribute strongly to their firms' relative success. Furthermore, founder-CEOs often have more equity ownership in the firm, which results in them having more influence when key strategic decisions have to be made (Jayaraman et al., 2000). Whasserman (2003) provides evidence that founder CEOs often are passionate and have a deep emotional attachment to the organization, in comparison to non-founder CEOs.

Despite what was previously mentioned, the literature finds that founders are most likely to be replaced by a manager after a period of rapid expansion (Boecker & Karichalil, 2002), or upon a new round of outside funding (Wasserman, 2003). All founders will eventually leave their startups sooner or later, unless the organization fails first. The founder turnover is in the majority of the cases motivated by the stakeholders, with an expectation that the firm will go through an episode of transformational growth, in the near future (Chen & Thompson, 2015).

After the succession in the startup, the founder's role needs to be redefined (Dobrev & Barnett, 2005).

There are plenty of reasons for the founder to leave, such as being fired or displaced by the board of directors, due to his performance, he/she may relinquish management voluntarily, among others (Nelson, 2003).

The process of chief executive succession provides an opportunity for existing power relationships to be altered, for new strategic perspectives to be introduced, and for strategic change to take place (Grøstad & Johansen, 2015). As a result, there is a higher likelihood of replacing the CEO whenever the venture performance is not satisfactory and the process of substituting the CEO is the most important and toughest action for the shareholders, regarding to the quest for value creation.

The transition from a founder-CEO to a Professional-CEO occurs and is almost inevitably as the firm outgrows the expertise of the founder (Daily & Dalton, 1992) and is such an important decision that can even be traumatic, in the case that the startup is left without a leader for a long time or where the new leader does not have a sound understanding of the philosophy and the environment in which the company operates. The organizations are the reflection of their top managers.

There is a lack of research regarding this topics. The relationship of startups with CEOs is not generally addressed and studies have made only point to the CEO founder *vs.* professional CEO in the business. The purpose of this study is to address this gap. Although this is a topic that has not had much research, it carries big importance to entrepreneurs to feel enlightened and can in turn apply more knowledge in their new born companies.

The decision of selecting a CEO is critical. But does the founder need to choose a CEO for the business, or will the founder assume its position? This is what our study will conclude

There are some reasons that can lead to the hire of a Professional-CEO, such as the need to add value to the company, the start of an internationalization process, trying to obtain financing or the need of a new guidance with a different vision.

Moreover, our study was made using data collected through a semi-structured interview, where we analysed some Portuguese startups main characteristics as well as what led them to hire a CEO and under which situations. As it is an exploratory study, we interviewed a sample of founders in startups incubated in Lisbon in order to do a case study with a startup with a Founder-CEO and another startup with a Professional-CEO. These interviews will take place in the addresses of the selected startups and will be in attendance format.

Even though the majority of the founders that answered to the questionnaire mentioned that a Professional-CEO would bring a better network of clients or help in the internationalization process, they all agree that the startup needs to achieve a growing point before hiring a Professional-CEO. That said, the main conclusion of the study is that the majority of startups do not hire a Professional-CEO, but rather resort to the Founder.

This study is structured as follows: in the next sections we present a review of the literature and the prepositions to test. Section III presents the data and our sample selection. In section IV we exhibit the methodology used; followed by section V that presents a review of the sample ventures and a description of the results obtained in section VI. Finally, section VII concludes the study and presents a discussion.

2. Literature Review

According to Churchill & Lewis (1983), startups pass through five stages: existence, survival, success, take-off and maturity. In the first two stages, the main challenges are to win the market by delivering their product. In the success stage, the venture has already a niche market for its product and the competitors start emerging. The company has a considerable profit margin and it is growing. On the last two stages, the startup needs resources to continue to support its growth. These are the stages where the founder might consider hiring a CEO to help guide the venture.

But is the CEO truly crucial to a startup? What is his role? The role of a CEO involves taking various important decisions that will affect venture performance and direction. A CEO is the public image of the venture and is primary responsible for the leadership of the business. Their duty is to build a strong and solid foundation for the business and work on the first product or service that the company will deliver and maximize the venture performance.

2.1. Hire a Professional-CEO or maintain Founder-CEO

Most founders have a special bond with their venture and consequently invest themselves as a leader in the long-term, to make it reach the success. Replacing the founder-CEO should be a rare and exceptional thing when all other possibilities have been exhausted (Narasin, 2015). As Arthurs & Busenitz (2003) illustrate, founders tend to possess stronger psychological attachment and commitment to their ventures than professional-CEOs. Because of their involvement in both the creation and management of the venture, founders-CEO have an unequalled specific knowledge. The main advantages of keeping the founder-CEO are that they have emotional relationships and more knowledge about the startups and are cheaper than professional-CEOs, in terms of compensation costs and venture performance.

Founders-CEO influence their workers with their passion and dedication to the venture that they have created. They are extremely valuable for new ventures because of their organizational identification and motivation to work. There are three ingredients that founder-CEOs have: comprehensive knowledge, moral authority and total commitment to the long term (Hoffman, 2013). In the first stage, the entrepreneurs/ founders are more important and effective, whereas CEOs are more required when the business has already been established.

There are certain must-have qualifications that make a CEO the ideal person for the job. The toughest task for the founder and the board is to find a person that could fit in those parameters. An ideal CEO can make tactical adjustments to emerging challenges that will lead the startup to strong and sustainable growth. The main goal of hiring a Professional-CEO is to complement the ventures' team skills and to scale the company through its next stages of growth.

A range of consequences for the startup in a medium/long-term can arise with the decision of hiring a Professional-CEO, if he/she does not integrate in the team or understand the market. In contrast, hiring a Professional-CEO can lead the company to achieve much better results.

A problem that arises with the succession of the CEO is that many founders wrestle with an internal conflict, whether to give up control of a project where they have invested ample amount of time and energy. Thus, a founder that is completely focused about the future of the venture and its' value, understands that there must be a trade-off between creating market value and preserving control over the company (Dutia, 2015).

Replacing the founder-CEO should be a rare and exceptional thing when all other possibilities have been exhausted (Narasin, 2015). Hiring a Professional-CEO has

ambiguous results. A range of long-term consequences can come from a hiring a Professional-CEO. They make decisions, which affect venture performances and directions.

Although, as startups start growing, ventures need managerial skills allied with knowledge, in order to improve it. There is a symbolic measurement of the CEO replacement, as usually when a Founder-CEO is replaced, is due to his poor performance, helping like this, the startup into the improvement of their confidence in the future. In these cases founders should voluntarily leave and transfer the control to professional managers, to avoid being forced out by the board. The announcement of CEO change sends a signal that the person responsible for the poor performance is about to be replaced and that his successor can lead the venture to recovery (Liu *et al*, 2012).

As such, we propose:

Preposition 1: The majority of Founders-CEO does not hire a Professional-CEO

The chances of replacing a CEO that performs to the company's standard is almost non-existent. If the CEO leads the company to success, that person is a strong asset, becoming almost irreplaceable in the company.

Every founder-CEO needs to go through their moment of reflexion in order to decide if he or she is the right candidate to take the company to the next level, but there is a resistance in the founder's to change (Dutia, 2015) and according to most of the studies, they conclude that the presence of a founder-CEO is associated with better firm performance (Willard *et al.*, 1992; Fahlenbrach, 2009; Cohen *et al.*, 2013).

Willard et al., (1992) believe that many founders can and do manage growth successfully, without the help of any professional manager. Founder-CEOs possess unique intrinsic

attributes that are incomparable to professional managers and are more likely to outperform professional CEOs. (He, 2007).

Preposition 2: The founder does not want to give up their position as CEO due to the strong emotional bond they carry.

The venture's founders usually feel a deep passion for the companies they have launched and generally pass through a hard time making an introspective if their talents are best suited to lead their companies forward the next stages of growth (Dutia, 2015) and to give up control on the project they created with so much effort and dedication.

An entrepreneur has to be able to leave control, as he can be a good technical officer but may not be the best manager (Finger & Samwer, 1998).

2.2. Determinants of Hiring a Professional-CEO

Although it is a rare-event, in some circumstances the founders will hire a Professional-CEO. In this subsection, we will identify the main factors that lead founders to step back from the venture direction.

One of the reasons for hiring a Professional-CEO is to have the skills to capture more value for the startup, in order to ensure a profitable venture. Founders are replaced because there is a limit point in the development of the entrepreneurial ventures where the capabilities, skills and the vision of them are no longer enough in order to manage a growing business (Wasserman, 2012). In these situations, founders should step back and leave their control to Professional-CEOs, for the good of the company and for their continuous success.

According to Dutia (2015), as the company develops, products become more robust, technology matures, revenues grow, and the next stage of planning begins for growth and

expansion into new products/service lines. Hiring a successor for the founder-CEO is a task that requires differences of talent and experience in mature growth ventures, so it can take it to the next stage.

The cost implications of the CEO integration could be considerable and almost impossible for first stages startup to make bear to that but, for a venture to get in the process of internationalization, a CEO compensation might be expected as there are higher risks and rewards, reflecting the demand to hire a competent top executive. Oxelheim & Randøy (2004) refer that product and service market internationalization implies that the CEO might be held responsible for market fluctuations clearly beyond his or her control.

Preposition 3: A Professional-CEO is hired when the venture needs a different knowledge

When a startup goes through several rounds of founding, usually the leadership is affected. If the founder-CEO is inexperienced and young, age individual, the probability of continuing in the company decreases. Outside investors do not have confidence in his way of leading, so they usually force the founder to hire an experienced CEO.

Very often in companies the founder does not have time to retire and the company starts immediately the transition to a professional-CEO because without a leader, the company can pay financially (Khurana, 2001). This succession can cause disturbs in the business because investors will not invest on a venture that does not have a strong and stable management, so eventually end up considering it unsafe and unstable to invest.

Preposition 4: When the startup begins the process of internationalization, there is a succession of the CEO

The decision to begin a process of internationalization makes the CEO to diversify the product/ service the venture developed, into global markets and it is a critical and huge strategic decision for managers.

Vermeulen and Barkema (2002) proposed that the characteristics of senior management influence the organizational absorptive capacity and moderate the performance of a firm during international expansion.

Sapienza, *et al.*, (2006) concluded that professional managers play an important role in internationalization, as they are able to draw upon their competencies and experiences as they facilitate the establishment and operation of new offices.

Preposition 5: When the startup raises external finance from Venture Capital or Business

Angels, the odd of hiring a Professional-CEO increases

With the help of a professional manager, the internationalization may provide a lot of opportunities to startups, but capitalizing on these opportunities poses significant organizational challenges (Hsu *et al.*, 2013).

Research conducted by Noam Wasserman at Harvard Business School concluded that when a founder-CEO stepped down, the value of the company's equity increased. As the venture begins achieving a solid foothold in the marketplace, it needs different leadership capabilities (Dutia, 2015), in order to grow and access external finance.

Usually startups have lack of resources and need some founding, from venture capitalist, business angels or even corporate investors who once start providing funds to the new venture. Professional managers also play an important role on it and often try to force a CEO change early in the process.

Preposition 6: As the Founder-CEO ages, the probability of a succession increases

At the succession, CEO age will be an important criterion influencing the board's decision. As the CEO gets older, there are physiological changes that occur with age can make older CEOs less inclined to pursue acquisitions (Yim, 2013).

Older CEOs are no longer so disposed to take some risks for the startup and that is a reason for the board to replace him/her by another CEO.

Researchers argue that older executives possess less physical and mental stamina and are more risk-averse (Child, 1974), when compared to younger managers and that are less able to organize information effectively, which may result in a poorer company performance (Taylor, 1975).

2.3. Characteristics of the Professional-CEOs

There are certain must-have qualifications that make a Professional-CEO the ideal person for the job. The ideal Professional-CEO is older and have more years of prior experience (Wasserman, 2003). The main goal of hiring a Professional-CEO is to complement the ventures' team skills and scaling the company through its next stages of growth (Dutia, 2015).

Besides what was previous referred, professional-CEOs are paid higher salaries but in the same time and have an extraordinary influence on the key decisions made within the company, even outside of any other instrumental influences (Zaleznik & Kets de Vries, 1975). By contrast, they own less of the company's equity when compared to Founder-CEOs.

According to Kesner and Sebora (1994), the most important fact has to do with the succession of the founder. Or the successor CEO comes from outside or, instead, from inside the organization.

Diversity is likely to have positive effects such as increasing the environmental scanning capacity of the team and increasing the range of potential actions that the group considers when making strategic decisions (Knight *et al*, 1999).

Even though there are successors that come from inside of the companies (Pfeffer & Leblebici, 1973), outside successors have been found to make more changes, to be much more compensated, and to achieve higher inter organizational status than inside successors (Grusky, 1963). Moreover, firms are more likely to change the strategy when outside successors are chosen (Wiersema, 1992). After the succession of the founder, the position in the company has to be negotiated, and in most cases, he/she assumes a position with fewer charges (Wasserman, 2003).

Preposition 7: The transition from a Founder-CEO to a Professional-CEO leads the founder to pay much attention to the characteristics of the CEO that will hire

One of the reasons for hiring a Professional-CEO is to have the skills to capture more value for the startup, in order to ensure a profitable venture.

The founder-CEO should work together with the board to find the right person for the replacement and to manage the transition. He ought to determine whether the professional manager chosen for the startup should stay in the company or not (Dutia, 2015).

3. Data and Sample Selection

We gather unique data on startups in Portugal. Data was gathered between September and October 2016 through a survey that was administered to four startups incubated in the region of Lisbon. In the absence of a complete list of all startups in Portugal, we follow the subsequent approach to get our answers: we contacted the Instituto Nacional de Estatística (INE) and the Minister of Justice to collect data on the name and address of the startups and founders, and we decided after to make use of some of the Lisbon startup incubators, from whom we gathered primary data. After having obtained the list of incubated startups (Appendix 2), we contacted these 186 entities that are named in the Appendix 2, to send them questionnaire. In the process of trying to contact the startups incubated in Lisbon, we verified that none of them had a Professional-CEO. Thus, we requested whether the CEOs that answered us affirmatively were aware of other incubated startups that had a Professional-CEO; they put us in contact with DoctorGummy. From all the above startups, the four that responded positively, were used for the study.

With this study we were able to do a case study, identifying the main characteristics of these companies and evaluating their propensity to hire a CEO.

The complete interview is presented in Appendix 1. Our interview was divided into four parts. In the first part, we asked general questions related to the characteristics of the startup; the second part deals with the characteristics of the founders, whilst the strategy and challenges were the themes of the third part; and the fourth part addressed the role and importance of a Professional CEO.

In addition, we complemented the interview information with other data sources, like the startups' website, to check the validity of the data and constructs. We analysed the reports on the start-ups and incubators and further explored into their website to validate all information.

4. Methodology

We first pre-tested the semi-structured interview on one founder, Eng. Rosário Sommer, from the startup UFARM. We followed several suggestions by Dillman (2000), in order to maximize response rates. Another author that we also took into consideration in order to enrich our qualitative research was Myers (2013). Firstly, we sent an email to the founder stating the importance and objective of the research project, followed by our visit to do the interview. This part of the study was conducted through the interview and was discussed with the startup founders. In total, among the contacted startups, we interviewed four due to the difficulty in obtaining an affirmative response from the founders.

5. Review of the sample ventures

5.1.1. Wrightia

Wrightia is a software company that provides specialized technical consultancy on Web Methods platform, their main service. More than 70% of their services comes from customers outside of Portugal and the remaining 30%, are provided from the only five Portuguese customers. In 2016, the company sales reached 2.6 million euros and employed 30 works.

Even though the company was founded in 2006, is still incubated in Centro de Incubação e Desenvolvimento – LISPOLIS. *Wrightia* was founded by four founders, but after a few time, one was fired. Meanwhile, after this last event, the founders decided to implement two more workers, to whom the company gave away some shares. The founder did not explicit how many shares they gave away to their new workers.

Wrightias' funding sources were the capital invested (not specified) by the first three intern founders. The venture had not yet distribute dividends, being all reinvested.

All the three founders are males and have more than 24 years of experience in the industry and a minimum of six years of experience in the labor market. In its ten years existence, *Wrightia* has not hired a Professional-CEO. Dr. Júlio Coelho is the founder in charge of the company since the moment the startup was created, because is the one that presents academic background in the management area as due to that, more knowledge to face this position.

In the long-run, the start-up plans to grow to 8 million euros in sales by 2022. In order to achieve this goal, the company will increase their offer in the Portuguese market and export their know-how about the web methods area. Thus, *Wrightia* will face significant challenges in the future, such as hiring employees, approximately 30 workers per year by

the year 2022, because existing workers sometimes become saturated to travel abroad so often and the associated costs are too high. To address this problem, the company opened an office in the Northern Europe and the forecast for the next two years is to settle there from thirty to thirty five workers.

5.1.2. Soilvitae

Soilvitae is startup that designs and manufacture bio products for agriculture. Their main products are bio fertilizers, sold to the national market and also to the Spanish and South American markets. In 2015, the company sales were 85 thousand euros and employed three workers and one intern.

Soilvitae was founded in 2014 by three researchers. All the founders have a PhD in Life of Sciences but none of them had managing experience. They had experience in project managing. For one of them, *Soilvitae* was his first job. In 2016, a shareholder bought 50% of the company and joined the three founders. *Soilvitae* does not have a Professional-CEO. The founder in charge is Eng. Cristina Cruz.

The venture's funding sources were the capital invested by the three founders and the new shareholder.

The main goals in the short-run are to achieve a sales volume of 200 thousand euros by 2019, hire two more workers and insert in the market four new products, both new bio fertilizers and their own technology, that is now being studied. Another goal is to being able to expand their customer base, especially in India, where these products have been growing. For the long-run, the venture wants to develop their own and unique technology, and cease being dependent on others in the manufacturing. To achieve these goals, the company had already jointed to new partners, with the purpose of placing well the product

on the market. The companies faces fierce competition from the Asian market, however the fact that bio fertilizers are being widely used, is a point in favor of the venture.

5.1.3. *Prewind*

Prewind is a spin-off company that provides forecasting services for the energy sector and their main products are related to the development of wind farm power forecast models as well as the operation of a wind farm production forecast system. Its' sales volume was about 200 thousand euros and there are three workers in the startup.

The venture was created in 2010 and the financing sources came from an investigation project (EPREV), plus the social capital invested by the founders. The venture labours at a national level and it already made the leap to the Brazilian market.

Prewind has eight founders of which two of them are institutions. Concerning to the management experience, there already exist and three of the founders are professors connected to the industrial area, whereas the other three have experience in the industry and investigation field.

The main goals for the *Prewind* in the long-run relate to strengthening the internationalization process and to accomplish this, the venture will reinforce the marketing, new contacts and the ones that already has and arranging meetings with new clients. A close relationship with customers is essential for the business. There are always challenges and the ones that *Prewind* has to face are the multinational companies' competition and the new emergent markets.

Like the last two cases, the venture does not have a Professional-CEO and never thought about hiring one, being Dr. João Sousa the founder responsible for the CEO task.

5.1.4. DoctorGummy

The single founder of *DoctorGummy* is Dr. Nuno Santos, who has academic studies in the field of chemical engineering. The venture was founded by a private non-profit association from Oporto, called Associação das Escolas Jesus, Maria e José. The company developed intellectual property around sweets to be applied in the industries of food and pharmaceutical. *DoctorGummy* only started selling their product this year, so there are not yet numbers concerning the sales volume. The company operates in the internet base, with their website.

The investment process took place from 2008 until 2014, when *DoctorGummy* was founded. The investment sources came from the founder and in 2014, by the entrance of a singular investor, who left the company later on and after that, by the entrance of three Business Angels from Shark Tank Portugal, that few months later saw their position being rebought by the founder and finally, a second investment entered the company and *DoctorGummy* decided to hire a Professional-CEO with an incentive, such as stockoptions. Dr. Sérgio Silvestre is the company's new Professional-CEO and was hired in July of the present year.

DoctorGummy's mission is to provide families with healthy sweets and nutraceuticals. There are approximately thirty five workers in the company. The founder already had some management experiences, in his own businesses and others belonging to third parties.

DoctorGummy has already made the jump to the international market, selling their product to all the UE, by distributors that they choose previously.

The main goals for the startup in the long-run are to being able to continue the internationalization process, develop new products and improve the one that already

exists and establish their one own factory in Portugal. For these to happen, the strategies that the company will implement are to hire a Professional-CEO (strategy already made), hire more professionals to work in *DoctorGummy* and start the negotiations to install the factory. There are some challenges that the company has to face, such as being able to increase their production in order to reach the global markets, no longer rely on third parties to the manufacturing of the products and find the correct distributor for the international markets.

6. Results

The last step concerned the analysis of the data. For each case and across cases the particular network effects were analysed. According to the replication logic (Eisenhardt, 1989) comparisons across the various cases may confirm particular emergent relationships between constructs and thereby improve the validity of the relationship. When case findings disconfirm a relationship, they provide an opportunity to refine and extend the theory. However, for future research it is interesting to reformulate our propositions into testable hypotheses for a larger sample of high technology ventures. This research enables us to develop an exploratory study where we interviewed a small sample of startup founders incubated in Lisbon, using data collected through a semi-structured interview, and objectives to develop a case study with a startup containing a Founder-CEO and another startup utilizing a Professional-CEO and be able to study the differences that led them to hire or not to hire a Professional-CEO to their ventures.

Moreover, this paper also addresses the question of whether the Professional-CEO should be hired or if the company should maintain the Founder-CEO. Thus, our empirical questions are: When does a founder hire a CEO? and In which situations should a startup choose a Professional CEO rather than the Founder-CEO?

In the case of *Wrightia*, the first company analyzed, the founder referred that one of the reasons why they decided not to hire a Professional-CEO was because the company did not have yet sufficient maturity to enter in such an important decision, with such high costs. *Wrightia*'s Founder-CEO is not apologist of hiring a professional due to some examples where the professional-CEOs work for a bonus and compensations, instead of thinking about what is truly the best for the company. The venture would only hire a Professional-CEO when thinking about the internationalization process, making the structure to grow. It would have to be a Professional who knew how to run a business,

understand their culture and the objectives set. The Professional-CEO would have to trace a path for the company and be an inspiration to the venture.

Concerning *Soilvitae*'s Founder-CEO, despite the fact of being yet a small startup, the venture thought about a possible hiring of a professional that could help them grow but as they are still in the expansion phase, the costs inherent to a CEO hiring are too much for them to manage. The venture would hire a Professional-CEO when they have a critical mass capable of generating more money. In the Founder-CEO point of view, the Professional-CEO should be a very creative person and contain good knowledge of the technique used in the manufacture of the bio fertilizers, as well as the market in which the venture has a role and must have great managing capabilities. When the venture achieves a mature phase, the Professional-CEO will guide the venture and be able to make good decisions, regarding for examples raw materials and human resource phenomenon's each venture typically goes through.

In the point of view of *Prewind*'s Founder-CEO considering the possibility of hiring a Professional-CEO, his opinion is that the venture is too small and specific and there is no room for a full-time professional, as the actual responsible can accumulate both the managing and engineering tasks. A possible Professional-CEO should have some characteristics, like knowing the renewable energies sector and its' evolution and tendencies on the international level, along with a global financing knowledge of the countries in which the venture could invest. Some problems could arise if the startup decides to hire a professional, such as poor management of the team, the possibility of taking abrupt decisions that bring problems in the short-term or even the fact that the professional cannot fit or understand well the market in which the venture is functioning. A positive point in the decision of hiring a Professional-CEO would be to allow the venture leverage and give more gains, such as knowledge and experience, to the venture.

In contrast with the first cases, which prompted *DoctorGummy*'s founder to hire a professional was his professional experience in the internationalization field, as well as having better and stronger focus on the marketing (as the new CEO is a very well-known professional in the area) and in the company's communication. The founder decided to give up his position and hire a professional, to improve his company and work alongside the new CEO, in a committed way to implement the project, sharing a good relationship with one another. The characteristics the founder was looking for regarding the person who would take over as CEO, were to have an extensive professional experience, allied with a good network of contacts and good execution capabilities.

The fact that the founder hired a professional CEO resulted into some evident changes, such as being able to manage and generate more credibility to the company, increase customer network and making it faster to enter in the international market, along with a bigger investment in the national market.

Regarding the results of the case studies, they partly reinforce existing insights in the literature, referred in the literature review. With the results presented in Table I that summarizes and compares the constructs that lead the startups to hire a Professional-CEO, there is evidence that led us to conclude that preposition 1 is strengthened, as only one venture has a Professional-CEO and the reason for the others not having one yet, has to do with the fact that this hiring entails a lot of attention to the characteristics of the Professional that will be hired, leading us to the validation of preposition 7.

On what concerns to the determinants that can lead the companies to hire a Professional-CEO, the majority agree that the internationalization process causes them to hire a professional, which reinforces preposition 4. Moreover, preposition 3 is also validated as all the startups come to an agreement that there are characteristics absolutely essential

that make them decide to hire a professional, such as a great knowledge of the sector, its trends and evolution, the experience that the CEO already has and knowing how to manage and measure a company.

Preposition 5 was rejected, as none of the founders agree that in any moment for the company to obtain financing sources, they would need a Professional-CEO. Apart from the previous example, the age of a Founder-CEO construct was not mentioned in the interview, so that we can not reject preposition 6.

Despite the previous paragraph that contrast to the literature review, preposition 2 is validated by one of the founders that refers some Founder-CEOs as selfish people, not wanting to give up on their position, so as to give the chance to a professional to do their job, helping the company to grow.

The consequences that can come with the decision to hire a CEO, as the founders denote the poor performance that can reach the company, due to the fact that the professional might not fit well in the company or not understand the market in which the company operates. In contrast, there are further positive consequences in decision of hiring a CEO, such as the companies' leverage and the increase in the customers' number.

The results of our study, made through a quantitative analysis, indicate that the majority of the Portuguese startups do not hire a Professional-CEO, opting by the Founder-CEO on that position, instead.

Our findings are based on a limited number of case studies. Future research can improve the results by developing the propositions into testable hypotheses based on a larger sample of ventures.

7. Discussion and conclusions

In this study we analysed what led startups to hire a Professional-CEO, by interviewing a sample of startups incubated in the region of Lisbon, opting by a quantitative analysis. The list of the incubated startups by incubator, located in Lisbon, to whom we sent the questionnaire are presented in the Appendix section, on Appendix 2.

It is important to note that the results suggest that the vast majority of startups choose to stay in the long-term with the founder in charge as CEO, instead of hiring a Professional-CEO. The founders influence all employees with the dedication and passion that is demonstrated by the company such as their creation, being an essential piece in the startup.

The results of this study also help demonstrate what the reasons are that might have led companies to make this decision, including all the characteristics that the Professional-CEO should have to guide the team and make good decisions. Also, the lack of maturity of the company coupled with the high incentives forced by the action of hiring a professional or even the consequences that may arise in the short/long-term. There is another problem that has to do with the fact that the Founders-CEOs sometimes do not want to leave the position due to emotional attachments, preventing the startup from hiring a professional to perform this job.

However, there are some concept determinants a startup should consider when hiring a Professional-CEO, like when it wants to start the internationalization process or to generate higher turnovers.

In our opinion, it is still difficult to find a Portuguese startup that has a Professional-CEO because that requires a lot of costs and beside that fact, the founders still show some concern to deliver a job of such importance to a professional who does not resonate such passion and dedication by the company, as the Founder CEO.

Our study suffers from the following limitation: the lack and difficulty to achieve data on the startups in Portugal. Another limitation that comes up with this study is the difficulty to contact the founders of the startups incubated in Lisbon, particularly those that have a Professional-CEO.

Nonetheless, it is essential to mention that the results obtained are limited by the methodology used and by our dataset, due to the number of responses gathered from the questionnaire.

Disregarding the limitations, this study provides important information to future research, as it enforces that almost no startup, in Portugal, hires a Professional-CEO for their companies, based on a lot of factors mentioned above.

Future investigation can complement our research by conducting a questionnaire for a larger sample of startups with a Professional-CEO, to better understand the motivations that did/did not led them to hire. Although we consider the factors that affect the founders not to hire a professional to their startup to be of extreme relevance, a deeper study on their motivations and purposes should also be explored to further said data and statistics.

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9. List of Tables

TABLE I

Comparison of the constructs that lead startups to hire a Professional-CEO

Constructs	Wrightia	Soilvitae	Prewind	DoctorGummy
Reasons for not hiring a Professional- CEO	The venture does not have enough maturity. Afraid of a poor management due to incentives.	Is still in the expansion phase, needs to become more mature.	"The company is still very small and specific, requiring more maturity so there is room for a full-time professional".	Does not have. "There are some companies that do not want to hire a Professional-CEO because the Founder is selfish".
Determinants for hiring a Professional- CEO	Internationalization process.	Be able to generate a higher turnover.	The company has to grow up.	Great experience in the internationalization process. Brought a vast network of clients.
Characteristics that Professional- CEOs should have	Know how to manage a company, "You only manage what you can measure".	"High levels of creativity and great knowledge of the technique and the surrounding market".	Know the sector and their trends and evolution concerning the international markets.	Experience. Network of contacts. Execution capabilities.
Consequences concerning the hire of a Professional- CEO	Does not know.	At the right time can guide the startup and make good decisions.	Problems in the management of the team and not fit in the reality of the company. Allow the companies' leverage.	Generate more credibility to the company. Arrive faster to the international market and make a huge bet on the national market. Increase the costumers' number.

When Do Startups Hire a CEO | Ana Margarida Martins de Almeida

10. Appendix

Appendix 1: Semi-structure Interview on Professional-CEO in Startups

This interview is part of a dissertation project carried out by Ana Margarida Martins de Almeida, designed to the Master's in Finance Final Work, in order to obtain the Master's degree in ISEG - School of Economics and Management. The interview was made under

the guidance of Professor Ana Venâncio.

The purpose of this questionnaire is to obtain information about the general characteristics of the selected startups, as well as their opinions concerning the CEOs and their recruitment to the business. The interview will be in-person and will have the duration of ten to fifteen minutes, where all the data collected will be confidential and only used for academic purposes.

For the interest of the companies that collaborated with the study, we may provide them our final results.

1. Startup Characteristics

- 1. Name of the startup
- 2. Address
- 3. Representative answering the questions
- 4. The year of creation? For how many years is in the sector.
- 5. What are your sales volume? Since the beginning, how many workers did you have?

- 6. Does your company labour at a national level or did it already made the leap to the international market?
- 7. What were your funding sources? Business Angels, Venture Capitalists, ...

2. Founders Characteristics

- 1. Who are the founders of the startup and what is their educational and demographic background?
 - i. Name and Gender
 - ii. Educational Area and Field
- iii. Managerial Experience
- iv. Industry Experience
- v. Labour Experience

3. Strategy and Challenges

- 1. What are the main goals for the startup in the long-run?
- 2. Which strategies will you implement in order to achieve those goals in the future?
- 3. What are the main challenges for the future?

4. Professional CEO

1. Does your startup have a Professional CEO? Who performs this role?

For the startups with a Professional CEO:

- 1. When did you hire a Professional-CEO?
- 2. What led you to hire a professional CEO? (ex: Venture age, international experience, pressure from investors, Founder sucession)

- 3. Which are the most evident changes that you noticed?
- 4. What is your role as the founder and what is the role of a Professional-CEO?
- 5. What did you look for in a Professional-CEO? Main demographic characteristics?
- 6. What are the demographic characteristics of the Professional CEO?
 - i. Name and Gender
 - ii. Age
- iii. Education
- iv. Experience

For the startups with a Founder CEO:

- 1. Have you ever consider hiring a Professional-CEO? Why?
- 2. Under which situation/circumstances will you hire a Professional CEO?
- 3. What are the main characteristics that a CEO should have? What would you look for in a Professional-CEO? Main demographic characteristics?
- 4. What do think it will be the consequences for the startup if you hire a Professional CEO?

Appendix 2: List of incubated startups by incubator, in Lisbon, Portugal

- 1. The list of the incubated startups in Startup Lisboa Tec are the following: Pumpkin, Zaask, Wishareit, Exciting Space, Hole 19, Consultaclick, All-Desk, N-Music, Nozomi, Uniplaces, TableandFRIENDS, My TABLE, Ezimut, Intrinsic, Bewarket, Compare O Mercado, Crowdprocess, Foodzai, ImaginaryCloud, Lean Data Consulting, Limetree, Mobi AG, Modelo 3, Muzzley, My Child, Outitude, Pockted, Prodsmart, Qamine, Recibos Online, Shipizy, T-ShirtLovers, WeGoOut.
- 2. In the case of Startup Lisboa Commerce, the incubated startups are: Boas Noticias, Plugged In, Trendy Paws, Style In A Box, Yonest, Village Undeground, Velx, Naturima, GoProd!, Daring nProject, Home Lovers, "Obrigada": Sincero Souvenirs from Portugal, 351Design, Chepers, Hei, Hostel Palace Lisboa, Inout Portugal, Lisbon Riders, Movind Walls, Mystar, Nata Lisboa.
- 3. Concerning Lispólis, the list of the incubated startups are: Ebbo, Izzdone, SLG, Iberocoredata, Sapient, Vgraf, Bioteca, Esindus, Idmind, Design Andaluz, Primuscare, Wepartners, YellowScire, BlueView, Cloud 365, Keyvision, Chief Security Officer, Inevo, Share Value, Adlaser, Hafc, Plataforma Ideias, CrossRoyal, PME Excel, Tetraedro, Helponbiz, Orbcom, Unitender, CSO, Abcisaa, Capincome, Improving Communications, Business Compass, Hpss, Iep, Cimai, Engu 360, Focus BC, AreaGest, Ris 2048, Sintersa, Oppinap, By Closure, GroupVision DS, One Point Sale, Sfm, Boonzi, Noerus, Urpl, Plural, SourceFactor, Titanium Walls.
- 4. In the case of LABS Lisboa, there are incubated the following startups: MIT Solutions, Acredita Portugal, Clouts, Mom is Proud, DreamAholics, Bee, Fluxphera, Qualify Just, Garden Frame, Inspiring Code, Godinho Luz Engenharia, Lean Data

Consulting, Youphi, Realize, Milou Milou, Portugal Festival Awards, DariAcordar Associação, Renda Zero.

- 5. In regard to the incubator TEC LABS, the startups are the succeeding: Bioalvo, Biopremier, Biosurfit, Lumisense, OutMind, Associação Portuguesa de Dietistas, We value, Science4You, Fluiddo Interactive, Ega, Escola de Mar, Prewind, PeopleWare, Aavanz, Gesengue, Lusitanicus, Os Produções, Other Signs, Upaje, Biorah, Associação PAR Respostas Sociais, ICTE, Make It Bizz, Videonomics.
- 6. The next startups are the ones incubated in INOVISA: arqOut, Cooking.LAB, Corevin, Energia Lateral, Engirecursos, Fita Preta, Florestas Sustentávies, Foodintech, Gen Yen, Outfield, PlantDoctors, Prosense, Sigmetum, Sustinia, Uavision, Wine ID, Techsuber.
- 7. The following startups are incubated in EDP Starter: Feedzai, Eidt, Waydip, Omniflow, Eco-Eifes, Acharya, Unplugg, Clean Biomass, Isgreen, Techsolairs, Egg, InSwitch.
- 8. Relating to eegNEST, the succeeding companies are those incubated there: Performance Sales, Leads4sales, Skyeye, MedicalPort, EPC.
- 9. Finally, regarding to IDEAhub, the startups there incubated are the subsequent: Coderhat, Megaworks, Upgrade Yourself, Tprofit Business, Turopa DMC, SP Coaching, Dotzar.