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SARAH VENTURIM LASSO

REASONS FOR ENTREPRENEURS OPEN TECHNOLOGICAL STARTUPS: a comparison study between Brazilian and foreign entrepreneurs.

VITÓRIA

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ABSTRACT

Nascent technology based companies, startups, and entrepreneurs have relevant importance to reach a country high level of innovation and economic growth, therefore this study has as objective comparing the Brazilian and foreign entrepreneurs´ reasons for opening a startup and also to categorize the Brazilian entrepreneurs' types. It was based on a literature review of entrepreneurial intention, entrepreneurs' characteristics, reasons for entrepreneurship, entrepreneurship comparative studies and on startups. The methodology used to achieve the objective was a quantitative approach with a descriptive characteristic, a transversal cut and using primary and subjective data. A questionnaire was applied online for entrepreneurs who own startups and 455 were analyzed, where 325 were from Brazilian entrepreneurs and 130 were foreigners. After the analysis it is possible to evidentiate that Brazilians are opening startups because of market opportunity, learn as a person , new challenges and self-realization and the foreigners are opening startups with the same reasons plus freedom to implementing work methods Analyzing the result of the mean comparison, comparing to the foreigners, the Brazilians, when opening a startup, give more importance to selling products that they invented, to the market innovations, to new products idea and to the startup importance for society and market. For the foreigners, compared to the Brazilians, they give more importance to financial security, building wealth, flexibility, freedom to implement work methods and to friend´s respect. Four clusters were found in the Brazilian entrepreneurs´ sample, and they were named: Financial success entrepreneurs, Leaders entrepreneurs, New challengers and Pessimists.

Keywords: Entrepreneurship. Technological startups. International comparative study. Reasons.

RESUMO

Empresas nascentes de base tecnológica, startups, e empreendedores, tem uma importância relevante no alcance de um alto nível de inovação e crescimento econômico de um país, portanto, esse estudo tem como objetivo comparar as razões dos empreendedores brasileiros e estrangeiros para abrir uma startup e também categorizar os tipos de empreendedores brasileiros. Foi baseado em uma revisão de literatura de intenção empreendedora, características empreendedoras, razões para o empreendedorismo, estudos comparativos de empreendedorismo e startups. A metodologia utilizada foi a abordagem quantitativa com característica descritiva, corte transversal e utilizando dados primários e subjetivos. Um questionário foi aplicado online para empreendedores donos de startups e 455 respostas foram analisadas, onde 325 eram brasileiros e 130 estrangeiros. Depois da analise dos dados, é possível evidenciar que os brasileiros abrem startups pela oportunidade do mercado, aprender como pessoa, novos desafios e auto realização e os estrangeiros abrem startups pelas mesmas razões além da liberdade para implementar métodos de trabalho. Analisando o resultado da comparação das médias, comparado aos estrangeiros, os brasileiros, ao abrir uma startup, dão mais importância à venda de produtos que eles inventaram, às inovações do mercado, às ideias para novos produtos, e à importância da startup para a sociedade e o mercado. Já os estrangeiros, comparado aos brasileiros, dão mais importância à segurança financeira, à construção de riqueza, à flexibilidade, à liberdade para implementar métodos de trabalho e ao respeito dos amigos. Quatro clusters foram encontrados na amostra de empreendedores brasileiros: Empreendedores com foco em sucesso financeiro, Empreendedores líderes, os Empreendedores com foco em novos desafios e os Pessimistas.

Palavras-chave: Empreendedorismo. Startups tecnológicas. Estudo comparativo internacional. Razões.

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SUMMARY

CHAPTER 01

1. INTRODUCTION

Developed countries had experienced and demonstrated throughout their history that their economic growth and development are connected to skilled entrepreneurs, whose work with innovation and technology led to increasing income as well as social welfare in their communities (Heydari et al., 2013).

With technological advances, the spread of globalization, corporate reorganization, the increase of knowledge production and high levels of prosperity, there was a shift from a managerial economy to a new economy, which is characterized by a political approach that facilitates the creation and commercialization of knowledge through entrepreneurial activity (Thurik et al., 2013).

Accordingly, nascent technology based companies and entrepreneurs are of relevant importance to reach high levels of innovation and economic growth (Song et al., 2008; Oosterbeek et al., 2010), especially in a dynamic economic era where the entrepreneurial activity can be a mean to drive sustainable growth, technological change and also makes the globalization process easier (Carayannis et al., 2006).

This, as can be seen, for example, in Korea, where the increasing number of technology based companies had a positive impact on their economy in the 90s, as for increasing of job numbers and income (Heshimati ; Kim, 2010). In the American environment, inventions and changes in technology, especially its advances, affect the high rate of entrepreneurship in the country (Shane, 1996).

Brazil is experiencing a strong innovative growth and the entrepreneurial culture is increasingly present in the economic sphere in the form of startups, which can be defined as a technology based company with a model of repeatable and scalable business, that has innovative elements (ie. Business plan, working methods, marketing methodology) and work in conditions of extreme uncertainty (Associação Brasileira de Startups, 2013).Within this innovative scenario, startups began to develop in Brazil, and there are about 10,000 technology based companies in Brazil (Associação Brasileira de Startups, 2013).

The entrepreneurship importance in economy, the process of opening a startup, the new business development for employment creation, productivity and income generation, leads to an increased number of studies on entrepreneurship in the last 20 years and what excites its occurrence, ie Feeser ; Willard (1989) on the high technology firms performance ; Shane (1996) on the entrepreneurial motivation; Muller ; Thomas (2001) study on the culture and entrepreneurial potential; Grimaldi ; Grandi (2005) research on new business formation; and others as Dvir et al (2010); Hansen et al (2011) ; Saemundsson ; Holmén (2011) ;Barba-Sanchez ; Atienza-Sahuquillo (2011); Beckman et al (2012) and Stuetzer et al (2012).

Furthermore, the municipal, regional, national government and even in an international level, is making an ongoing effort to assist the creation of startups as well as their growth and survival, also many incentives are given to individuals who want to start a business for its economic importance (Birley,1986; Dubini, 1989; Thurik et al., 2013).

An example of this movement, is the creation of the Inovativa program and the Start Up Brasil program, initiatives for accelerating Brazilian startups created by the federal government, coupled with investments in technological parks, incubators and

accelerators (Ministério da Ciência, Tecnologia e Inovação –MCTI, 2013), and also the launch of Sebrae Up program, an initiative to mentor and help entrepreneurs and nascent startups.(Sebrae, 2014).

Although several relevant studies in entrepreneurship and new businesses creation area has been made, as Autio et al., (2001), Carter et al., (2003); Chen ; Elston (2013), it is still necessary to know and explore what drives entrepreneurs to engage on startups (Koellinger et al., 2007), which leads to the following question: what are the personal reasons for an entrepreneur open a technology startup? And is there a difference between the reasons from Brazilian and foreigners entrepreneurs? Also, which are the different entrepreneurs profiles in the Brazilian entrepreneurs? By questioning, it makes possible to stimulate the formation of potential entrepreneurs, because entrepreneurs are not born ready to be entrepreneurs, they are made by the environment and culture (Krueger ; Brazeal, 1994). Therefore, this research has the objective of identifying the reasons of Brazilian entrepreneurs, compare the Brazilian and foreign entrepreneurs´ reasons for opening a startup and also to categorize the Brazilian entrepreneurs' types.

It seek to identify what is common among these kinds of entrepreneurs, independent of his country, and what the Brazilian has as different from others.

This study can contribute to society and also government, as a greater understanding of the variables that can influence entrepreneurship may conduce to the development and use of additional policies to increase entrepreneurial activity and its results (Van de Ven et al., 1984; Birley, 1986; Shane, 1996; Mueller ; Thomas, 2001; Bosma et al., 2012).

For the academy, it is relevant to know the personal reasons of entrepreneurs to open startups, since it is possible to better assist potential entrepreneurs when

they find the environment and opportunity to open a new company (Krueger ; Brazeal, 1994), and also it is not possible to understand the entrepreneurship field and / or phenomenon if there is no understand of the entrepreneur and his project (Bruyat ;Julien, 2001;Dvir et al.,2010).

This research can also contribute to the entrepreneurs themselves, since it is known that the entrepreneurs motivation in starting a startup can help reveal how and why entrepreneurial activities are pursued, and also the entrepreneurial behavior itself can be considered a competitive advantage for the individual (Chen ; Elston, 2013; Martín-Rojas et al., 2013).

Besides, it is important to highlight that most studies are in Europe and the U.S.(Mueller ; Thomas, 2001;Hansen et al., 2011),(eg, Carter et al., 2003; Heydari et al., 2013; Chen ; Elston, 2013; Pillis ; Reardon, 2007; Autio et al., 2001) thus showing the importance of researching the entrepreneur´s reasons in an emerging market, in this case in Brazil, since technology and entrepreneurial activity can bring investments to an emerging country (Carayannis et al.,2006). Emerging economies can achieve economic development and growth objectives with an entrepreneurial economy (West et al., 2008).

Also, international comparative entrepreneurship studies are rare since of the difficulties as having access to other countries´ entrepreneurs, lack of secondary data with reliability and high expensive for researching abroad (Mueller ; Thomas, 2001).

To achieve the proposed objectives, firstly, theoretical revisions were made regarding entrepreneurship by focusing on entrepreneurial intention, following by the entrepreneur’s characteristics and reasons for entrepreneurship, in which Carter et al., (2003) study is explored and also it was used as the basis for this study, after the comparative studies on entrepreneurship are presented and also the theory on

startups. After, it is explained the used methodology followed by data analysis. It closes with the discussions, contributions, limitations, and suggestions for future studies.

CHAPTER 02

2. LITERATURE REVIEW

To have a theory support for this study, its Literature is based on entrepreneurial intention since the creation of a startup is intentional, entrepreneurs characteristics, the reasons for entrepreneurship found in the literature, entrepreneurs comparative studies to be the base of the analysis and on the startup processes. This literature review is the base for the data collection questionnaire and the discussion of the results.

2.1 ENTREPRENEURIAL INTENTION

Entrepreneurial activity/intention can be defined or influenced by an entrepreneur´s idea set on creating value with a service/product and having return and these ideas are opportunities that can pursued with further action, and they can be refined, revised and even abandoned (Saemundsson ; Holmén ,2011).It can also be influenced by founders past experience, number of founders, financing, technology type, market and the self-image of “entrepreneur” (Feeser ; Willar,1989;Pillis ; Reardon, 2007; Saemundsson ; Holmén, 2011).

When focusing on startups, its creation is an intentional act which involves a number of attempts to achieve the outcome, therefore, new business are not created by accident. There are many obstacles for becoming a successful startup, which confirms that the evolving actions in the creation process of them are intentional (Shaver et al., 2001; Koellinger et al., 2007) and Autio et al., (2001) affirm that entrepreneurial intention has been measured in different ways and studies, in which

some affirm that intentions are before the attitudes and perceptions toward entrepreneurship (Hayton ; Cholakova, 2012).

In the United States, where business and entrepreneurship are seen as a social welfare and the country seeks to encourage on its people (Birley, 1986 apud Shane, 1996), a great percentage of 18 to 64 years old adults are engaged in some kind of entrepreneurship (Friedman ; Aziz, 2012). American entrepreneurship can be explained by the Schumpeter Model, where it is affirmed that the entrepreneur establish its firms where other people cannot see the opportunities, and also sees new inventions as new business opportunities (Shane, 1996).

The American entrepreneurial rates changes can be explained by the innovation and technological rates and even by change in the population rates, besides, also consider the age distribution, the market risk rate, bankruptcy rate and also immigration for the United States rate (Shane, 1996). Adding to these, the American culture encourages individualism and has a positive predisposition for competitive business (Pillis ; Reardon, 2007).In the American environment, inventions and technological changes can influence the high entrepreneurial rate in the country (Shane, 1996), and with them came new business creation modalities as the startups.

For the Chinese environment, it is important to understand what drives entrepreneurship intention, since it has a relevant importance on it economy, especially for the non-state sector, where entrepreneurs face financial barriers and have attitude towards risk taking, also having relationships as well as social networks as important as the intention to open a new venture (Yueh,2009).

In the Brazilian environment, entrepreneurship intention is being cultivated and is being implemented in the country´s culture by programs that teaches and shows

the needed abilities for entrepreneurs such as the Empretec from Sebrae that helps individuals willing to start their own business and have entrepreneur's characteristics (Ramlow Campelli et al., 2011).

In Pillis and Reardon (2007) study on the personality traits influence on entrepreneurial intention, self- consistency was a predictor of entrepreneurial intention, as well as persuasive messages about careers and culture, in this study the American and Irish cultures on entrepreneurship were compared.

Ajzen´s theory on planned behavior can be applied to entrepreneurship, once it says that there are three key-attitudes to forecast intentions as, "attitude for the act", social norms" and realized behavior control" , and all can be found in entrepreneurs (Krueger ; Brazael, 1994). Shapero´s model of "Entrepreneurial Event" can also be applied to entrepreneurship, and it assumes that human inertia guides behavior until something breaks it, and the answer of this behavior is "credibility" and "pretention to act" (Krueger ; Brazael, 1994).

For having a major part in the startup, the entrepreneur must have a high motivation and commitment level (Van de Ven et al., 1984), as well as it is need to see an opportunity in which it will be developed into a new business (Saemundsson ; Holmén ,2011).

To know the entrepreneurial intention is relevant for the study of the entrepreneurs reasons as well as the entrepreneurs characteristics since it can influence on the entrepreneurs and on their startups.

2.2 ENTREPRENEURS CHARACTERISTICS

To understand entrepreneurship, it is relevant to focus on the individual, the entrepreneur, who has its own characteristics and abilities, as locus of control, autonomy, perseverance, commitment, vision and creativity, who believes that it is possible to create value as opening a business (Gartner, 1990; Dvir et al., 2010).

It is not everybody who has the ability to open a startup and to see, exploit and pursue the opportunities for creating new products/services, that come with new technologies, innovation, and changes in the world around, as demography, even if a person opens a business it can happen to not be able to manage it and fail (Jeng ; Wells, 2000).

Entrepreneurship requires intelligence, creativity, and successful intelligence which can be example by when an entrepreneur capitalizes his strengths and works on his weakness , as well as to know the environment context in which the startup is going in and also the discernment to change environments when does not fit (Sternberg ,2004 ; Barba-Sanchez ; Atienza-Sahuquillo, 2011).

The entrepreneur with skill set are ahead when opening a business and he adds team members with complimentary skill set to better assist his new venture, as entrepreneurs know the relevance of human capital and the need to produce high level of knowledge for startups entrepreneurs (Davidsson ; Honig,2003; McKelvey, 2004; Brandstätter, 2011; Stuetzer et al., 2012). Even universities can have importance as for encouraging, training and facilitating social process for entrepreneurs, helping them develop their skills and abilities (Hsu et al., 2007).

There is a relationship between psychological characteristics such as motive for achievement, intolerance for ambiguity, innovation, self-honor and self-efficacy,

and entrepreneurship, also entrepreneurs pay more attention to subjects, and have a different cognitive style as being perceptive and are creative (Heydari et al., 2013).

The entrepreneur characteristics such as emotions and mood are also important on its intentions to open a startup (Hayton ; Cholakova, 2011). Three characteristics can be associated with entrepreneurs and entrepreneurship are motivation to achieve goals, ambiguity or risk tolerance and personal effectiveness (Hofstede, 1964;Simon et al., 2000; Pillis ; Reardon, 2007; Kessler ; Frank, 2009; Heydari et al., 2013). The way the entrepreneurs think has different cognition and can be connected to their aims and achievement (Baron, 1998; Brandstätter, 2011).

Positive relation between entrepreneurial competences (such as invention, leadership and commercial activities or skills) and entrepreneurial personality (Obschonka et al., 2010; Brandstätter, 2011).Entrepreneurs are likely to create or open startups that fit or are similar to their personality characteristics and the organization also suffer with their personality influence on their managerial way of it, also nascent entrepreneurs need feedback for their actions and learn from them to better develop the startup (Kisfalvi, 2002; Lichtenstein et al., 2007; Dvir et al.,2010).

Entrepreneurs can be characterized as individuals that have an internal locus control believing that hard work and success are results of their actions and also have a propensity for high risk taking, as individuals who perceived low risk levels start new ventures(Simon et al., 2000; Pillis ; Reardon, 2007; Kessler ; Frank, 2009).

Individuals with characteristics as high expectation and optimist levels can also be linked to entrepreneurship, besides overconfidence and wiliness to become self-employed (Simon et al., 2000; Kolvereid ; Isaksen, 2006; Koellinger et al., 2007).

Nascent entrepreneurs who open a business are characterize as active and took actions like: looked for facilities and equipment's and financial support, organized a team, and had full time for their business, they were entrepreneurs that were on the daily routine of their startup (Carter et al., 1996).

Besides the entrepreneurial intention and the entrepreneur´s characteristics, the nascent entrepreneur's reasons for opening their startups are also crucial, as they can be alike to the career reasons of other individuals in dimensions as self-realization, financial success, innovation and independence (Carter et al., 2003).

2.3 REASONS FOR ENTREPRENEURSHIP

There are different reasons why people open a business, and they are a result of motives and intentions as well as motivation, commitment, and effort which are the key to open a business or to enter in entrepreneurship (Dubini, 1989; Barba-Sanchez ; Atienza-Sahuquillo, 2011).

Entrepreneurship is very complex and it can involve not only the environment but also risk taking people and unique and skilled individuals to open a business with fast growth (Dubini, 1989; Gartner, 1990; Simon et al., 2000; Mueller ;Thomas, 2001).

Literature shows that several factors influence the creation of new business/ startup firms, including macro and micro levels, such as environment, personal characteristics, politic, culture, society, market competition (Chen ; Elston, 2013).

For some people, to start a business can be a way to satisfy a human need to achieve **financial success** or economic safe, or even a kind of a life style (Chen ; Elston, 2013). The priority to satisfy this need is contextual, having three implications

where the first is cultural, since the reasons to start a business can differ from country to country (Hofstede,1964; Chen ; Elston, 2013), as for example, cultural factors make entrepreneurship more natural in the American context than in the Irish (Pillis ; Reardon, 2007).The second is the market orientation, once it can be for tourism, for example, and the last implication is the volatility of these reasons that can vary in time (Chen ; Elston, 2013).

Together with these reasons, it can be others that go beyond the economic aspect, as social gains, objectives, and the “I can do this” test, which leaves to encourage the aspirations and objectives levels (Carsrud ; Brännback, 2011).

Reasons can be intrinsic or extrinsic, not been mutually exclusives, where entrepreneurs with intern reasons are motivated to achieve an objective, and the ones with external reasons are motivated by status and money, as it is the case of the high percentage of individuals that see entrepreneurship as an attractive career for its high status, recognition and some become entrepreneurs as an mean for themselves (Dubini, 1989; Carsrud ; Brännback, 2011; Friedman ; Aziz, 2012).

Many entrepreneurs affirm that their decision to open and develop a startup were influenced by other people, being these entrepreneurs or famous people, or even colleagues and family members, that serve as “role model”, and even influential people that are imitated for its personal characteristic as being innovative in society (Dubini, 1989; Shane et al., , 1996;Bosma et al., 2012).

The entrepreneur’s use of influential people has a significant proportion, where one third of the studied entrepreneurs by Bosma et al., (2012) affirmed that they would not have started a startup without an influential person, and one fifth of them would not continue the startups.

There are time periods in history that entrepreneurship is seem as an “easy professional choice”, attracting high rates of entrepreneurship, and in this time period when an individual decides to be an entrepreneur, he looks if the entrepreneurial rate is high, risk rates are low and technological changes are disseminate, besides entrepreneurship can be connected to the flexibility of the work and **independence** (Dubini, 1989; Shane, 1996).

Carter et al., (2003) explored the reasons that influence the nascent entrepreneur’s reasons for their work/job and career choices, and compared with the answers from a non-entrepreneur group of people. As a result, six distinctive factors were responsible for 68% of variance: **self-realization, financial success, roles, innovation, acknowledge and independence**.

The first factor is “**self-realization**”, which is connected with the notion of “I can do this”, self-related goals and more individual reasons , followed by “**financial success**” which can be connected with financial security and earning an amount of money. “**Roles**” is a factor connected to the idea of a family tradition, of even the influence of friends, influential people / entrepreneurs, in opening a business, and as for “**innovation**” is when the individual wants to create a product and sell it, or even because the individual follow the technology market. “**Acknowledge**” is related to recognition, status, and approval from friends, family and/ or society, and “**independence**” is related to flexibility, control and freedom that can be connected to the working place and time (Carter et el, 2003).

Since there are many influential factors for entrepreneurs to open a startup, all the entrepreneurs reasons presented were summarized in Table 1.

TABLE 1: INFLUENCING FACTORS FOR ENTREPRENEURS OPENING STARTUPS

Factors	Authors
Self-realization	Carter et al., (2003); Carsrud and Brännback (2011); Dubini(1989); Aziz and Friedman(2012)
Financial success	Carter et al., (2003); Chen and Elston (2013);
Roles	Carter et al., (2003); Dubini(1989); Bosma et al., (2012) ; Shane et al., (1996)
Innovation	Carter et al., (2003); Mueller and Thomas (2001)
Acknowledge	Carter et al., (2003); Dubini (1989) ; Carsrud and Brännback (2011) ; Friedman ; Aziz(2012)
Independence	Carter et al., (2003); Chen and Elston (2013);

Source: by the author based on Carter et al., (2003) research and on the presented literature review.

As seem, many can be the reasons and motivations for entrepreneurship and opening a startup (Dubini, 1989; Carter et al., , 2003; Barba-Sanchez ; Atienza-Sahuquillo, 2011; Carsrud ; Brännback, 2011; Friedman ; Aziz, 2012), which highlights the importance for a compact model that has the most relevant factors that influence the startup opening, especially by the own entrepreneurs.

Since reasons for opening a business can defer from country to country (Hofstede, ,1964; Chen ; Elston, 2013), and one of the objectives of this study is to compare the Brazilian and foreign entrepreneurs´ reasons, it is relevant to highlight the entrepreneurship comparative studies.

2.4 ENTREPRENEURSHIP COMPARATIVE STUDIES

Comparative studies on entrepreneurship are rare since it faces many barriers as costs, access to entrepreneurs willing to participate and reliable data (Mueller ; Thomas, 2001).

Cowling (2000) aimed to see if the entrepreneurs in the European Union are different across countries, and found that age, gender and education were the key variables. When a profile is made of European entrepreneurs according to the research analyzed data, it can have different characteristics, like in United Kingdom and Sweden the entrepreneur would be older and male, in Greece and Spain the

entrepreneur would be poor educated and in Italy he would be educated (Cowling, 2000).

Mueller and Thomas (2001) studied nine countries entrepreneurs from Latin America, Asia and Easter Europe, and they argument that the country´s culture influence the values, attitudes and also the believe of its entrepreneurs, which can explain the distribution of individuals with potential for being entrepreneurs across different cultural contexts between countries. Also, the bigger the frequency of entrepreneurs among a country population, the greater is the rate of new venture openings.

When comparing United States and India, Stewart et al., (2008) found that Indian and American entrepreneurs have more in common than different, suggesting a similar behavior on information seeking, scanning and cognition.

With the focus on the emerging economies, West et al., (2008) researched entrepreneurship in Mexico and Costa Rica, finding that where there is political instability, like Mexico, the efforts in entrepreneurial activity is discourage, but social networks, and the acquisition of knowledge and tangible resources can aid new venture development. Also, in Costa Rica, even with political stability, there was no entrepreneurial activity in evidence (West et al., 2008).

A three nation research by Gupta and Fernandez (2009) in India, Turkey and United States studied the cross-cultural similarities and differences in the characteristics that are associated with entrepreneurs. They believe that culture can influence the attributed characteristics to entrepreneurs, and it was found that attributes such as competent, strong, need for achievement, self-reliant, curious, intelligent and logical were attributed to entrepreneurs by people from all the three studied countries.

Del Junco and Brás-dos-Santos (2009) aimed to analyze the difference of entrepreneurs from Germany, Italy and Spain, and according to their research in Spain entrepreneurs create a business for personal dissatisfaction, to seize opportunity, for ambition, independence, experience and need. As for German entrepreneurs the main reasons were ambition, seize opportunity, family tradition, independence, interest and need, and for the Italians entrepreneurs the main reasons were ambition as well, seize opportunity, independence and enjoyment. In summary, the main cultural values that can be associated with German, Italian and Spanish entrepreneurs are the desire for independence, adaptability and caution (Del Junco ; Brás-dos-Santos, 2009).

Klapper et al., (2010) researched 101 countries from 2000 to 2008 on new and total business number, found that 82 countries positively correlated entrepreneurship with economic growth, also which in times of economic expansion, entrepreneurs can be encourage by the optimism and can be willing to open new business.

It is interesting to highlight that when analyzing and comparing entrepreneurs from different countries that they are exposed and suffer from cultural influences from the environment that surrounds them, as it is shown by Hofstede (1984, p.83).Cultural characteristics as individualism, collectivism, power distance, uncertain avoidance, masculinity, femininity can reflect in the countries´ entrepreneurs (Hofstede ,1984,p.83). But, as the focus of this study is the Brazilian entrepreneurs comparing with the foreign entrepreneurs in a general way, cultural aspects are not present in this investigation.

In summary, entrepreneurs in different countries are not a homogenous group, since different countries have different cultures and can influence and encourage different people to become entrepreneurs (Cowling, 2000).

Besides, the entrepreneurs´ reasons, it is important to highlight as well, as the focus of this study are the entrepreneurs who found or own a technological startup, what they are and how are their creation and working process.

2.5 STARTUPS PROCESS

In this research, the term “startup” is used as a reference to nascent technological based business, that are in the market for a short time (Xavier ; Cancellier,2008), that can scale, are young with low costs, and are in an uncertain environment, in which can lead to high failure rate (Dubini, 1989; Francis ; Bessant, 2005).

The creation of new business is a relevant to know and understand process (Kessler ; Frank, 2009; Stuetzer et al., 2012), and in the potential entrepreneur perspective, the entrepreneurial process can start with one idea, with its judgment process and the idea development (Shane, 1996; Hayton ; Cholakova, 2012).Tension is created by the entrepreneur´s perception of the idea, opportunity or aspiration to start a business (Lichtenstein et al., 2007).

With time, the initial idea can be developed and refined in an opportunity that can be explored or not, and in a negative case, the idea will never be a formal opportunity, therefore, the idea and the opportunity are not the same thing, but without the idea, does not exist the opportunity (Hayton ; Cholakova,2012).

The idea formation process, idea examination, and intention, are together a development cycle of entrepreneurial opportunity, where the opportunity itself does not exist, it needs to be researched, studied, looked for and developed (Hayton ; Cholakova, 2012).

The technological based nascent businesses have five development stages: gestation, planning, contract services, own products, and multiple products (Van de Ven et al., 1984). In the first stage, which is the gestation, the founders obtain abilities and experiences that will guide them to start a business. In the second stage, called planning, starts with the founders decision to of really opening a business and starts its operations, while in the third stage, known as the service by contract stage, where the company depends on contracts to have revenue. On the fourth stage, owning products, has the product development and also where finds difficulties to find a market share and distribution channels. And the last stage, multiple products, happens when the company develops its own line of products (Van de Ven et al., 1984).

It is relevant to notice that the startup creation process is complex and fluid, which means that it is not a step by step linear one that all entrepreneurs have to follow the same path, the activities that they engage on are not in sequence or linear (Dubini, 1989; Liao et al., 2005).

The startups are born from the identifying an opportunity process together with the idea generation, concept construction, prototype test and new market introduction, the entrepreneurs seek opportunities and to find results for problems (Carter et al.,1996;Liao et al., 2005;Buijs, 2008).

That are many factors that can influence the startups born and growing , as environmental, personal, cultural, political, social, economic (resources), foundation process, and even factors regarding competition (Chen ; Elston, 2013 ; Kessler ; Frank, 2009).

This business creation depends on technological entrepreneurship that exists when opportunities are generated from scientific and engineering developments, in

the field of electronics, computers, software, biotechnology and internet that allowed the creation of a company , a market or an industry, which will attend or not the latent needs of consumers (Park,2005; Beckman et al., 2012). These technical developments can lead to models with competitive advantage, elevated technical patters and lower costs, and are connected to the creation of new products and intellectual property (Beckman et al., 2012).

Most of startups follow the 4 innovation P´s, once it develops new innovative products, which are: product/service innovation, service innovation, organization market position innovation, or innovation in the organization´s paradigm, and they can be developed separate or at the same time, since that there is no frontier between them (Francis ; Bessant, 2005).

Startups can also allow that the client create ideas for new products designs or decide which should be produced, giving them the competitive advantage on traditional organizations (Fuchs ; Schreier, 2011).

In the technological sector, where startups are insert, organization´s survival and growth can be dependent on the finding and the exploitation of an innovative strategy in a fast way and before other companies enter at the same market share (Park, 2005), once the products life cycle is smaller, the consumers are more demanding and technologies are constant for a short period of time (Dayan ; Elbanna, 2011).

Startups success and development are related to an ability set and the own entrepreneur expertise, since it is a small organization, the entrepreneur is the agent and the “major brain”, entrepreneurs have a central part on their firm and affect its orientation (Van de Ven et al., 1984; Kisfalvi, 2002).

With the literature approach in this study, it was possible to see the importance of this study, once there are many reasons for entrepreneurs to open a startup (Dubini, 1989; Carter et al, 2003; Barba-Sanchez ; Atienza-Sahuquillo, 2011; Carsrud ; Brännback, 2011; Friedman ; Aziz, 2012) , it is important to know which are the most relevant for the Brazilian entrepreneurs, and international comparative studies are rare (Mueller ; Thomas, 2011) specially in countries outside Europe and United States.

CHAPTER 03

3. METHODOLOGY

The used methodology for achieving this study´s objective is explained, beginning with the choosing of the used method for it and also the population of this study and sample. It closes with the data collection techniques and analysis.

3.1 METHOD

To achieve the proposed objectives, this research was developed using a quantitative approach with a descriptive characteristic, a transversal cut and using primary and subjective data.

Quantitative since it used a numeric data base to achieve its general objective and thus, the results of it did not suffer any influence of the researcher opinion (Hair et al., 2003), and it has a transversal cut, once it seeks to investigate the reasons of the entrepreneurs in one time period (Hair et al.,2003).

It has the descriptive characteristic once it is aimed to describe the reasons for entrepreneurs open a startup and uses primary and subjective data that was collective through a questionnaire with the purpose to achieve the research objectives.

3.2 POPULATION AND SAMPLE

The population for this study is the founders and owners of nascent technological startups. As in Beckman et al., (2012), it was separated the technological base entrepreneurship from general entrepreneurship, for its focus on

innovation, besides its concern with technical innovations, the birth of new markets and new products (Beckman et al., 2012).

It is speculated that there are around 10 thousand technological based startups in Brazil (Associação Brasileira de Startups, 2013), but there are not many studies in the field that can confirm this number as a certain. For its uncertain environment in which they are insert, there are cases in which some go bankrupt before they enter the market, since the high competition they face, unusual pressure and lack of management skills (Van de Ven et al., 1984; Roure ; Keeley, 1990).

For achieving the research objective, the used sample is for convenience, because the answers came from entrepreneurs, volunteers available to participate of the research (Hair et al., 2003). In this case, it was a total sample of 497 entrepreneurs who are startup´s founders or owners, from Brazil and abroad. But only 455 questionnaires answers were used because they passed in the control question that asked if the responder had a startup, and 42 were not used as the final sample since their negative answer in the control question of the research questionnaire.

The sample is divided in two for the comparison of them, where there are 325 Brazilian entrepreneurs and 130 foreign entrepreneurs.

The sample number is restrict by the fact that most startups have focus on mobile/internet business or even having websites, mobile applications , which can be aggravating, by the fact that they are developing new technological innovative products/services, they become closed for researches or for sharing any information about the startups.

3.3 DATA COLLECTION

For the data collection, it was used a questionnaire based on Carter et al., (2003) study, and on the factors analyzed in the literature review (Table 1). The questionnaire is based on closed end statements (survey) and it has a Likert scale of 5 points , where 1-Completely disagree ,2- Partially disagree,3-Indiferent, 4- Partially agree and 5-Completely agree, where the entrepreneurs choose their level of agreement. The questionnaire was made on Google Doc platform, and it was applied in Portuguese and English (questionnaires available on Appendices 1 and 2).

The questionnaire has a total of 28 statements. It has one control question which asks if the respondent owns/has a startup and in the case of a negative answer, it was eliminated from the final sample. Five questions are on the sample characterization, as for gender, age, education, startup market and working experience.

Twenty two statements were based on Carter et al., (2003) on the reasons for entrepreneurship through technological startups, divided into six factors: self-realization (six statements), financial success (five statements), roles (three statements), innovation (three statements), recognition (three statements) and independence (two statements).

The factors and variables that were in the research questionnaire are summarized in Table 2 for a better understanding.

A questionnaire pretest was made with 10 entrepreneurs, who found minor understanding issues that were corrected, and the sample collection went as expected.

TABLE 2: VARIABLES´ NAMES AND REFERENCE

Factor	Variable name and reference
Self- realization	Self-accomplishment (AR1) New challenges (AR2) Learn as a person (AR3) Lead and motivate others (AR4) To have power to influence a company (AR5)
Financial	Financial success (FIN1) Financial independence (FIN2) Greater personal income (FIN3) Financial security (FIN4) Build wealth (FIN5)
Independence	Flexibility (IND1) Freedom for work methods (IND2)
Innovation	Create and sell new products (INOV1) Follow technological innovation(INOV2) Many products ideas (INOV3) Market opportunity (INOV4)
Roles	For children inherit (PA1) Family tradition (PA2) Follow examples (PA3)
Acknowledge	Importance in market –society (REC1) Society´s acknowledge (REC2) Friend´s respect (REC3)

Source: Adapted from Carter et al., (2003).

The sample collection started on September 16, 2013 and closed on April 23, 2014, and was distributed on social media as Facebook startup groups and profiles, LinkedIn, emails, startup´s websites, entrepreneurship events and courses. The questionnaire was also sent to accelerators, incubators, technology parks and innovation centers from Brazil and abroad for a broader distribution of it.

3.4 DATA ANALYSIS TECHNIQUES

The data analysis techniques were chosen to better assist the research's objectives as for comparing the Brazilian and foreigner entrepreneurs´ reasons for opening a startup and also to categorize the Brazilian entrepreneurs' types.

The data obtained in the questionnaire was organized in Tables to make possible the analysis in the SPSS software.

For achieving the study´s objectives, the data analysis techniques that best suited for it were the sample characterization, descriptive analysis, the mean comparative and cluster analysis.

The sample characterization is important since to know the study sample is essential, especially once it is a comparative based research.

The descriptive analysis was also suited as for knowing the different samples opinion with the mean and also helped to compare those, as well as using the standard deviation to check for clusters in the respondents.

As for the mean comparative, a T Test was made since it was necessary to know the differences in the reason for Brazilian and foreign entrepreneurs to open a startup, and to see where they differ on it.

Also a cluster analysis was made to see the groups that would be formed inside the Brazilian sample, and their characterization, for that, an analysis of the clusters respondents was made, having their age, gender, education, startups market and working experience described and compared. The mean comparison between the clusters was made to see the differences in the perceptions among groups.

It was not relevant to make a cluster analysis of the foreigners´ sample, since they do not represent one country or region, but are from 26 countries.

CHAPTER 04

4. DATA ANALYSIS

4.1 SAMPLE CHARACTERIZATION

For a better understanding the sample characterization was divided in three parts. On the first part, the sample characterization focuses on the Brazilian entrepreneurs (Table 3), and as for the second part focus on the foreign entrepreneurs (Table 4).

Both have the same information on gender, age, education, startup market and work experience of the owner.

The third part is the comparison between both samples to see where their characterization differs (Table 5).

4.1.1 Brazilian Entrepreneurs

As for the Brazilian entrepreneurs, which there were 325 respondents, most of them are in between 25 to 28 years old (105 respondents, 32.30%), followed by 18 to 24 years old (80 respondents, 24.61%), as it can be seen in Table 3.

TABLE 3:BRAZILIAN ENTREPRENEURS SAMPLE CHARACTERIZATION

		N	%
Age	18-24	80	24,61
	25-28	105	32.30
	29-34	75	23.07
	35-42	42	12.93
	over 42	23	7.07
Gender	Female	28	8.61
	Male	297	91.38
Education	High school	10	3.07
	Graduation	205	63.07
	Specialization	60	18.46
	Master/Doctor/PhD	50	15.38

Startup market	Mobile app	42	12.92
	E-commerce	31	9.53
	Education	21	6.46
	Games	11	3.38
	Artificial intelligence (robotics)	6	1.84
	Sustainable products	9	2.76
	Health	18	5.53
	Services	99	30.46
	Others	88	27.07
Working experience	I already have startup experience	117	36
	I never had startup experience but I had worked in companies	169	52
	I don´t have experience	39	12
Total respondents		325	

Source: Research data.

For gender, 297 respondents were male (91.38%), which agrees with previous mentioned researches where the majority of entrepreneurs were male (Cowling, 2000).

As for the education of the respondents, most have graduation (205 respondents, 63.07%), in relation to the startup market, 99 respondents (30.46%) are in services and 88 (27.07%) chose the category “others” as for example communication, transportation, Big Data, social, and information technology. It can be said that these results show the influence that the universities and research centers have, especially when sponsoring innovation from students and teaching entrepreneurship in their courses (Hsu et al., 2007).

As for the owner´s working experience, 169 respondents (52%) said that did not had startup experience but had worked in other companies, showing that work experience can be important and it can influence the decision to open a technological startup.

As a generic entrepreneurs ´profile based on the answers’ percentages it is possible to say that the Brazilian entrepreneur is young, male, with high education, in

the area of services and others, and never having worked on startups before, but having experience working in other companies.

It is possible to see that the sample is not homogenous, which makes the research possible, and therefore it can represent the population of the Brazilian entrepreneurs and not one specific group.

4.1.2 Foreign Entrepreneurs

As for the foreign entrepreneurs, the total number of respondents was 130, from countries like: United States, Portugal, Morocco, England, Romania, Chile, France, India, Netherlands, Singapore, Mexico, Sweden, Ireland, Colombia, Russia, Germany, Italy, Jordan, Malaysia, Poland, Estonia, Cameroon, Spain, Australia, Japan and Canada, but none had a significant number of respondents to be considered a separated sample.

As for the age, the result as relatively close for three age ranges, where 35 respondents are from 25-28 years old (26.92%), 32 respondents are 29-34 years old (24.61%), followed by 18-24 years old (23.07%) . It is possible to see that 74.6% of the respondents are on the age range from 18-34, being economically active and young. And as for the gender, 116 were male (89.23%).

On education, 71 respondents have graduation (54.61%). In relation to the startup market, 44 (33.84%) respondents chose the option “others” having as example financial, SaaS (software as a service), cloud service, marketing and communication, as it can be seen in Table 4.

TABLE 4: FOREIGN ENTREPRENEURS

		N	%
Age	18-24	30	23.07
	25-28	35	26.92
	29-34	32	24.61
	35-42	23	17.69
	over 42	10	7.69
Gender	Female	14	10.76
	Male	116	89.23
Education	High school	8	6.15
	Graduation	71	54.61
	Specialization	6	4.61
	Master/Doctor/PhD	45	34.61
Startup market	Mobile app	8	6.15
	E-commerce	6	4.61
	Education	5	3.84
	Game	2	1.53
	Artificial intelligence (robotics)	1	0.76
	Sustainable products	1	0.76
	Health	9	6.92
	Services	27	20.76
	Others	44	33.84
Working experience	I already have startup experience	62	47.69
	I never had startup experience but I had worked in companies	51	39.23
	I don´t have experience	20	15.38
Total respondents		130	

Source: Research data.

As for their working experience, the majority of entrepreneurs on the research, corresponding to 47.69%, said to have already startup experience, meaning that startup experience can be important for foreign entrepreneurs open startups, which can be interpreted as for them being serial entrepreneurs (entrepreneurs who open and own more than one startup at the same time).

Making an generic entrepreneurs´ profile with the foreigners respondents, based on the percentages, it is possible to see that the entrepreneur is young, male, with high education, in the area of services and others, and having startup experience.

It is possible to see that the sample is heterogenic, so it has no bias and can represent the foreign entrepreneurs, making the research possible, and therefore not representing one group only.

4.1.3 Comparative of the Sample Characterization

When comparing both samples it is possible to see where they differ and are similar, as it can be seem in Table 5.

On age, the majority of the answers in both samples are in the 25-34 years old and the minority for both is the over 42 years old option, meaning that in both samples they are young.

As for gender, the great majority in both samples is men, and in education, graduation is also the great majority option, but the samples differ in the minority. For Brazilian entrepreneurs, the minority in relation to education is high school and for the foreigner is specialization.

It is also relevant to notice that in the foreigners' sample, the Master/Doctor/PhD represent 34.61% of respondents, and as for the Brazilian sample they represent only 15.38% of the sample, which is almost half of the foreigners´ respondents, showing a different reality in the entrepreneurs´ background. Even so, in both samples the major percentages have high education, which was expected since the research population and sample are owners of technological startups.

When comparing the startup market the samples differ as well, for the Brazilians the majority answered to be in the services market and the minority in artificial intelligence (robotics) and for the foreigners, the most answered option as

“others”, where they preferred to specify their market, and the minority as also in artificial intelligence, but this time, together with sustainable products.

TABLE 5: SAMPLES COMPARISON

		Brazilians (%)	Foreigners (%)
Age	18-24	24,61	23.07
	25-28	32.30	26.92
	29-34	23.07	24.61
	35-42	12.93	17.69
	over 42	7.07	7.69
Gender	Female	8.61	10.76
	Male	91.38	89.23
Education	High school	3.07	6.15
	Graduation	63.07	54.61
	Specialization	18.46	4.61
	Master/Doctor/PhD	15.38	34.61
Startup market	Mobile app	12.92	6.15
	E-commerce	9.53	4.61
	Education	6.46	3.84
	Games	3.38	1.53
	Artificial intelligence (robotics)	1.84	0.76
	Sustainable products	2.76	0.76
	Health	5.53	6.92
	Services	30.46	20.76
	Others	27.07	33.84
Working experience	I already have startup experience	36	47.69
	I never had startup experience but I had worked in companies	52	39.23
	I don´t have experience	12	15.38
Total respondents (n)		325	130

Source: Research data.

As for the respondent´s working experience, both samples agreed in the minority having their respondents saying to not have experience, but their majority differs, when most Brazilians entrepreneurs said to not have startup experience but having worked in other companies, and the foreign entrepreneurs having startup experience.

As having similar samples, it was possible to achieve the research´s objective by comparing them and their characteristics, and it is interesting to see that the samples have more in common than what they differ.

In summary, as for sample characterization, Brazilian and foreigner entrepreneurs have more in common than different, just like in Stewart et al., (2008) study with American and Indians entrepreneurs.

Analyzing the characteristics of the obtained sample in this research with other comparative researches, it is possible to see some differences and similarities between entrepreneurs.

As for age, in the Brazilian sample 80% of the respondents are from the range aged to 18-34 and 74% of the foreigners´ sample is in the same range, which goes against the characterization of the United Kingdom and Sweden entrepreneur, who is characterized as older in the study of Cowling (2000), and Chen and Elston (2013), that had most of their sample (44%) ranging from 41 to 50 years old. These results can be connected with the fact that this study has as entrepreneur sample technology startup owners and Chen and Elston (2013) had as entrepreneurs sample restaurant owners that is a different entrepreneurship area from technology, which is more connected to a younger entrepreneur.

Both samples, Brazilian and foreigners, had as a majority of respondents men, which go with Cowling (2000) research that also had a majority of men in United Kingdom and Sweden, and Chen and Elston (2013) with 87% of men in their study with China, but goes against Carter et al., (2009) that had an oversample of women, which was due to their data collection method.

As far as the entrepreneurs´ education, according to Cowling (2000), the Italian entrepreneur is educated, which also goes with both samples, since in both the majority of entrepreneurs have graduation, but goes against the Spanish and Greek entrepreneurs, since they are characterized as poor educated. The entrepreneurs´ education can be related to the entrepreneurial field in which they are

insert and are working on, as for this study focus on technological startups, it was hoped to have a high percentage of high education entrepreneurs in the sample, but in other studies with different population and sample characteristics, it is hoped to have different entrepreneurs´ educational background.

4.2 DESCRIPTIVE ANALYSIS

To see where the Brazilian and foreign entrepreneurs differ, the mean and the standard deviation were analyzed from both samples, which it can be seem on Table 6.

It is possible to see that most of the means are above 3.00 for both samples, which can mean that almost all factors are influential reasons for the respondents open startups.

Having the highest mean for the Brazilian entrepreneurs sample as 4.33, in the “innovation” factor number 4, which is connected to market opportunity, meaning that the entrepreneurs are opening startups since they have seem a market opportunity that can be taken, and goes with Hayton and Cholakova (2012) study. Also confirms the entrepreneur need to see an opportunity in which it will be developed into its startup (Saemundsson ; Holmén,2011).

The other three highest means for this sample are for the “self- realization” factor, with 4.21 for connected to learn and grow as a person, 4.20 which is connected to seek new challenges and 4.16 which stands for self-accomplishment. These means show that entrepreneurs have self-realization reasons as important and influent when opening a startup, and are seeking for learning and personal growth, new challenges and self-accomplishment.

For the foreign entrepreneur´s sample, the results were similar but not the same, the highest mean was in the same factor and sentence as the Brazilian sample, 4.27 for in the “innovation” factor number 4 which is for market opportunity, just like the Brazilian entrepreneurs´, which shows that this can be the primary reason for them to open technological startups.

The other three highest means for this sample was also are from the “self-realization” factor but not in the same order as the other sample, with 4.20 for learn and grow as a person, 4.17 standing for self-accomplishment and 4.15 connected to seek new challenges, which can be interpreted just as for the Brazilian entrepreneurs.

TABLE 6: DESCRIPTIVE ANALYSIS

BRAZILIANS
Descriptive Statistics

	N	Mean	Std. Deviation
Self realization (AR1)	325	4,1600	1,05947
New challenges (AR2)	325	4,2000	1,01531
Learn as a person (AR3)	325	4,2123	1,00669
Lead and motivate others (AR4)	325	3,6369	1,26339
To have power to influence a company (AR5)	325	3,2062	1,36217
Financial success (FIN1)	325	3,8031	1,01744
Financial independence (FIN2)	325	3,5662	1,25195
Greater personal income (FIN3)	325	3,2000	1,26930
Financial security (FIN4)	325	2,2985	1,31004
Build wealth (FIN5)	325	2,9262	1,35654
Flexibility (IND1)	325	3,3631	1,38461
Freedom for work methods (IND2)	325	3,6369	1,22116
Create and sell new products (INOV1)	325	3,7138	1,24026
Follow technological	325	3,3846	1,29924

FOREIGNERS
Descriptive Statistics

	N	Mean	Std. Deviation
Self realization (AR1)	130	4,1769	,99195
New challenges (AR2)	130	4,1538	1,00743
Learn as a person (AR3)	130	4,2077	1,03950
Lead and motivate others (AR4)	130	3,5692	1,23852
To have power to influence a company (AR5)	130	3,3692	1,25221
Financial success (FIN1)	130	3,6308	1,21450
Financial independence (FIN2)	130	3,7692	1,24227
Greater personal income (FIN3)	130	3,3385	1,21715
Financial security (FIN4)	130	2,8538	1,46331
Build wealth (FIN5)	130	3,3077	1,29905
Flexibility (IND1)	130	3,6615	1,34426
Freedom for work methods (IND2)	130	4,0000	1,14119
Create and sell new products (INOV1)	130	2,9923	1,41693
Follow technological innovation(INOV2)	130	2,7692	1,34417

innovation(INOV2)			
Many prodicts ideas (INOV3)	325	3,8431	1,22096
Market opportunity(INOV4)	325	4,3385	,93090
or children inherit (PA1)	325	2,0554	1,24599
Family tradition (PA2)	325	1,4523	,89324
Follow exemples (PA3)	325	2,8800	1,28898
Importance in market –society (REC1)	325	3,8185	1,22006
Society´s acknoledge (REC2)	325	2,7662	1,30553
Friend´s respect (REC3)	325	1,3046	,63061
Valid N (listwise)	325		

Many prodicts ideas (INOV3)	130	3,4000	1,35028
Market opportunity(INOV4)	130	4,2769	,98055
For children inherit (PA1)	130	2,2385	1,38544
Family tradition (PA2)	130	1,6308	1,11466
Follow exemples (PA3)	130	2,8462	1,27870
Importance in market – society (REC1)	130	3,5692	1,12021
Society´s acknoledge (REC2)	130	2,6385	1,31187
Friend´s respect (REC3)	130	1,7000	,96167
Valid N (listwise)	130		

Source: Research data

The standard deviation was high in both samples, having factors above 1.0, which shows that there is no homogeneity in the answers and possible clusters. The samples differed in the factors that had the highest standard deviations and have lack of consensus.

In the Brazilian sample, the highest standard deviation was 1.38 in the “independence” factor, which was connected to having more flexibility in personal life in relation to work, where 26.15% partially or strongly disagree and 50.76 % partially or strongly agree, showing that even with a mean of 3.36 what would show indifference, there is half of respondents that agree with it. This can show that entrepreneurs´ do not agree with the idea that to have flexibility in personal life in relation to work is a major reason to open a startup, but still, half of respondents are individuals who wants this flexibility.

Still in the Brazilian sample, for the “self-realization” factor connected to liking the power to influence a company, a standard deviation of 1.36, where 30.15% partially or strongly disagree and 43.69% partially or strongly agree. This lack of

consensus can be related to the fact that startups are small and nascent business, that are in the market for a short time (Xavier ; Cancellier,2008),so the influence power of the founder or owner is in agreement with its size.

And on the “financial” factor relational to build wealth, a standard deviation of 1.35, where 30.69% partially or strongly disagree and 36.31% partially or strongly agree, which shows that similar percentages have as reason to open a startup to build wealth. This lack of consensus among the entrepreneurs can be due to the fact that the startups are insert in an uncertain environment, in which can lead them to a high failure rate (Dubini, 1989; Francis ; Bessant, 2005).

For the foreign entrepreneurs´ sample, the highest standard deviation was 1.46 for the “financial” factor connected to want a greater financial security, where 43.85% partially or strongly disagree and 34.62% partially or strongly agree, showing that even with a mean of 2.85 what would show disagree, there is almost half of respondents that agree with it. This result can also be connect to the startups´ high failure rate (Dubini, 1989; Francis ; Bessant, 2005) but also with the idea that there are cases in which the startup is sold for a reasonable price for bigger companies.

Being followed by 1.41 standard deviation in “innovation” connected to the creation of new products and want to sell them, where 42.31% partially or strongly disagree and 39.25% partially or strongly agree. In this case, the disagreeing can be explained by the fact that most of the respondents are in the service market area and are not creating new products.

And in “roles” factor, the variable connected to create a business that children can inherit with 1.38 standard deviation, where 64.61% partially or strongly disagree and 20% partially or strongly agree. The high percentage of disagreeing can also be connect to the startups´ high failure rate (Dubini, 1989; Francis ; Bessant, 2005)

It is relevant to highlight that the samples had similarities in their standard deviation, although not as it happened in their mean analysis where the factors where the same, but in this case, it is possible to see a similarity between them, showing that the lack of consensus can be in the same even for different countries and cultures entrepreneurs.

As a result, it is possible to see that the Brazilian entrepreneurs, from this study´s sample, affirm that have as reasons for opening startup the market opportunity, learn as a person, self- realization and new challenges. The foreign entrepreneurs affirm that they open startup for the same reasons but also freedom to implement work methods is also a relevant reasons but this is not as relevant for the Brazilian entrepreneurs.

Both Brazilian and foreign entrepreneurs have similar reasons to open their own startups, going with Stewart et al (2008) research with American and Indians that found that they have similarities. This result shows that even being from different countries and cultures, which influence the entrepreneur (Hofstade,1964; Mueller and Thomas, 2001), they can have common reasons, but there are differences that can be seem in the next analysis.

4.3 MEAN COMPARATIVE

To analyze where the Brazilian and foreign entrepreneurs differ in perceptions, a T Test was made, and from the total of 22 variables, only 9 of them showed to be statistically different at 0,05, and what can be seemed as difference in thoughts, which it can be seem on Table 7 and Table 8.

Two groups of variables had no statistically differences in the samples´ means: the self-realization factor and roles factor.

TABLE 7: GROUP STATISTICS

Group Statistics

LOCAL		N	Mean	Std. Deviation	Std. Error Mean
Financial security (FIN4)	BRAZILIANS	325	2,2985	1,31004	,07267
	FOREIGNERS	130	2,8538	1,46331	,12834
Build wealth (FIN5)	BRAZILIANS	325	2,9262	1,35654	,07525
	FOREIGNERS	130	3,3077	1,29905	,11393
Flexibility (IND1)	BRAZILIANS	325	3,3631	1,38461	,07680
	FOREIGNERS	130	3,6615	1,34426	,11790
Freedom for work methods (IND2)	BRAZILIANS	325	3,6369	1,22116	,06774
	FOREIGNERS	130	4,0000	1,14119	,10009
Create and sell new products (INOV1)	BRAZILIANS	325	3,7138	1,24026	,06880
	FOREIGNERS	130	2,9923	1,41693	,12427
Follow technological Innovation (INOV2)	BRAZILIANS	325	3,3846	1,29924	,07207
	FOREIGNERS	130	2,7692	1,34417	,11789
Many products ideas (INOV3)	BRAZILIANS	325	3,8431	1,22096	,06773
	FOREIGNERS	130	3,4000	1,35028	,11843
Importance in market – society(REC1)	BRAZILIANS	325	3,8185	1,22006	,06768
	FOREIGNERS	130	3,5692	1,12021	,09825
Friend´s respect (REC3)	BRAZILIANS	325	1,3046	,63061	,03498
	FOREIGNERS	130	1,7000	,96167	,08434

Source: Research data.

The first group of variables is the one connected to the Finance factor and had two variables with statistical differences between them. The first variable is FIN4 which goes to financial security, where the Brazilian sample had a lower mean (2.29) than the foreign sample (2.85), what can be interpreted as for the Brazilians opening startups with the less perception of having more financial security than the foreigners.

The FIN5 is connected to build wealth, where foreign sample had a higher mean (3.30) than the Brazilian (2.92), what can be seem as the foreigners opening startups with the idea of building more wealth than the Brazilian entrepreneurs.

It is relevant to notice that the foreign sample had a mean that indicates indifference and the Brazilian sample indicate disagree, but means can not be

analyzed by themselves, and in these cases the standard deviation for them as high, as for 1.35 for the Brazilian sample and 1.29 for the foreign sample.

The second factor is independence and also had two statistically different variables between samples. The first is INDI1 that goes for work flexibility in relation to personal life, where the Brazilian sample had a lower mean (3.36) than the foreigners (3.66), meaning that foreigners open startups to have more flexibility in work in relation to their personal life than Brazilians.

The second variable INDI2 stands for freedom to implement work methods, where the foreigners had a higher mean (4.00) than Brazilians (3.63), which means that foreign entrepreneurs open startups to have more freedom in implement their own work methods than Brazilians.

The third factor is innovation with three statistically different variables. The first is INOV1 that stands for inventing new products and wanting to sell them, where the Brazilian sample had a higher mean (3.71) than the foreigners (2.99), meaning that Brazilians open startups since they invent products and want to put them in the market and sell, more than foreigner entrepreneurs.

The foreigners' entrepreneurs are opening startups with the idea of building more wealth, to have more flexibility in work in relation to their personal life, to have more freedom in implementing their own work methods.

Foreigners´ reasons go with Chen and Elston (2013) study as for the need to achieve financial security and also since their reasons are from macro and micro levels, they are personal as well as environmental.

TABLE 8: INDEPENDENT SAMPLES TEST

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
	Equal variances								Lower	Upper
Financial security (FIN4)	assumed	2,589	,108	-3,948	453	,000	-,55538	,14066	-,83182	-,27895
	not assumed			-3,766	216,128	,000	-,55538	,14749	-,84608	-,26469
Build wealth (FIN5)	assumed	,103	,748	-2,743	453	,006	-,38154	,13910	-,65490	-,10817
	not assumed			-2,794	247,343	,006	-,38154	,13654	-,65047	-,11261
Flexibility (IND1)	assumed	,530	,467	-2,094	453	,037	-,29846	,14251	-,57852	-,01840
	not assumed			-2,121	244,210	,035	-,29846	,14071	-,57562	-,02130
Freedom for work methods (IND2)	assumed	4,357	,037	-2,918	453	,004	-,36308	,12442	-,60759	-,11857
	not assumed			-3,004	253,092	,003	-,36308	,12086	-,60109	-,12506
Create and sell new products (INOV1)	assumed	5,786	,017	5,377	453	,000	,72154	,13418	,45784	,98524
	not assumed			5,080	212,248	,000	,72154	,14205	,44154	1,00154
Follow technological Innovation (INOV2)	assumed	,219	,640	4,519	453	,000	,61538	,13617	,34778	,88299
	not assumed			4,454	230,609	,000	,61538	,13818	,34314	,88763
Many products ideas (INOV3)	assumed	7,335	,007	3,391	453	,001	,44308	,13067	,18629	,69987
	not assumed			3,248	217,897	,001	,44308	,13643	,17419	,71196
Importance in market – society (REC1)	assumed	,125	,724	2,014	453	,045	,24923	,12375	,00604	,49242
	not assumed			2,089	257,389	,038	,24923	,11930	,01430	,48416
Friend´s respect (REC3)	assumed	39,114	,000	-5,148	453	,000	-,39538	,07681	-,54632	-,24444
	not assumed			-4,330	175,129	,000	-,39538	,09131	-,57559	-,21518

Source: research data

And also, the foreigners ´reasons go with the results of studies from Dubini (1989), Carsrud and Brannback (2011) and Aziz and Friendman (2012), since one of their motivations is building wealth, which is connected to seem entrepreneurship as an attractive career, status and money.

The variable INOV2 connected to follow the market technology innovations, where the Brazilian sample had a higher mean (3.38) than the foreigners (2.76), meaning that Brazilian entrepreneurs follow the market innovations more closely.

The INOV3 variable connected to new products ideas, where the Brazilians had a higher mean (3.84) than foreigners (3.40), meaning that Brazilian entrepreneurs open startups because they have new products ideas, more than foreign entrepreneurs.

The third and last factor is acknowledgement, with two statistically different variables. The first is REC1 which stands for the startup importance for the society/market, where Brazilians had a higher mean (3.81) than foreigners (3.56), meaning that Brazilians care more about the startup importance for the society and market, and they open one for it, than foreign entrepreneurs, who also had a high mean.

When analyzing the results of the mean comparison, Brazilians are opening startups to sell the new products that they invented, because they follow the market innovations, have new products ideas and also care about the startup importance for the society and market.

The variable REC3, standing for friends respect for startup owners, where foreigner had a higher mean (1.70) than Brazilians (1.30), showing that

neither of the entrepreneurs open startups for their friends respect, as both had low means.

Connecting with Del Junco and Brás-dos-Santos (2009) study, Brazilian entrepreneurs' reasons to open a startup can be connected to Spanish, German and Italians entrepreneurs, since all these samples want to seize an opportunity that they can see in the market. Foreigners can also be connected to this study, as two of their main reasons stand for independence, as freedom to implement work methods and flexibility, like Spanish, German and Italian entrepreneurs, that also have independence as one key desire when opening a startup.

This analysis shows that there is a statistically difference on the Brazilian and foreign entrepreneurs reasons in 9 variables. The foreigners think more on financial security, build more wealth, flexibility, freedom to implement work methods and friend´s respect when opening a startup them the Brazilians. They can be connected to external reasons as the idea of achieving a financial goal or a life style connected to money and status (Dubini, 1989; Carsrud ; Brännback, 2011; Friedman ; Aziz, 2012 ; Chen ; Elston, 2013).

On the other hand, the Brazilian entrepreneurs think more on create and sell new products, follow technological innovation, many products ideas and the importance in market and society when opening a startup more than the foreigners. Their reasons are more intern, connect to achieving an objective or a mean for themselves (Dubini, 1989; Carsrud ; Brännback, 2011; Friedman ; Aziz, 2012 ; Chen ; Elston, 2013).

4.4 CLUSTER ANALYSIS

A cluster analysis was made in the Brazilian sample, which found 4 clusters in the Brazilian entrepreneurs, and they can be seen in Table 9.

TABLE 9: BRAZILIAN ENTREPRENEURS CLUSTERS

Cluster	Characteristics	Statistically different means (variables)
Financial success entrepreneurs (cluster 1)	78 respondents. Lowest number of women (3.84%). Highest number of entrepreneurs over 42 years old (12.82%) Highest number of entrepreneurs in the sustainable products area (5%).	Self-realization factor had one variable related to have power to influence a company. All finance variables. One innovation variable related to market opportunity. Three variables for Roles. One variable for Recognition related to Friends 'respect. No independence variables.
New challenges entrepreneurs (cluster 2)	96 respondents.Largest cluster. Highest number of young entrepreneurs (from 18 to 28 years old - 69%). Highest number of entrepreneurs with specialization, master and PhD (33%). Highest percentage on e-commerce and games (17%). Highest number of entrepreneurs with no startup experience and no experience at all (92%).	All self-realization variables. Three finance variables. All two independence variables. All innovation variables. Two roles variables. Two recognition variables.
Leaders entrepreneurs (cluster 3)	92 respondents. Highest percentage of 35 to over 42 years old entrepreneurs (20%). Highest percentage of entrepreneurs on mobile apps (14%). Lowest percentage of entrepreneurs with High school education (1.08%). Highest percentage of entrepreneurs in the service market (34%). Highest percentage of entrepreneurs with startup experience (15%).	Two variables on self-realization factor. Four variables on finance. All variables in the independence factor. Three variables on the Innovation factor. Two variables on Roles. No recognition variables.
Pessimist entrepreneurs (cluster 4)	59 respondents. Smallest cluster. Highest percentage of women (11%).	All factors had statistically different means

Source: by author.

Analyzing Table 9, is possible to see that each cluster has its own characteristics, as while the Financial success entrepreneurs focus on the financial reasons more than others, agreeing with Chen and Elston (2013), Dubini (1989), Carsrud and Brannback (2011) and Aziz and Friendman (2012).

The New challengers are reasoning with Del Junco and Brás-dos-Santos (2009) study. In this cluster, all the variables on self- realization and innovation were statistically different from other clusters, which characterize these entrepreneurs as new challengers.

The third cluster, Leaders is connected with the New Challengers as both belong to the same factor Self- realization, but it gave its highest mean to the variable connected to lead others as the main reason to open a startup. They are also connected to finance and roles, going with Dubini (1989), Shane et al., (1996) and Bosma et al., (2012).

The last cluster being the Pessimist entrepreneurs as for the quantity of low means they gave and also on sentences where the other clusters gave high means.

Even though being similar, since they are from one sample, each cluster has its own characteristics and variables with statistically different means. The four clusters are analyzed and characterized for better understanding.

4.4.1 Financial Success Entrepreneurs

When analyzing the first cluster on the Brazilian sample, it was possible to see the mean difference and the significant difference with others clusters on the sample, where a total of 11 variables had significant differences, which can be seen in Table 10 and Table 11 (fully presented on Appendices 5-6).

The Financial success entrepreneurs (Cluster 1) had 78 respondents and corresponded for 24% of the total sample. Most of the respondents in this cluster are between 25 to 28 years old (29.48%), and also it has the highest

number of entrepreneurs over 42 years old (12.82%). It has the lowest percentage of women (3.84%). Entrepreneurs with graduation (65.38%) were also a high percentage, and were from different startups markets, choosing to answer “others” (32.05%) and never had startup experience but had worked in other companies (56.41%). These results go with studies from Cowling (2000), Yueh (2009), Chen and Elston (2013) on the entrepreneurs characteristics.

TABLE 10: BRAZILIAN CLUSTER 1 GROUP STATISTICS

CL1		N	Mean	Std. Deviation	Std. Error Mean
To have power to influence a company (AR5)	CL1	78	3,7179	1,25768	,14240
	Others	247	3,0445	1,35627	,08630
Financial success (FIN1)	CL1	78	4,2949	,79133	,08960
	Others	247	3,6478	1,03271	,06571
Financial independence (FIN2)	CL1	78	4,3333	,89249	,10105
	Others	247	3,3239	1,25278	,07971
Greater personal income (FIN3)	CL1	78	4,1282	,88800	,10055
	Others	247	2,9069	1,23113	,07834
Financial security (FIN4)	CL1	78	3,6667	1,13580	,12860
	Others	247	1,8664	1,03710	,06599
Build wealth (FIN5)	CL1	78	4,1154	,95320	,10793
	Others	247	2,5506	1,24469	,07920
Market opportunity (INOV4)	CL1	78	4,6026	,77861	,08816
	Others	247	4,2551	,96046	,06111
For children inherit (PA1)	CL1	78	3,0513	1,32799	,15037
	Others	247	1,7409	1,03872	,06609
Family tradition (PA2)	CL1	78	1,9487	1,19411	,13521
	Others	247	1,2955	,70833	,04507
Follow examples (PA3)	CL1	78	3,2308	1,23712	,14008
	Others	247	2,7692	1,28760	,08193
Friend´s respect (REC3)	CL1	78	1,5128	,76860	,08703
	Others	247	1,2389	,56636	,03604

Source: research data.

It is possible to see the factors and the variables with significant differences. For the “self-realization” factor, only one variable AR5, which is connected to have power to influence a company, had significant differences in the mean. For cluster 1 the mean is 3.71 as for the other clusters is 3.04, which shows that the respondents in cluster are opening startups to have power to

influence a company more than in the other clusters form the same sample, which goes with Roberts (1989) study that affirms that technological entrepreneurs have moderated need for power.

For the “financial” factor, all the five variables had significant differences among cluster 1 and the others. It is relevant to see the high difference between them, which shows that in cluster 1 the respondents are opening more startups to have financial success than in other clusters, which gave the cluster this name. These results go with Yueh (2009) study, where it affirms that the Chinese entrepreneurs have finance reasons as earning money to open new ventures, but goes against Roberts (1989) study with MIT students that says that the financial gains is less focus of the entrepreneur.

As for the “innovation” factor, one variable INOV4, which is connected to market opportunity, had significant difference, where cluster 1 had a mean of 4.60 and the other clusters 4.25, showing that the respondents in cluster 1 are opening startups for market opportunity more than the respondents in other clusters. This result goes with Del Junco and Brás-dos-Santos (2009), since on their study entrepreneurs from Spain, Germany and Italy have seized opportunity as reasons to create their business.

Analyzing the “roles” factor, three variables had significant difference, PA1 connected to opening a startup for children inherit, had a mean of 3.05 whereas other clusters had a mean 1.74. It is relevant to see the great difference between the mean of them, showing that in cluster 1, the entrepreneurs are opening startups that their children can inherit more than the respondents in other clusters. The variable PA2 connected to family tradition also had significant differences, where for cluster 1 the mean was 1.94 as for

other clusters was 1.29. And PA3, connected to follow examples, was the last variable in this factor that had a significant difference in the clusters means, where in cluster 1 the mean was 3.23 and in other clusters was 2.76, showing that the entrepreneurs in this cluster open startups following examples more than the entrepreneurs from other clusters in this sample. These results goes against Dubini (1989), Shane et al., (1996) and Bosma et al., (2012) since it shows that the respondent entrepreneurs have little influence of role models as family, friends and others, even in this cluster that had a higher mean but it is 3.23.

And the last factor that had significant difference is “acknowledge” with one variable, REC3, connected to friend´s respect, where in cluster 1 the mean was 1.51, the other clusters had a mean of 1.23, showing even that the respondents in cluster 1 have higher mean, neither clusters are opening startups thinking of their friends ´respect for other startups owners than the entrepreneurs in other clusters.

When analyzing all the variables together for this cluster, it is possible to see that financial was the factor with more significant variables and higher means, as for self – realization, innovation and acknowledge factors, only one variable on each were significant and roles had three variables but with low means, showing the financial factor as the more important for this cluster, having for this influenced its name.

TABLE 11: BRAZILIAN CLUSTER 1 INDEPENDENT SAMPLES TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
	Equal variances	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
To have power to influence a company (AR5)	Assumed	,256	,613	3,888	323	,000	,67341	,17319	,33270	1,01413
	not assumed			4,044	138,110	,000	,67341	,16651	,34417	1,00266
Financial success (FIN1)	Assumed	5,784	,017	5,081	323	,000	,64710	,12736	,39654	,89766
	not assumed			5,824	166,978	,000	,64710	,11111	,42773	,86647
Financial independence (FIN2)	Assumed	18,125	,000	6,604	323	,000	1,00945	,15286	,70871	1,31018
	not assumed			7,843	180,731	,000	1,00945	,12871	,75548	1,26341
Greater personal income (FIN3)	Assumed	9,240	,003	8,116	323	,000	1,22132	,15048	,92528	1,51737
	not assumed			9,582	178,285	,000	1,22132	,12746	,96980	1,47285
Financial security (FIN4)	Assumed	,798	,372	13,058	323	,000	1,80027	,13786	1,52905	2,07149
	not assumed			12,455	120,275	,000	1,80027	,14455	1,51409	2,08645
Build wealth (FIN5)	Assumed	13,636	,000	10,195	323	,000	1,56478	,15349	1,26282	1,86674
	not assumed			11,689	167,085	,000	1,56478	,13387	1,30048	1,82907
Market opportunity (INOV4)	Assumed	9,058	,003	2,907	323	,004	,34750	,11954	,11233	,58268
	not assumed			3,240	157,405	,001	,34750	,10727	,13563	,55938
For children inherit (PA1)	Assumed	6,874	,009	9,053	323	,000	1,31039	,14475	1,02561	1,59517
	not assumed			7,978	108,360	,000	1,31039	,16425	,98483	1,63595
Family tradition (PA2)	Assumed	51,481	,000	5,918	323	,000	,65317	,11036	,43605	,87029
	not assumed			4,583	94,697	,000	,65317	,14252	,37022	,93612
Follow examples (PA3)	Assumed	1,052	,306	2,785	323	,006	,46154	,16570	,13556	,78752
	not assumed			2,844	133,791	,005	,46154	,16228	,14058	,78250
Friend´s respect (REC3)	Assumed	28,876	,000	3,399	323	,001	,27395	,08060	,11538	,43252
	not assumed			2,908	104,706	,004	,27395	,09419	,08718	,46073

Source: Research data.

4.4.2 New Challenges Entrepreneurs

As for the second cluster from the Brazilian sample had 18 variables with significant differences and the means and standard deviations can be seen in Table 12 and the significant differences among them on Table 13 (fully presented in Appendices 7-8).

TABLE 12: BRAZILIAN CLUSTER 2 GROUP STATISTICS

CL2		N	Mean	Std. Deviation	Std. Error Mean
Self-realization (AR1)	CL2	96	4,5417	,70958	,07242
	Others	229	4,0000	1,13941	,07529
New challenges (AR2)	CL2	96	4,7188	,55636	,05678
	Others	229	3,9825	1,08404	,07164
Learn as a person (AR3)	CL2	96	4,7188	,57497	,05868
	Others	229	4,0000	1,07197	,07084
Lead and motivate others (AR4)	CL2	96	4,3021	,84753	,08650
	Others	229	3,3581	1,30558	,08628
To have power to influence a company(AR5)	CL2	96	3,9479	,99863	,10192
	Others	229	2,8952	1,37567	,09091
Financial success(FIN1)	CL2	96	4,0729	,81104	,08278
	Others	229	3,6900	1,07399	,07097
Financial independence(FIN2)	CL2	96	4,0417	,88159	,08998
	Others	229	3,3668	1,32980	,08788
Greater personal income(FIN3)	CL2	96	3,6354	1,03740	,10588
	Others	229	3,0175	1,31444	,08686
Flexibility(IND1)	CL2	96	3,9792	1,13304	,11564
	Others	229	3,1048	1,40095	,09258
Freedom for work methods(IND2)	CL2	96	4,3125	,70056	,07150
	Others	229	3,3537	1,28136	,08467
Create and sell products (INOV1)	CL2	96	4,0833	1,13941	,11629
	Others	229	3,5590	1,25036	,08263
Follow technological innovation (INOV2)	CL2	96	3,9792	,99450	,10150
	Others	229	3,1354	1,33246	,08805
Many products ideas (INOV3)	CL2	96	4,2083	1,07524	,10974
	Others	229	3,6900	1,24778	,08246
Market opportunity(INOV4)	CL2	96	4,5938	,64201	,06552
	Others	229	4,2314	1,01033	,06676
For children inherit (PA1)	CL2	96	1,8542	,98386	,10041
	Others	229	2,1397	1,33365	,08813
Follow examples (PA3)	CL2	96	3,6667	1,01221	,10331
	Others	229	2,5502	1,25074	,08265
Importance in market-society (REC1)	CL2	96	4,1354	1,03232	,10536
	Others	229	3,6856	1,26935	,08388
Society´s acknoledge (REC2)	CL2	96	3,2500	1,16980	,11939
	Others	229	2,5633	1,30843	,08646

Source: Research data.

Cluster 2, had 96 respondents and corresponds to 29% of the total sample, in which it has the highest number of young entrepreneurs (from 18 to 24 years old - 69%), highest number of entrepreneurs with specialization, master and PhD (33%), and also highest number of entrepreneurs with no startup experience and no experience (89%), meaning that the New challenge entrepreneurs are the youngest, more specialized and having their first startup experience.

It is possible to see that more factors and variables had significant differences than in the Cluster 1 analysis. For the “self-realization” factor, the variable AR1, connected to self-realization, had a mean of 4.54 and the other clusters had 4.00, showing that the entrepreneurs in cluster 2 open startups thinking more on their self-realization than the respondents in the other clusters. This result goes with the “I can do this” ideal, connected to Carsrud and Brännback (2011)study.

Focusing on the variable AR2, connected to new challenges, cluster 2 had a mean of 4.71 and the other clusters 3.98, which shows that the respondents in cluster 2 open startups linked to new challenges than the respondents in other clusters, which gave this cluster´s name. This result can be connected to the idea that entrepreneurs seek opportunities and new challenges, and also find results for problems (Carter et al., 1996; Liao et al., 2005; Buijs, 2008).

As for the AR3 variable, connected to learn as a person, cluster 2 had a mean of 4.71 and the other clusters 4.00, showing that the entrepreneurs in cluster 2 open startups with the idea of learning as a person, more than the entrepreneurs of the other clusters. On the AR4 variable connected to learn and

motivate others, still on the “self-realization” factor, cluster two had a mean of 4.30 and as for the other clusters, 3.35, showing that in cluster two the entrepreneurs are opening startups linked to the idea of learning and motivate others, more than the entrepreneurs of other clusters. Both results can be connected to Gupta and Fernandez (2009), that affirm that entrepreneurs are curious and also with Dubini (1989), Shane et al., (1996) and Bosma et al., (2012) studies on the influence suffered by entrepreneurs, showing that they want motivate and influence others as well.

As for the AR5 variable, connected to having power to influence a company, cluster 2 had a mean of 3.94 and the other clusters 2.89, meaning that the respondents in cluster 2 open startups thinking on the power they are going to have to influence a company, going with Roberts (1989) idea that entrepreneurs have a need for power.

For the “financial” factor, three variables had significant differences among cluster 2 and the others. The first variable FIN1, connected to financial success, cluster 2 had a mean of 4.07, while the other clusters 3.69, meaning that in cluster 2 the entrepreneurs are opening their startups thinking more on the financial success than the entrepreneurs who belong to the other clusters, but the financial success cluster had a mean of 4.21.

As for the variable FIN2, connect to financial independence, cluster 2 had a mean of 4.04 as for the other clusters 3.36, showing that the cluster 2 entrepreneurs think of the financial independence when opening the startups more than the entrepreneurs in other clusters. And when focusing on the FIN3 variable, which stands for greater personal income, cluster 2 had a mean of 3.63 and as for the other clusters 3.01, meaning that the respondents in cluster

2 open startups with the reason of greater personal income, more than the entrepreneurs belonging to other clusters. These results go with the idea of entrepreneurs need to achieve a financial or economic safe (Chen ; Elston, 2013).

The “independence” factor had two variables, IND1 and INDI2. In the IND1 variable, standing for flexibility, cluster 2 had a mean of 3.97 and the other clusters 3.10, which shows that the respondents in cluster 2 think more on their flexibility more than the respondents in other clusters. In the INDI2 variable, connected to freedom with work methods, cluster 2 had a mean of 4.31 and the other clusters had a mean of 3.35, showing that the entrepreneurs on the second cluster think more on their freedom with work methods when opening startups.

These results go with Del Junco and Brás-dos-Santos (2009) as in their study entrepreneurs from Spain, Germany and Italy open their business having independence as a factor and this independence can be as for working methods and freedom, as Carter et al., (2003) mention or as financial.

As for the “innovation” factor, fours variables had significant difference, Inov1 connected to create and sell new products, had for cluster 2 a mean of 4.08 and for the other clusters 3.55, meaning that in cluster 2 the entrepreneurs open startups with the reason to create and sell products more than in the other clusters. Connected to following technological innovation, the INOV2 variable had for cluster 2 a mean of 3.97 and 3.13 for the other clusters which means that cluster 2 entrepreneurs open startups since they follow technological innovations more than the entrepreneurs from other clusters, which makes

connection within a cluster of new challenge entrepreneurs, agreeing with Carter et al., (2003) study.

Still on the “innovation” factor, INOV3, variable connected to many products ideas, had cluster 2 with a mean of 4.20 and the other cluster with 3.69, meaning that the respondents in cluster 2 open startups since they have many products ideas more than the respondents in other clusters. And INOV 4, the last variable in this factor, connected to market opportunity, had cluster two mean of 4.59 and 4.23 mean for other clusters, which means that the entrepreneurs in cluster 2 open startups since the see a market opportunity more than the entrepreneurs in other clusters. These results agree with Carter et al., (2003) and Del Junco and Brás-dos-Santos (2009) where to seize an opportunity is seem as one main factor to open a startup.

Analyzing the “roles” factor, two variables had significant difference, PA1 and PA3, where PA1 standing for children inherit, cluster two had a mean of 1.85 and the other clusters 2.13, meaning that besides both had low means, the entrepreneurs from other clusters think less than the entrepreneurs from cluster 2 to open startups so their children can inherit, which can be connected to the startups´ high failure rate (Dubini, 1989; Francis ; Bessant, 2005) that can make impossible for entrepreneurs´ children to inherit the startup.And PA3, connected to follow examples, the cluster 2 had a mean of 3.66 and the other clusters had a mean of 2.55, showing that the entrepreneurs form cluster 2 open startups following examples than the entrepreneurs from other clusters.

TABLE 13: BRAZILIAN CLUSTER 2 INDEPENDENT SAMPLES TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
Equal variances		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Self-accomplishment (AR1)	assumed	9,525	,002	4,318	323	,000	,54167	,12545	,29487	,78846
	not assumed			5,185	276,675	,000	,54167	,10447	,33601	,74732
New challenges (AR2)	assumed	24,316	,000	6,311	323	,000	,73622	,11666	,50671	,96572
	not assumed			8,054	310,411	,000	,73622	,09141	,55635	,91608
Learn as a person (AR3)	assumed	23,444	,000	6,202	323	,000	,71875	,11588	,49077	,94673
	not assumed			7,814	304,330	,000	,71875	,09199	,53774	,89976
Lead and motivate others (AR4)	assumed	27,461	,000	6,528	323	,000	,94400	,14461	,65952	1,22849
	not assumed			7,727	267,658	,000	,94400	,12217	,70347	1,18454
To have power to influence a company (AR5)	assumed	16,556	,000	6,783	323	,000	1,05272	,15519	,74740	1,35804
	not assumed			7,708	242,364	,000	1,05272	,13657	,78370	1,32174
Financial success (FIN1)	assumed	10,416	,001	3,138	323	,002	,38296	,12205	,14284	,62308
	not assumed			3,512	233,445	,001	,38296	,10904	,16814	,59778
Financial independence (FIN2)	assumed	34,180	,000	4,567	323	,000	,67485	,14776	,38416	,96555
	not assumed			5,366	262,973	,000	,67485	,12577	,42721	,92250
Greater personal income (FIN3)	assumed	5,205	,023	4,101	323	,000	,61795	,15070	,32148	,91442
	not assumed			4,512	223,687	,000	,61795	,13695	,34807	,88783
Flexibility (IND1)	assumed	10,302	,001	5,416	323	,000	,87436	,16144	,55676	1,19197
	not assumed			5,903	218,412	,000	,87436	,14813	,58241	1,16631
Freedom for work methods (IND2)	assumed	40,786	,000	6,907	323	,000	,95879	,13881	,68571	1,23187
	not assumed			8,651	301,351	,000	,95879	,11083	,74070	1,17688
Create and sell new products (INOV1)	assumed	6,078	,014	3,539	323	,000	,52438	,14819	,23285	,81592
	not assumed			3,676	194,478	,000	,52438	,14265	,24303	,80573
Follow technological innovation(INOV2)	assumed	17,925	,000	5,585	323	,000	,84380	,15109	,54655	1,14104
	not assumed			6,280	236,078	,000	,84380	,13437	,57908	1,10851
Many products ideas (INOV3)	assumed	6,203	,013	3,554	323	,000	,51838	,14586	,23143	,80533
	not assumed			3,776	205,282	,000	,51838	,13727	,24774	,78901
Market opportunity (INOV4)	assumed	21,109	,000	3,248	323	,001	,36231	,11155	,14285	,58177
	not assumed			3,873	272,344	,000	,36231	,09355	,17814	,54647
For children inherit (PA1)	assumed	19,766	,000	-1,893	323	,049	-,28557	,15090	-,58243	,01129

	not assumed			-2,137	238,708	,034	-,28557	,13360	-,54877	-,02238
Follow examples (PA3)	assumed	12,220	,001	7,745	323	,000	1,11645	,14415	,83285	1,40004
	not assumed			8,439	218,275	,000	1,11645	,13230	,85570	1,37720
Importance in market –society	assumed	7,369	,007	3,072	323	,002	,44983	,14645	,16171	,73794
(REC1)	not assumed			3,340	217,229	,001	,44983	,13467	,18439	,71526
Society´s acknowledge	assumed	6,145	,014	4,450	323	,000	,68668	,15432	,38308	,99028
(REC2)	not assumed			4,658	198,077	,000	,68668	,14741	,39598	,97738

Source: Research data.

This result shows that the new challengers are inspired by others more than the entrepreneurs from other clusters (even with a not so high mean) being these other entrepreneurs or famous people, colleagues and family members, that are imitated for its personal characteristic as being innovative in society (Dubini, 1989; Shane et al., 1996; Bosma et al., 2012).

And the last factor that had significant difference is “acknowledge” with two variables, REC1 and REC 2.In the variable REC1 which is connected to importance in market and society, cluster 2 had a mean of 4.13 and the other clusters had a mean of 3.68, showing that cluster 2 entrepreneurs think more on the importance in market and society than the entrepreneurs in other clusters. And in the REC2 variable, connected to society´s acknowledge, cluster 2 had a mean of 3.25 and the other clusters had a mean of 2.56 meaning that the respondents in cluster 2 when opening startups think more on the society´s acknowledge than the entrepreneurs in other clusters, agreeing with the idea of being an entrepreneur and having its own business as attractive career for its high status and recognition (Dubini, 1989; Carsrud ; Brännback, 2011; Friedman ; Aziz, 2012).

In summary, the New Challengers are young, with little or no startup experience, that are driven by new technology, market opportunities and recognition.

4.4.3 Leaders Entrepreneurs

When focusing on Cluster 3, the mean and standard deviation can be found on Table 14 and the variables with significant differences on Table 15:

TABLE 14: BRAZILIAN CLUSTER 3 GROUP STATISTICS

CL3		N	Mean	Std. Deviation	Std. Error Mean
Lead and motivate others (AR4)	CL3	92	3,9348	,91152	,09503
	Others	233	3,5193	1,36167	,08921
To have power to influence a company (AR5)	CL3	92	2,7935	1,25390	,13073
	Others	233	3,3691	1,37128	,08984
Financial independence (FIN2)	CL3	92	3,2283	1,18696	,12375
	Others	233	3,6996	1,25425	,08217
Greater personal income (FIN3)	CL3	92	2,6522	1,06322	,11085
	Others	233	3,4163	1,28086	,08391
Financial security (FIN4)	CL3	92	1,7283	,92704	,09665
	Others	233	2,5236	1,37107	,08982
Build wealth (FIN5)	CL3	92	2,5109	1,19977	,12508
	Others	233	3,0901	1,38201	,09054
Flexibility (IND1)	CL3	92	3,0326	1,24434	,12973
	Others	233	3,4936	1,41762	,09287
Freedom for work methods (IND2)	CL3	92	3,3261	1,21446	,12662
	Others	233	3,7597	1,20441	,07890
Follow technological innovation(INOV2)	CL3	92	2,9348	1,27361	,13278
	Others	233	3,5622	1,26856	,08311
Many products ideas (INOV3)	CL3	92	3,5978	1,22304	,12751
	Others	233	3,9399	1,20909	,07921
Market opportunity (INOV4)	CL3	92	4,0761	,99707	,10395
	Others	233	4,4421	,88441	,05794
Family tradition (PA2)	CL3	92	1,2500	,58601	,06110
	Others	233	1,5322	,97823	,06409
Follow examples (PA3)	CL3	92	2,4130	1,13052	,11786
	Others	233	3,0644	1,30324	,08538

Source: Research data.

Cluster 3 had 92 respondents, highest percentage of 35 to over 42 years old entrepreneurs (20%) and highest percentage of entrepreneurs with startup experience (15%) that can indicate that these entrepreneurs are serial entrepreneurs, which are the ones with one or more startups.

The self-realization factor had two significant different variables, the first AR4 connected with leading and motivating others had a mean of 3.93 as the other clusters had a mean of 3.51, and the second variable AR5 connected to have power to influence a company had a low mean of 2.79 as for the other clusters had a mean 3.36, meaning that these entrepreneurs are driven by leading and motivation and not for power, and they can be connected with Del Junco and Brás-dos-Santos (2009) study where the Italian entrepreneurs have enjoyment as a motivation to open a business.

All the four out of five financial variables that had significant different means had lower means for this cluster, which can indicate that for these entrepreneurs the financial variables are less important than for the entrepreneurs in the other clusters, that can be due to the fact that they are older and with more startup experience already, being more mature.Therefore, it is possible that these entrepreneurs know the difficulties of having a startup and have less financial expectations on it when comparing to other clusters.

When analyzing then, it is possible to see that the first variable financial independence (FIN2) had a mean of 3.22 and the other cluster had a mean of 3.69, the greater personal income (FIN3) variable had a mean of 2.65 as for the other clusters had a mean of 3.41, the third variable connected to financial security (FIN4) had a mean of 1.72 as for the other clusters had 2.52 and the last variable in the Financial factor is connected to build wealth (FIN5) with a mean of 2.51 and 3.09 for the other clusters. These results go against Del Junco and Brás-dos-Santos (2009) were it affirms that entrepreneurs from Spain, Germany and Italy have ambition as one of the reasons to open their business and Yueh (2009) study that affirm that Chinese entrepreneurs have finance reasons. It is possible that these entrepreneurs are thinking less on the financial side of opening a business and more on a personal development and leadership, as being more mature than the entrepreneurs from other clusters, they can have lost the vision of entrepreneurship being for its high status and financial side (Dubini, 1989; Carsrud ; Brännback, 2011; Friedman ; Aziz, 2012).

When focusing on the Independence factor both variables had statistically different means. The first variable is connected to flexibility (IND1) with a mean for this cluster of 3.03 and 3.49 as the mean for the other clusters,

and the second variable is connected to freedom for work methods (IND2) with a mean of 3.32 for this cluster and 3.75 mean for other clusters, which also these entrepreneurs, go against Del Junco and Brás-dos-Santos (2009) results that showed independence as a reason for opening a business.

When connecting the first three analyzed factors, independence, finance and self-realization, as for having a higher percentage of older entrepreneurs on this cluster, it is possible that they can have already achieve the financial status that they wanted, since variables such as financial independence, greater income, build wealth, and financial security are lower for them than for the entrepreneurs from the other clusters, and it is also possible that, as this cluster has the highest percentage of entrepreneurs with startup experience, they already have other startups and therefore, the variable connected to have power to influence a company has a low mean for them, just as the variables for the independence factor, like freedom for work methods and flexibility.But the self-realization factor has a high mean, which can indicates that to lead and motivate others is a relevant reason for these entrepreneurs to open technological startups.

In the innovation factor, three variables were significant, as it can be seen it Tables 14 and 15, follow technological innovation (INOV2) with a mean of 2.93 for this cluster and 3.56 for other clusters, many products ideas (INOV3) with a 3.59 mean and 3.93 for the other clusters and the last variable is connected to market opportunity (INOV4) with a mean of 4.07 and 4.44 mean for the other clusters.

When connecting this factor result with the other analyzed factors. It is possible to see that these entrepreneurs are less worried with the following of

the technological innovation, products ideas, and can be thinking more on market opportunity and lead and motivate others. It is possible that these entrepreneurs see the opening of a startup as an opportunity in the market to be exploited and also a way to lead and motivate others to be entrepreneurs as well.

Both roles factor variables that had significant means had lower means than for other clusters. As them being PA2 connected to family tradition where this cluster had a mean of 1.25 and the other clusters had 1.53, both clusters had both means in this case .And the variable PA3 connected to follow examples this cluster had a mean of 2.41 and the other clusters had 3.06. These results mean that for these entrepreneurs both variables are not important when opening a technologic startup goes against Dubini (1989), Shane et al., (1996) and Bosma et al., (2012) that affirm that entrepreneurs have influence from role models. When connecting this result to the results of the self-realization factor, it can be said that these entrepreneurs want to be the role models to be followed, since the variable to lead and motivate others have a high mean for them.

The Leaders entrepreneurs are older, mature, with startup experience, driven by leading and motivating others when opening their startups, they are less worried with finance and more concerned to others, they can be considered financially established and serial entrepreneurs.

TABLE 15: BRAZILIAN CLUSTER 3 INDEPENDENT SAMPLES TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
	Equal variances	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Lead and motivate others (AR4)	Assumed	25,999	,000	2,696	323	,007	,41547	,15408	,11234	,71860
	Not assumed			3,188	246,847	,002	,41547	,13034	,15875	,67219
To have power to influence a company (AR5)	assumed	3,719	,055	-3,491	323	,001	-,57562	,16490	-,90004	-,25120
	not assumed			-3,629	181,376	,000	-,57562	,15862	-,88860	-,26264
Financial independence (FIN2)	assumed	,394	,531	-3,098	323	,002	-,47131	,15215	-,77064	-,17198
	not assumed			-3,173	175,547	,002	-,47131	,14854	-,76447	-,17815
Greater personal income (FIN3)	assumed	5,360	,021	-5,072	323	,000	-,76414	,15065	-1,06051	-,46776
	not assumed			-5,496	199,482	,000	-,76414	,13903	-1,03829	-,48998
Financial security (FIN4)	assumed	31,679	,000	-5,119	323	,000	-,79534	,15538	-1,10102	-,48966
	not assumed			-6,028	244,524	,000	-,79534	,13194	-1,05524	-,53545
Build wealth (FIN5)	assumed	2,786	,096	-3,529	323	,000	-,57926	,16416	-,90221	-,25631
	not assumed			-3,751	190,789	,000	-,57926	,15441	-,88383	-,27468
Flexibility (IND1)	assumed	8,626	,004	-2,731	323	,007	-,46095	,16882	-,79307	-,12884
	not assumed			-2,889	188,729	,004	-,46095	,15955	-,77568	-,14623
Freedom for work methods (IND2)	assumed	,381	,537	-2,917	323	,004	-,43357	,14865	-,72602	-,14112
	not assumed			-2,906	165,606	,004	-,43357	,14919	-,72813	-,13901
Follow technological innovation(INOV2)	assumed	,121	,728	-4,012	323	,000	-,62745	,15638	-,93509	-,31981
	not assumed			-4,006	166,252	,000	-,62745	,15665	-,93672	-,31818
Many products ideas (INOV3)	assumed	1,515	,219	-2,290	323	,023	-,34209	,14936	-,63593	-,04824
	not assumed			-2,279	165,138	,024	-,34209	,15011	-,63847	-,04571
Market opportunity (INOV4)	assumed	3,651	,057	-3,239	323	,001	-,36597	,11298	-,58824	-,14370
	not assumed			-3,075	150,622	,002	-,36597	,11901	-,60111	-,13083
Family tradition (PA2)	assumed	26,670	,000	-2,588	323	,010	-,28219	,10903	-,49669	-,06769
	not assumed			-3,187	272,175	,002	-,28219	,08854	-,45650	-,10787
Follow examples (PA3)	assumed	,916	,339	-4,208	323	,000	-,65133	,15477	-,95583	-,34684
	not assumed			-4,475	190,933	,000	-,65133	,14554	-,93840	-,36426

Source: Research data.

4.4.4 Pessimist Entrepreneurs

As for the Cluster 4 in the Brazilian sample, the mean and standard deviation are on Table 16 and the in Table 17 are the variables significant differences.

TABLE 16: BRAZILIAN CLUSTER 4 GROUP STATISTICS

CL4		N	Mean	Std. Deviation	Std. Error Mean
Self-accomplishment (AR1)	CL4	59	3,3220	1,37013	,17838
	Others	266	4,3459	,87778	,05382
New challenges (AR2)	CL4	59	3,4237	1,28926	,16785
	Others	266	4,3722	,85595	,05248
Learn as a person (AR3)	CL4	59	3,2712	1,17195	,15257
	Others	266	4,4211	,83518	,05121
Lead and motivate others (AR4)	CL4	59	2,3898	1,23200	,16039
	Others	266	3,9135	1,09374	,06706
To have power to influence a company (AR5)	CL4	59	1,9661	1,03334	,13453
	Others	266	3,4812	1,27147	,07796
Financial success (FIN1)	CL4	59	2,8814	1,21889	,15869
	Others	266	4,0075	,84225	,05164
Financial independence (FIN2)	CL4	59	2,3051	1,11810	,14556
	Others	266	3,8459	1,10005	,06745
Greater personal income (FIN3)	CL4	59	2,1186	1,13083	,14722
	Others	266	3,4398	1,17126	,07181
Financial security (FIN4)	CL4	59	1,6441	,90521	,11785
	Others	266	2,4436	1,34256	,08232
Build wealth (FIN5)	CL4	59	1,6949	,93319	,12149
	Others	266	3,1992	1,28333	,07869
Flexibility (IND1)	CL4	59	2,5763	1,41669	,18444
	Others	266	3,5376	1,31769	,08079
Freedom for work methods (IND2)	CL4	59	2,9492	1,38245	,17998
	Others	266	3,7895	1,12972	,06927
Create and sell new products (INOV1)	CL4	59	3,1864	1,46775	,19109
	Others	266	3,8308	1,15479	,07080
Follow technological innovation (INOV2)	CL4	59	2,8814	1,40301	,18266
	Others	266	3,4962	1,25065	,07668
Many products ideas (INOV3)	CL4	59	3,4746	1,35641	,17659
	Others	266	3,9248	1,17601	,07211
Market opportunity (INOV4)	CL4	59	3,9831	1,16695	,15192
	Others	266	4,4173	,85270	,05228
For children inherit (PA1)	CL4	59	1,3559	,82551	,10747
	Others	266	2,2105	1,27118	,07794
Family tradition (PA2)	CL4	59	1,0678	,31428	,04092
	Others	266	1,5376	,95586	,05861
Follow examples (PA3)	CL4	59	1,8644	,99060	,12897
	Others	266	3,1053	1,23937	,07599
Importance in market –society (REC1)	CL4	59	3,2373	1,39382	,18146
	Others	266	3,9474	1,14144	,06999
Society´s acknowledge (REC2)	CL4	59	1,7288	1,06400	,13852
	Others	266	2,9962	1,24233	,07617
Friend´s respect (REC3)	CL4	59	1,0508	,28910	,03764

Others	266	1,3609	,67111	,04115

Source: research data.

It is interesting to notice that in the analysis of Cluster 4 in the Brazilian samples, all the variables had significant differences when comparing this cluster with the others, and also all this cluster means were lower in comparison with other clusters.

Cluster 4 had 59 respondents corresponding to 18% of the total sample of Brazilian entrepreneurs, and was the smallest of the clusters. Most of its respondents are between 25 to 28 years old (35.59%), are male (81.35%), with graduation (54.23%), in the areas of service and others (both with 27.11%) and had worked for other companies but had no startup experience (47.45%). It is also interest to highlight that it had the highest percentage of women (11%) from all the other clusters.

When focusing on the self-realization factor, the variable with the highest significant difference is connected to have power to influence a company (AR5) where this cluster had a mean of 1.96 while the other clusters had a mean of 3.48, showing a relevant difference between them and go against Roberts (1989) showing that these entrepreneurs do not have a need for power. In the other side, the variable connected to new challenges had the highest mean for this factor, which can mean that these entrepreneurs do not think of power to influence a company but think more on the new challenges that they can have as opening a technological startup.

In the financial factor, the variable with the highest significant difference is connected to build wealth (FIN5) with a mean of 1.69 for this cluster and 3.19 for the other clusters, showing that the pessimist entrepreneurs go against the studies of Yueh (2009) and Del Junco and Brás-dos-Santos (2009), since that

both affirm financial reasons as building wealth as a reasons for opening a business. If connecting this result to the result of the self-realization factor, this can show that this cluster is not worried with power or finance when opening a startup, it can be possible that, as the Leader entrepreneurs, they can have lost the vision of entrepreneurship being for its high status (Dubini, 1989; Carsrud ; Brännback, 2011; Friedman ; Aziz, 2012).

The independence factor had the flexibility (IND1) variable as the variable with the highest significant difference with 2.57 mean for this cluster and 3.53.The innovation factor had the variable with the highest significant difference mean of 2.88 while other clusters had 3.49 in the INOV2 variable connected with follow technological innovation. The roles factor had the variable connected to follow examples (PA3) as the variable with the highest significant difference, where for this cluster the mean is 1.86 and for other clusters is 3.10, which shows a relevant difference, which goes against Dubini (1989), Shane et al., (1996) and Bosma et al., (2012), since this entrepreneurs have little or influence of role models.

Analyzing these results with the cluster characteristics based on the percentages, this cluster has the highest percentage of women, has a relevant percentage acting in the service area, and had worked in other companies but had no startup experience, which can indicate that they can be opening startups thinking more on the new challenges and not on power, finance, or following examples, they can be looking for a different working experience from the ones they already have, and as for being in the service sector they think less on the technological innovation.

TABLE 17: BRAZILIAN CLUSTER 4 INDEPENDENT SAMPLES TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
Equal variances		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Self-accomplishment (AR1)	assumed	30,509	,000	-7,227	323	,000	-1,02383	,14167	-1,30255	-,74511
	not assumed			-5,495	68,916	,000	-1,02383	,18632	-1,39553	-,65213
New challenges (AR2)	assumed	27,863	,000	-6,949	323	,000	-,94845	,13649	-1,21697	-,67994
	not assumed			-5,393	69,749	,000	-,94845	,17586	-1,29922	-,59769
Learn as a person (AR3)	assumed	11,280	,001	-8,830	323	,000	-1,14987	,13022	-1,40606	-,89367
	not assumed			-7,145	71,604	,000	-1,14987	,16094	-1,47072	-,82901
Lead and motivate others (AR4)	assumed	5,969	,015	-9,455	323	,000	-1,52370	,16115	-1,84074	-1,20667
	not assumed			-8,765	79,519	,000	-1,52370	,17385	-1,86970	-1,17770
To have power to influence a company (AR5)	assumed	7,873	,005	-8,545	323	,000	-1,51510	,17731	-1,86392	-1,16628
	not assumed			-9,744	101,001	,000	-1,51510	,15549	-1,82354	-1,20666
Financial success (FIN1)	assumed	24,719	,000	-8,494	323	,000	-1,12616	,13258	-1,38699	-,86534
	not assumed			-6,748	70,762	,000	-1,12616	,16688	-1,45893	-,79340
Financial independence (FIN2)	assumed	1,018	,314	-9,704	323	,000	-1,54078	,15877	-1,85314	-1,22842
	not assumed			-9,604	84,724	,000	-1,54078	,16043	-1,85978	-1,22178
Greater personal income (FIN3)	assumed	,088	,767	-7,887	323	,000	-1,32121	,16752	-1,65077	-,99164
	not assumed			-8,066	87,797	,000	-1,32121	,16380	-1,64674	-,99567
Financial security (FIN4)	assumed	20,544	,000	-4,357	323	,000	-,79954	,18350	-1,16054	-,43854
	not assumed			-5,562	122,046	,000	-,79954	,14375	-1,08411	-,51497
Build wealth (FIN5)	assumed	9,845	,002	-8,514	323	,000	-1,50433	,17669	-1,85194	-1,15672
	not assumed			-10,393	112,532	,000	-1,50433	,14475	-1,79111	-1,21755
Flexibility (IND1)	assumed	1,062	,303	-5,000	323	,000	-,96132	,19226	-1,33956	-,58309
	not assumed			-4,774	81,736	,000	-,96132	,20136	-1,36191	-,56074
Freedom for work methods (IND2)	assumed	8,339	,004	-4,952	323	,000	-,84032	,16968	-1,17413	-,50651
	not assumed			-4,357	76,089	,000	-,84032	,19285	-1,22441	-,45624
Create and sell new products (INOV1)	assumed	15,057	,000	-3,680	323	,000	-,64439	,17512	-,98891	-,29986
	not assumed			-3,162	74,712	,002	-,64439	,20378	-1,05037	-,23841
Follow technological innovation(INOV2)	assumed	3,477	,063	-3,340	323	,001	-,61488	,18410	-,97708	-,25269
	not assumed			-3,104	79,704	,003	-,61488	,19810	-1,00914	-,22063
Many products ideas	assumed	6,529	,011	-2,585	323	,010	-,45024	,17418	-,79291	-,10756

(INOV3)	not assumed			-2,360	78,475	,021	-,45024	,19074	-,82994	-,07053
Market opportunity (INOV4)	assumed	7,089	,008	-3,290	323	,001	-,43424	,13197	-,69388	-,17460
	not assumed			-2,703	72,329	,009	-,43424	,16067	-,75450	-,11398
For children inherit (PA1)	assumed	27,450	,000	-4,935	323	,000	-,85459	,17317	-1,19528	-,51391
	not assumed			-6,437	127,343	,000	-,85459	,13276	-1,11729	-,59189
Family tradition (PA2)	assumed	66,627	,000	-3,727	323	,000	-,46980	,12606	-,71780	-,22180
	not assumed			-6,573	281,136	,000	-,46980	,07148	-,61050	-,32910
Follow examples (PA3)	assumed	3,087	,080	-7,195	323	,000	-1,24086	,17247	-1,58017	-,90155
	not assumed			-8,290	102,560	,000	-1,24086	,14969	-1,53774	-,94397
Importance in market – society (REC1)	assumed	10,711	,001	-4,144	323	,000	-,71008	,17135	-1,04718	-,37298
	not assumed			-3,651	76,170	,000	-,71008	,19449	-1,09742	-,32274
Society´s acknowledge (REC2)	assumed	,764	,383	-7,265	323	,000	-1,26743	,17445	-1,61062	-,92423
	not assumed			-8,018	96,450	,000	-1,26743	,15808	-1,58120	-,95365
Friend´s respect (REC3)	assumed	62,359	,000	-3,475	323	,001	-,31005	,08924	-,48561	-,13450
	not assumed			-5,560	212,935	,000	-,31005	,05577	-,41998	-,20013

Source: research data.

The last factor, acknowledge, the variable with the highest significant difference is connected to society´s acknowledge (REC2) with a mean of 1.72 for this cluster and 2.99 for the other clusters, showing that besides both have low means, recognition has a lower mean for these entrepreneurs, going against Dubini (1989), Carsrud and Brännback (2011) and Aziz and Friedman (2012), showing that these entrepreneurs think less on recognition of the society when opening a startup.

This cluster had lower significant means than the other clusters meaning that all the variables presented in this study had less importance for them than for the other cluster entrepreneurs. This can be due to the fact that their reasons and drivers are more personal or related to other variables that can be relevant for the women entrepreneurs as they have a significant percentage on this cluster. They are not related to finance, recognition, independence or innovation; their reasons can be more intrinsic.

It is also possible to connect their means with the idea that this is a cluster of entrepreneurs who are pessimist about their own startups, once the questionnaire was applied to technologic startups owners, and it is known that their environment have high failure rates (Dubini, 1989; Francis ; Bessant, 2005).

With the result of the cluster analysis it was possible to see that even when having a sample from one country, there are different groups of entrepreneurs on it, with different reasons for opening their startups and possible different backgrounds as well.

In the sample of the Brazilian entrepreneurs of this study it was possible to identify four different groups of entrepreneurs: the ones who think about

money, the ones who are more concern with the new challenges that they are going to face with their new startup, other group more focus on leadership and even a group of pessimist who disagree of them all.

This result shows that even if the entrepreneurs come from the same country they can have different reasons and expectation about their startup opening which can influence their startup future, the investments they take and the products they create , since they are the founders and owners of it.

It shows even that the government needs to consider these entrepreneurs´ profiles when making programs to help these entrepreneurs, once they have different reasons, they need different stimuli to engage, pursue and continue on entrepreneurship. Not only that, but the market also needs to consider the different entrepreneurs profiles, once they differ on their startup´s opening reasons, they also differ on what they seek, which can be shown on their market strategies, in the relationship with partners and competitors, and in other aspects.

As for having in a sample, 24% of Financial success entrepreneurs, 29% of New challengers, 28% Leaders and 18% Pessimist, it is possible to see that the groups are well distributed, showing that in a country´s sample, entrepreneurs can seek for different outcomes when opening a technological startup.

CHAPTER 05

5. CONCLUSION

This study had the objective of identifying the reasons of Brazilian entrepreneurs, compare the Brazilian and foreign entrepreneurs´ reasons for opening a startup and also to categorize the Brazilian entrepreneurs' types, as entrepreneurship has a relevant importance in economy and is also a relevant research theme (Feeser ; Willard ,1989; Shane, 1996; Bruyat ; Julien, 2001;Muller ; Thomas, 2001; Grimaldi ; Grandi, 2005; Dvir et al.,2010; Hansen et al., 2011;Saemundsson ; Holmén, 2011;Barba-Sanchez ; Atienza-Sahuquillo, 2011;Beckman et al., 2012; Stuetzer et al.,2012).

It was possible to see with the analyzed sample of entrepreneurs, that Brazilians are opening startups because of market opportunity, learn as a person, to have new challenges and self-realization, which shows the importance of the creation of the Start Up Brasil program, created by the federal government, and also the launch of Sebrae Up program, that can stimulate entrepreneurs in their startup opening and, also help them to exploit the market opportunity, the creation of their products and the market research for their launch to minimize the failure rate (Dubini, 1989; Francis ; Bessant, 2005; Ministério da Ciência, Tecnologia e Inovação – MCTI, 2013; Sebrae, 2014).

Analyzing the result of the mean comparison, comparing to the foreigners, the Brazilians, when opening a startup, give more importance to selling products that they invented, to the market innovations, to new products idea and to the startup importance for society and market. For the foreigners,

compared to the Brazilians, they give more importance to financial security, building wealth, flexibility, freedom to implement work methods and to friend´s respect.

Four clusters were found in the Brazilian entrepreneurs´ sample, and they were named: Financial success entrepreneurs, Leaders entrepreneurs, New challengers and Pessimists, and were analyzed. Showing that even in a country´s sample is possible to have lack of consensus and homogenous groups being heterogenic among them, which can be seem as the entrepreneurs seeking for different outcomes when opening their startup.

It is important for government as well as society to know these reasons so they stimulate and help entrepreneurs, and in this way increasing the entrepreneurial activity (Van den Ven et al., 1984; Birley ,1986; Shane,1996; Mueller ; Thomas, 2001; Bosma et al., 2012).

This study contributed to the academy since the relevance to know the reasons for entrepreneurs to open startups and better assist them and also because comparative studies in entrepreneurship are rare (Krueger ; Brazeal, 1994; Mueller ; Thomas, 2001).It aimed to contribute to Carter et al., (2009), given a focus on the reasons to open technological startups from an emerging country entrepreneurs, in this case Brazil, and comparing with foreigners. Also to make a profile of the Brazilian entrepreneur, giving a better understanding of their reasons and what they seek.

It contributes in practice for government as well as society as it is important to know these reasons so they stimulate and help entrepreneurs, and in this way increasing the entrepreneurial activity (Van den Ven et al., 1984;

Birley ,1986; Shane,1996; Mueller ; Thomas, 2001; Bosma et al., 2012), which can be seem that for Brazilians, as one of their reasons, they are opening startups because they see a market opportunity and want to learn as a person, showing the importance of governmental programs to help these entrepreneurs.

It contributes for investors, once when they identify that there are clusters of entrepreneurs, they can approach the ones with the reasons that suits better their intentions and investments.

And also, it contributed for entrepreneurs themselves since it is important for them to know why they are pursuing entrepreneurship as a career (Chen ; Elston, 2013; Martin-Rojas et al., 2013).

This study has as limitation the number of respondents, as it was a sample non probabilistic and for convenience which means that the results can not be generalized, and also the methodology that was chosen for it. It can be seemed as limitation the fact that this study was made in Brazil, so the access to foreign entrepreneurs were limited to the internet, which is why the number of foreign entrepreneurs is smaller than the Brazilians.

Also, as a limitation in this study is the fact that the foreigners´ sample is not from just one country, the respondents are from United States, Portugal, Morocco, England, Romania, Chile, France, India, Netherlands, Singapore, Mexico, Sweden, Ireland, Colombia, Russia, Germany, Italy, Jordan, Malaysia, Poland, Estonia, Cameroon, Spain, Australia, Japan and Canada, but none had a significant number of respondents to be considered a separated sample. Which means that it is not possible to generalize them as a single profile, only as a comparison parameter having the Brazilian entrepreneurs, which had a significant number of respondents, as the base for the study.

As for future study suggestion is the application of this methodology in a broader sample with significant number of respondents from them, and also a qualitative method to better know and understand the entrepreneur of each country that were chosen to be researched. It can also be suggested a research comparing the reasons for technological and non-technological startup owners to see where they differ and even a comparative study with entrepreneurs that closed their startups to see with their reasons for closing are the same for opening their startup.

REFERENCES

AUTIO, E.; H. KEELEY, R.; KLOFSTEN, M.; GC PARKER, G.; HAY, M. Entrepreneurial intent among students in Scandinavia and in the USA. **Enterprise and Innovation Management Studies**, v. 2, n. 2, p.145-160, 2001.

BARBA-SANCHEZ, V.; ATIENZA-SAHUQUILLO, C. Reasons to create a new venture: A determinant of entrepreneurial profiles**. African Journal of Business Management**, v. 5, n. 28, p. 11497-11504, 2011.

BARON, R. A. Cognitive mechanisms in entrepreneurship: Why and when enterpreneurs think differently than other people. **Journal of Business venturing**, v.13, n. 4, p. 275-294, 1998.

BECKMAN, C., EISENHARDT, K., KOTHA, S., MEYER, A.; RAJAGOPALAN, N. Technology entrepreneurship. **Strat. Entrepreneurship J**., v. 6, p. 89-93, 2012. Doi: 10.1002/sej.1134

BIRLEY, S. The role of new firms: Births, deaths and job generation. **Strategic Management Journal**, v, 7, n. 4, p. 361-376, 1986.

BOSMA, N., HESSELS, J., SCHUTJENS, V., PRAAG, M. V., VERHEUL, I. Entrepreneurship and role models. **Journal of Economic Psychology**, v. 33, n. 2, p. 410-424, 2012.

BRANDSTÄTTER, H. Personality aspects of entrepreneurship: A look at five meta-analyses. **Personality and Individual Differences**, v. 51, n. 3, p. 222-230, 2011.

BRUYAT, C.; JULIEN, P. A. Defining the field of research in entrepreneurship. **Journal of Business Venturing**, v. 16, p. 2, p.165-180, 2001.

BUIJS, J. Action planning for new product development projects. **Creativity and Innovation Management**, v. 17, n. 4, p. 319-333, 2008.

CARSRUD, A.; BRÄNNBACK, M. Entrepreneurial motivations: what do we still need to know? **Journal of Small Business Management**, v. 49, n. 1, p. 9-26, 2011.

CARTER, N. M., GARTNER, W. B.; REYNOLDS, P. D. Exploring start-up event sequences. **Journal of Business Venturing**, v. 11, n. 3, p. 151-166, 1996.

CARTER, N. M., GARTNER, W. B., SHAVER, K. G.; GATEWOOD, E. J. The career reasons of nascent entrepreneurs. **Journal of Business Venturing**, v. 18, n. 1, p. 13-39, 2003.

CARAYANNIS, E. G., POPESCU, D., SIPP, C., ; STEWART, M. Technological learning for entrepreneurial development (TL4ED) in the knowledge economy (KE): case studies and lessons learned. **Technovation**, v. 26, n. 4, p. 419-443, 2006.

CHEN, S. C.; ELSTON, J. A. Entrepreneurial motives and characteristics: An analysis of small restaurant owners. **International Journal of Hospitality Management,** v.35, p. 294-305, 2013.

COWLING, M. Are entrepreneurs different across countries?. **Applied Economics Letters**, v. 7, n. 12, p. 785-789, 2000.

DAVIDSSON, P., ; HONIG, B. The role of social and human capital among nascent entrepreneurs. **Journal of Business Venturing**, v. 18, n. 3, p. 301-331, 2003.

DAYAN, M., ; ELBANNA, S. Antecedents of team intuition and its impact on the success of new product development projects. **Journal of Product Innovation Management**, v. 28, n. s1, p. 159-174, 2011.

DEL JUNCO, J. G., ; BRÁS-DOS-SANTOS, J. M. How different are the entrepreneurs in the European Union internal market?—An exploratory cross-cultural analysis of German, Italian and Spanish entrepreneurs. **Journal of International Entrepreneurship**, v. 7, n 2, p. 135-162, 2009.

DUBINI, P. The influence of motivations and environment on business start-ups: Some hints for public policies. **Journal of Business Venturing**, v. 4, n. 1, p. 11-26, 1989.

DVIR, D., SADEH, A., ; MALACH-PINES, A. The fit between entrepreneurs' personalities and the profile of the ventures they manage and business success: An exploratory study. T**he Journal of High Technology Management Research,** v. 21, n. 1, p. 43-51, 2010.

FEESER, H. R., ; WILLARD, G. E. .Incubators and performance: a comparison of high-and low-growth high-tech firms. **Journal of Business Venturing**, v. 4, n 6, p. 429-442, 1989.

FRANCIS, D., ; BESSANT, J. Targeting innovation and implications for capability development. **Technovation**, v. 25, n. 3, p. 171-183, 2005.

FRIEDMAN, B. A., ; AZIZ, N. (2012).Turkey and the United States: Entrepreneurship Activity, Motives, Aspirations, and Perceptions**. International Journal of Business and Social Science**, v. 3, n. 3, p. 96-107, 2012.

FUCHS, C., ; SCHREIER, M. (2011).Customer empowerment in new product development. **Journal of Product Innovation Management**, v. 28, n. 1, p. 17-32, 2011.

GARTNER, W. B. What are we talking about when we talk about entrepreneurship?. **Journal of Business Venturing**, v. 5, n. 1, p. 15-28, 1990.

GRIMALDI, R., ; GRANDI, A.Business incubators and new venture creation: an assessment of incubating models. **Technovation**, v. 25, n. 2, 111-121, 2005.

GUPTA, V., ; FERNANDEZ, C. Cross-Cultural Similarities and Differences in Characteristics Attributed to Entrepreneurs A Three-Nation Study. Journal of Leadership ; **Organizational Studies**, v. 15, n. 3, p. 304-318, 2009.

HANSEN, J. D., DEITZ, G. D., TOKMAN, M., MARINO, L. D., ; WEAVER, K. M. Cross-national invariance of the entrepreneurial orientation scale**. Journal of Business Venturing**, v. 26, n. 1, p. 61-78, 2011.

HAIR, J.F.; BABIN, B.J.; MONEY, A.H. and SAMOUEL, P., **Essentials of Business Research Methods**, Wiley, New York : NY, 2003.

HAYTON, J. C., ; CHOLAKOVA, M. (2012).The role of affect in the creation and intentional pursuit of entrepreneurial ideas**. Entrepreneurship Theory and Practice**, v. 36, p. 1, p. 41-68, 2012.

HEYDARI, H., MADANI, D., ;ROSTAMI, M.The Study of the Relationships Between Achievement Motive, Innovation, Ambiguity Tolerance, Self-Efficacy, Self-Esteem, and Self-Actualization, with the Orientation of Entrepreneurship in the Islamic Azad University of Khome in Students. **Procedia-Social and Behavioral Sciences**, v. 84, p. 820-826, 2013.

HESHMATI, Almas ; KIM, Yunhee. Analysis of Korean IT startups initial public offering and their post-IPO performance. **J Prod Anal**, v. 32, p.133-149, 2010.

HOFSTEDE, G. Cultural dimensions in management and planning**. Asia Pacific journal of management**, v. 1, n. 2, p. 81-99, 1984.

HSU, D. H., ROBERTS, E. B., ;EESLEY, C. E. Entrepreneurs from technology-based universities: Evidence from MIT. Research Policy, v. 36, n. 5, p. 768-788, 2007.

JENG, L. A., ; WELLS, P. C. The determinants of venture capital funding: evidence across countries. **Journal of corporate Finance**, v. 6, n. 3, p. 241-289, 2000.

KLAPPER, L., AMIT, R., ; GUILLÉN, M. F. Entrepreneurship and firm formation across countries. In: LERNER, J.; SCHOAR, A. (org). **International differences in entrepreneurship**, Chicago: University of Chicago Press, 2010 : p. 129-158.

KESSLER, A., ; FRANK, H.Nascent Entrepreneurship in a Longitudinal Perspective The Impact of Person, Environment, Resources and the Founding Process on the Decision to Start Business Activities. **International Small Business Journal**, v. 27, n. 6, p. 720-742, 2009.

KISFALVI, V. (2002).The entrepreneur's character, life issues, and strategy making: a field study. **Journal of Business Venturing**, v. 17, n. 5, p. 489-518, 2002.

KOELLINGER, P., MINNITI, M., ;SCHADE, C. “I think I can, I think I can”: Overconfidence and entrepreneurial behavior. **Journal of Economic Psychology**, v. 28, n. 4, p. 502-527, 2007.

KOLVEREID, L., ; ISAKSEN, E. New business start-up and subsequent entry into self-employment. **Journal of Business Venturing**, v. 21, n. 6, p. 866-885, 2006.

KRUEGER, N. F., ; BRAZEAL, D. V. Entrepreneurial potential and potential entrepreneurs. **Entrepreneurship Theory and Practice**, v. 18, p. 91-91, 1994.

LIAO, J., WELSCH, H., ; TAN, W. L. Venture gestation paths of nascent entrepreneurs: Exploring the temporal patterns. **The Journal of High Technology Management Research**, v. 16, n. 1, p. 1-22, 2005.

LICHTENSTEIN, B. B., CARTER, N. M., DOOLEY, K. J., ; GARTNER, W. B. .Complexity dynamics of nascent entrepreneurship. **Journal of Business Venturing**, v. 22, n. 2, p. 236-261, 2007.

MARTÍN-ROJAS, R., GARCÍA-MORALES, V. J., ; BOLÍVAR-RAMOS, M. T. (2013).Influence of technological support, skills and competencies, and learning on corporate entrepreneurship in European technology firms. **Technovation**, v.33, n. 12, p. 417-430, 2013.

MCKELVEY, B. Toward a complexity science of entrepreneurship. **Journal of Business Venturing**, v. 19, n. 3, p. 313-341, 2004.

MUELLER, S. L., ; THOMAS, A. S. Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness**. Journal of business venturing**, v. 16, n. 1, p. 51-75, 2001.

OBSCHONKA, M., SILBEREISEN, R. K., ; SCHMITT-RODERMUND, E. Entrepreneurial intention as developmental outcome. **Journal of Vocational Behavior**, v. 77, n. 1, p. 63-72, 2010.

OOSTERBEEK, H., van PRAAG, M., ;IJSSELSTEIN, A. The impact of entrepreneurship education on entrepreneurship skills and motivation. **European Economic Review**, v. 54, n. 3, p. 442-454, 2010.

PARK, J. S. Opportunity recognition and product innovation in entrepreneurial hi-tech start-ups: a new perspective and supporting case study. **Technovation**, v. 25, n. 7, p. 739-752, 2005.

PILLIS, E.de, ; REARDON, K. K. The influence of personality traits and persuasive messages on entrepreneurial intention: a cross-cultural comparison. **Career Development International**, v. 12, n. 4, p. 382-396, 2007.

RAMLOWCAMPELLI, M. G., BARBEJAT, P., RAMALHO, M. E.,; OLIVEIRA Moritz, G. Empreendedorismo no Brasil: situação e tendências. **Revista de Ciências da Administração**, v. 13, n. 29, p. 133-151, 2011.

ROBERTS, E. B. The personality and motivations of technological entrepreneurs. **Journal of Engineering and Technology Management**, v. 6, n. 1, p. 5-23, 1989.

ROURE, J. B.; KEELEY, R. H. Predictors of success in new technology based ventures. **Journal of Business Venturing**, v. 5, n. 4, p. 201-220, 1990.

SAEMUNDSSON, R. J.; HOLMÉN, M.Yes, now we can: Technological hange and the exploitation of entrepreneurial opportunities. **The Journal of High Technology Management Research,** v. 22, n. 2, p. 102-113, 2011.

SEBRAE. Sebrae Up. Available: http://www.sebrae.com.br/sites/PortalSebrae/ufs/es/cursos_eventos/Chamada-de-Projetos-%E2%80%93-Programa-de-Acelera%C3%A7%C3%A3o-SEBRAE-UP (Access in May 3, 2014).

SHANE, S. Explaining variation in rates of entrepreneurship in the United States: 1899-1988. **Journal of Management**, v. 22, n. 5, 747-781, 1996.

SHANE, S., LOCKE, E. A.; COLLINS, C. J. Entrepreneurial motivation. **Human resource management review**, v. 13, n. 2, p. 257-279, 2003.

SHAVER, K. G., GARTNER, W. B., GATEWOOD, E. J., Crosby, E.; Bakalarova, K. Attributions about entrepreneurship: A framework and process for analyzing reasons for starting a business. **Entrepreneurship Theory and Practice**, v. 26, p. 5‑32, 2001.

SIMON, M., HOUGHTON, S. M.; AQUINO, K. Cognitive biases, risk perception, and venture formation: How individuals decide to start companies. Journal of business venturing, v. 15, n. 2, p. 113-134, 2000.

SONG, M., PODOYNITSYNA, K., VAN DER Bij, H.; HALMAN, J. I. Success Factors in New Ventures: A Meta-analysis. **Journal of product innovation management**, v. 25, n. 1, p. 7-27, 2008.

STARTUPS - Associação Brasileira de Startups. O que é startup? Available: http://www.abstartups.com.br/ (Access in March 24, 2013).

STERNBERG, R. J. Successful intelligence as a basis for entrepreneurship. **Journal of Business Venturing**, v. 19, n. 2, p. 189-201, 2014.

STEWART, W. H., MAY, R. C., ; KALIA, A. Environmental perceptions and scanning in the United States and India: convergence in entrepreneurial information seeking?. **Entrepreneurship Theory and Practice**, v. 32, n. 1, p. 83-106, 2008.

STUETZER, M., GOETHNER, M., ;CANTNER, U. Do balanced skills help nascent entrepreneurs to make progress in the venture creation process? **Economics Letters**, v. 117, n. 1, p. 186-188, 2012.

THURIK,A.R.,STAM,E.,D.B.AUDRETSCH. The rise of the entrepreneurial economy and the future of dynamic capitalism. **Technovation**, v. 33, n. 8–9, p. 302-310, 2013.

VAN DE VEN, A. H., HUDSON, R.; SCHROEDER, D. M. Designing new business startups: Entrepreneurial, organizational, and ecological considerations. **Journal of management**, v. 10, n. 1, p. 87-108, 1984.

XAVIER, W. G.; LORENZICANCELLIER, É. L. P. Atividades de monitoramento em empresas de startup de base tecnológica na indústria do turismo. **Análise**, v. 19, n. 2, p. 107-119, 2008.

WEST, G. P., BAMFORD, C. E., ; MARSDEN, J. W. Contrasting entrepreneurial economic development in emerging Latin American economies: applications and extensions of resource-based theory. **Entrepreneurship theory and practice**, v. 32, n. 1, p. 15-36, 2008.

YUEH, L. China’s entrepreneurs. **World Development**, v. 37, n. 4, p.778-786, 2009.

APPENDICES 01 ENGLISH QUESTIONNAIRE

Reasons to open a startup
I´m doing a research with the purpose to identify the reasons to open a startup (new tech company, young and with a scalable business model) and I invite you to participate of it by answering thissurvey.It takes only 5 minutes and you will colaborate to a better understanding of startups.I assure your confidentiality and privacy, and it does not need any personal information.
Thank you for your collaboration.Sarah Venturim Lasso. Master student at Fucape Business School- Brazil

*Obrigatório

Do you have a startup? *
Yes or No

I opened my startup for self-accomplishment *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

Seeking financial success, I opened my startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

That importance of the startup for the society / market was an incentive for me to open a startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I always created new products and wanted to sell them, so I opened a startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

To get acknowledgment from society I opened my startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I opened my startup to accomplish financial independence. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

Seeking new challenges, I opened my own startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I like to learn and grow as a person so I opened my startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

Seeking to motivate and lead other people, I opened my own startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I opened my startup because I like the power to influence a company. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

To get a greater personal income I opened my own startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I wanted a greater financial security so I opened my startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I seek to build wealth and for that I opened my startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I opened a startup considering building a business that my children can inherit. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

My family always had companies, so I opened a startup to continue a family tradition. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I admire startup´s owners, and I opened my startup following their example. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

My friends have great respect for startup´s owners so I open one to have their respect. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I follow the market tech innovations, so I open a startup. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I have many products ideas and I open a startup in order to develop and sell them. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I identified a market opportunity and opened a startup to take it. *
1 – Totally disagree; 2 – Partially disagree; 3 - indifferent; 4 – Partially agree; 5 - Totally agree

I wanted to have more flexibility in my personal life in relation to work and this led me to open a startup. *

Gender *
Age *
Scholarity *
Startup market *
For "other" , please specify *
Working experience *
Country *
For Europe and "other" , please specify your country.

APPENDICES 02 PORTUGUESE QUESTIONNAIRE

Razões de se abrir uma startup.
Estou realizando uma pesquisa com o objetivo de identificar as razões de se abrir uma startup (empresa nascente de base tecnológica, jovem e escalável) e te convido a participar dessa pesquisa respondendo esse questionário. Leva apenas 5 minutos e você irá colaborar para uma melhor compreensão das startups brasileiras.
Garanto o seu sigilo e privacidade, pois não precisa de nenhum dado pessoal.
Obrigada pela colaboração. Sarah Venturim Lasso Mestranda na Fucape Business School

*Obrigatório

Você tem uma startup? *
startup (empresa nascente de base tecnológica, jovem e escalável)
Sim ou Não

Eu abri minha própria startup para me realizar pessoalmente. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Em busca do sucesso financeiro, eu abri uma startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

A importância da startup para a sociedade/mercado me incentivou a abrir uma startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Por sempre inventar novos produtos e ter vontade de comercializa-los, eu abri uma startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Para obter reconhecimento na sociedade, eu abri a minha startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Eu abri a minha startup para ter independência financeira. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Em busca de novos desafios, eu abri a minha própria startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Eu gosto de aprender e crescer como pessoa, e por isso abri minha startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Em busca de liderar e motivar outras pessoas, eu abri a minha startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Eu abri uma startup porque gosto do poder de influenciar uma empresa. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Para ganhar uma maior renda pessoal, eu abri uma startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Eu queria uma maior segurança financeira e por isso abri uma startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Eu busco construir uma grande riqueza e, para isso, eu abri a minha startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Eu abri uma startup pensando em construir um negócio que meus filhos possam herdar
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Minha família sempre teve empresas, então abri uma startup para continuar a tradição da família. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Admiro empreendedores donos de startups, e abri a minha startup seguindo o exemplo deles. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Meus amigos tem muito respeito por donos de startups, então abri uma para ter o respeito deles. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Eu acompanho as inovações tecnológicas do mercado e por isso abri uma startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Tenho muitas ideias de produtos e abri uma startup para poder desenvolve-los e comercializa-los. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Identifiquei uma oportunidade no mercado e abri uma startup para poder aproveita-la. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Quero ter uma maior flexibilidade na minha vida pessoal em relação ao trabalho e isso me levou a abrir uma startup. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Eu abri minha startup para ter liberdade de implementar meus métodos de trabalho. *
1 - Se DISCORDA Totalmente;2 - Se DISCORDA Parcialmente;3 - Se INDIFERENTE;4 - Se CONCORDA Parcialmente;5 - Se CONCORDA Totalmente com a afirmação

Seu gênero *
Faixa etária *
Sua escolaridade *
Tipo de startup *
Marque sua área de atuação
Caso marcou a opção "outro" na questão anterior, por favor, especifique.

APPENDICES 03 TABLE 08 COMPLETE

TABLE 08 - INDEPENDENT SAMPLES TEST

Equal variances		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Self-accomplishment (AR1)	assumed	,324	,570	-,157	453	,876	-,01692	,10800	-,22916	,19531
	not assumed			-,161	252,643	,872	-,01692	,10499	-,22369	,18984
New challenges (AR2)	assumed	,044	,835	,439	453	,661	,04615	,10513	-,16045	,25276
	not assumed			,440	239,384	,660	,04615	,10478	-,16025	,25256
Learn as a person (AR3)	assumed	,000	,998	,044	453	,965	,00462	,10545	-,20262	,21185
	not assumed			,043	231,000	,966	,00462	,10691	-,20603	,21526
Lead and motivate others (AR4)	assumed	,054	,817	,519	453	,604	,06769	,13038	-,18853	,32391
	not assumed			,524	242,040	,601	,06769	,12927	-,18695	,32233
To have power to influence a company (AR5)	assumed	1,132	,288	-1,180	453	,239	-,16308	,13821	-,43468	,10853
	not assumed			-1,223	257,089	,222	-,16308	,13331	-,42559	,09944
Financial success (FIN1)	assumed	12,511	,000	1,541	453	,124	,17231	,11179	-,04738	,39200
	not assumed			1,429	205,155	,154	,17231	,12055	-,06536	,40998
Financial independence (FIN2)	assumed	,141	,707	-1,567	453	,118	-,20308	,12964	-,45784	,05168
	not assumed			-1,572	239,375	,117	-,20308	,12920	-,45760	,05145
Greater personal income (FIN3)	assumed	,018	,892	-1,063	453	,288	-,13846	,13020	-,39434	,11742
	not assumed			-1,083	247,031	,280	-,13846	,12788	-,39033	,11341
Financial security (FIN4)	assumed	2,589	,108	-3,948	453	,000	-,55538	,14066	-,83182	-,27895
	not assumed			-3,766	216,128	,000	-,55538	,14749	-,84608	-,26469
Build wealth (FIN5)	assumed	,103	,748	-2,743	453	,006	-,38154	,13910	-,65490	-,10817
	not assumed			-2,794	247,343	,006	-,38154	,13654	-,65047	-,11261
Flexibility (IND1)	assumed	,530	,467	-2,094	453	,037	-,29846	,14251	-,57852	-,01840
	not assumed			-2,121	244,210	,035	-,29846	,14071	-,57562	-,02130

Freedom for work methods (IND2)	assumed	4,357	,037	-2,918	453	,004	-,36308	,12442	-,60759	-,11857
	not assumed			-3,004	253,092	,003	-,36308	,12086	-,60109	-,12506
Create and sell new products (INOV1)	assumed	5,786	,017	5,377	453	,000	,72154	,13418	,45784	,98524
	not assumed			5,080	212,248	,000	,72154	,14205	,44154	1,00154
Follow technological innovation (INOV2)	assumed	,219	,640	4,519	453	,000	,61538	,13617	,34778	,88299
	not assumed			4,454	230,609	,000	,61538	,13818	,34314	,88763
Many products ideas (INOV3)	assumed	7,335	,007	3,391	453	,001	,44308	,13067	,18629	,69987
	not assumed			3,248	217,897	,001	,44308	,13643	,17419	,71196
Market opportunity (INOV4)	assumed	,032	,858	,627	453	,531	,06154	,09810	-,13125	,25432
	not assumed			,613	227,031	,540	,06154	,10031	-,13612	,25920
For children inherit (PA1)	assumed	3,891	,049	-1,371	453	,171	-,18308	,13358	-,44560	,07944
	not assumed			-1,310	216,932	,192	-,18308	,13979	-,45860	,09245
Family tradition (PA2)	assumed	8,330	,004	-1,789	453	,074	-,17846	,09978	-,37455	,01763
	not assumed			-1,628	198,567	,105	-,17846	,10960	-,39459	,03767
Follow examples (PA3)	assumed	,002	,968	,254	453	,800	,03385	,13346	-,22843	,29613
	not assumed			,254	239,430	,799	,03385	,13300	-,22816	,29585
Importance in market – society (REC1)	assumed	,125	,724	2,014	453	,045	,24923	,12375	,00604	,49242
	not assumed			2,089	257,389	,038	,24923	,11930	,01430	,48416
Society´s acknowledge (REC2)	assumed	,040	,841	,941	453	,347	,12769	,13567	-,13893	,39431
	not assumed			,939	236,663	,349	,12769	,13595	-,14014	,39552
Friend´s respect (REC3)	assumed	39,114	,000	-5,148	453	,000	-,39538	,07681	-,54632	-,24444
	not assumed			-4,330	175,129	,000	-,39538	,09131	-,57559	-,21518

Source: Research data.

APPENDICES 04 TABLE 10 COMPLETE

TABLE 10: BRAZILIAN CLUSTER 1 GROUP STATISTICS

CL1		N	Mean	Std. Deviation	Std. Error Mean
Self realization (AR1)	CL1	78	4,2051	1,04892	,11877
	Others	247	4,1457	1,06449	,06773
New challenges (AR2)	CL1	78	4,0385	1,03751	,11747
	Others	247	4,2510	1,00494	,06394
Learn as a person (AR3)	CL1	78	4,1538	,99449	,11260
	Others	247	4,2308	1,01181	,06438
Lead and motivate others (AR4)	CL1	78	3,4103	1,34296	,15206
	Others	247	3,7085	1,23139	,07835
To have power to influence a company (AR5)	CL1	78	3,7179	1,25768	,14240
	Others	247	3,0445	1,35627	,08630
Financial success (FIN1)	CL1	78	4,2949	,79133	,08960
	Others	247	3,6478	1,03271	,06571
Financial independence (FIN2)	CL1	78	4,3333	,89249	,10105
	Others	247	3,3239	1,25278	,07971
Greater personal income (FIN3)	CL1	78	4,1282	,88800	,10055
	Others	247	2,9069	1,23113	,07834
Financial security (FIN4)	CL1	78	3,6667	1,13580	,12860
	Others	247	1,8664	1,03710	,06599
Build wealth (FIN5)	CL1	78	4,1154	,95320	,10793
	Others	247	2,5506	1,24469	,07920
Flexibility (IND1)	CL1	78	3,5897	1,41821	,16058
	Others	247	3,2915	1,36895	,08710
Freedom for work methods (IND2)	CL1	78	3,6923	1,19857	,13571
	Others	247	3,6194	1,23009	,07827
Create and sell new products (INOV1)	CL1	78	3,6795	1,23260	,13956
	Others	247	3,7247	1,24496	,07921
Follow technological innovation (INOV2)	CL1	78	3,5641	1,25450	,14204
	Others	247	3,3279	1,31043	,08338
Many products ideas (INOV3)	CL1	78	3,9615	1,15593	,13088
	Others	247	3,8057	1,24069	,07894
Market opportunity (INOV4)	CL1	78	4,6026	,77861	,08816
	Others	247	4,2551	,96046	,06111
For children inherit (PA1)	CL1	78	3,0513	1,32799	,15037
	Others	247	1,7409	1,03872	,06609
Family tradition (PA2)	CL1	78	1,9487	1,19411	,13521
	Others	247	1,2955	,70833	,04507
Follow examples (PA3)	CL1	78	3,2308	1,23712	,14008
	Others	247	2,7692	1,28760	,08193
Importance in market –society (REC1)	CL1	78	3,6410	1,33848	,15155
	Others	247	3,8745	1,17755	,07493
Society´s acknoledge (REC2)	CL1	78	2,8205	1,22468	,13867
	Others	247	2,7490	1,33197	,08475
Friend´s respect (REC3)	CL1	78	1,5128	,76860	,08703
	Others	247	1,2389	,56636	,03604

Source: Research data.

APPENDICES 05 TABLE 11 COMPLETE

TABLE 11: BRAZILIAN CLUSTER 1 INDEPENDENT SAMPLES TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Equal variances									Lower	Upper
Self-accomplishment (AR1)	assumed	,005	,946	,431	323	,667	,05938	,13778	-,21168	,33043
	not assumed			,434	130,897	,665	,05938	,13672	-,21109	,32985
New challenges (AR2)	assumed	,274	,601	-1,616	323	,107	-,21255	,13154	-,47134	,04624
	not assumed			-1,589	125,926	,115	-,21255	,13375	-,47724	,05214
Learn as a person (AR3)	assumed	,133	,716	-,588	323	,557	-,07692	,13088	-,33441	,18057
	not assumed			-,593	131,181	,554	-,07692	,12971	-,33352	,17967
Lead and motivate others (AR4)	assumed	1,492	,223	-1,824	323	,069	-,29825	,16350	-,61991	,02342
	not assumed			-1,744	120,652	,084	-,29825	,17106	-,63691	,04042
To have power to influence a company (AR5)	assumed	,256	,613	3,888	323	,000	,67341	,17319	,33270	1,01413
	not assumed			4,044	138,110	,000	,67341	,16651	,34417	1,00266
Financial success (FIN1)	assumed	5,784	,017	5,081	323	,000	,64710	,12736	,39654	,89766
	not assumed			5,824	166,978	,000	,64710	,11111	,42773	,86647
Financial independence (FIN2)	assumed	18,125	,000	6,604	323	,000	1,00945	,15286	,70871	1,31018
	not assumed			7,843	180,731	,000	1,00945	,12871	,75548	1,26341
Greater personal income (FIN3)	assumed	9,240	,003	8,116	323	,000	1,22132	,15048	,92528	1,51737
	not assumed			9,582	178,285	,000	1,22132	,12746	,96980	1,47285
Financial security (FIN4)	assumed	,798	,372	13,058	323	,000	1,80027	,13786	1,52905	2,07149
	not assumed			12,455	120,275	,000	1,80027	,14455	1,51409	2,08645
Build wealth (FIN5)	assumed	13,636	,000	10,195	323	,000	1,56478	,15349	1,26282	1,86674
	not assumed			11,689	167,085	,000	1,56478	,13387	1,30048	1,82907
Flexibility (IND1)	assumed	,117	,733	1,663	323	,097	,29825	,17935	-,05459	,65108
	not assumed			1,633	125,575	,105	,29825	,18268	-,06329	,65978

Freedom for work methods (IND2)	assumed	,053	,818	,459	323	,647	,07287	,15880	-,23954	,38529
	not assumed			,465	132,165	,643	,07287	,15666	-,23702	,38277
Create and sell new products (INOV1)	assumed	,024	,877	-,280	323	,779	-,04521	,16132	-,36257	,27215
	not assumed			-,282	130,367	,779	-,04521	,16048	-,36269	,27227
Follow technological innovation (INOV2)	assumed	,770	,381	1,402	323	,162	,23617	,16850	-,09532	,56766
	not assumed			1,434	134,219	,154	,23617	,16471	-,08959	,56193
Many products ideas (INOV3)	assumed	2,647	,105	,983	323	,326	,15587	,15859	-,15612	,46786
	not assumed			1,020	137,520	,310	,15587	,15285	-,14636	,45811
Market opportunity (INOV4)	assumed	9,058	,003	2,907	323	,004	,34750	,11954	,11233	,58268
	not assumed			3,240	157,405	,001	,34750	,10727	,13563	,55938
For children inherit (PA1)	assumed	6,874	,009	9,053	323	,000	1,31039	,14475	1,02561	1,59517
	not assumed			7,978	108,360	,000	1,31039	,16425	,98483	1,63595
Family tradition (PA2)	assumed	51,481	,000	5,918	323	,000	,65317	,11036	,43605	,87029
	not assumed			4,583	94,697	,000	,65317	,14252	,37022	,93612
Follow examples (PA3)	assumed	1,052	,306	2,785	323	,006	,46154	,16570	,13556	,78752
	not assumed			2,844	133,791	,005	,46154	,16228	,14058	,78250
Importance in market –society (REC1)	assumed	3,319	,069	-1,476	323	,141	-,23347	,15818	-,54465	,07772
	not assumed			-1,381	117,051	,170	-,23347	,16906	-,56829	,10135
Society´s acknowledge (REC2)	assumed	4,495	,035	,421	323	,674	,07152	,16978	-,26249	,40554
	not assumed			,440	139,191	,661	,07152	,16252	-,24979	,39284
Friend´s respect (REC3)	assumed	28,876	,000	3,399	323	,001	,27395	,08060	,11538	,43252
	not assumed			2,908	104,706	,004	,27395	,09419	,08718	,46073

Source: Research data.

APPENDICES 06 TABLE 12 COMPLETE

TABLE 12: BRAZILIAN CLUSTER 2 GROUP STATISTICS

CL2		N	Mean	Std. Deviation	Std. Error Mean
Self-accomplishment (AR1)	CL2	96	4,5417	,70958	,07242
	Others	229	4,0000	1,13941	,07529
New challenges (AR2)	CL2	96	4,7188	,55636	,05678
	Others	229	3,9825	1,08404	,07164
Learn as a person (AR3)	CL2	96	4,7188	,57497	,05868
	Others	229	4,0000	1,07197	,07084
Lead and motivate others (AR4)	CL2	96	4,3021	,84753	,08650
	Others	229	3,3581	1,30558	,08628
To have power to influence a company (AR5)	CL2	96	3,9479	,99863	,10192
	Others	229	2,8952	1,37567	,09091
Financial success (FIN1)	CL2	96	4,0729	,81104	,08278
	Others	229	3,6900	1,07399	,07097
Financial independence (FIN2)	CL2	96	4,0417	,88159	,08998
	Others	229	3,3668	1,32980	,08788
Greater personal income (FIN3)	CL2	96	3,6354	1,03740	,10588
	Others	229	3,0175	1,31444	,08686
Financial security (FIN4)	CL2	96	2,1354	1,15731	,11812
	Others	229	2,3668	1,36560	,09024
Build wealth (FIN5)	CL2	96	3,1146	1,15047	,11742
	Others	229	2,8472	1,42910	,09444
Flexibility (IND1)	CL2	96	3,9792	1,13304	,11564
	Others	229	3,1048	1,40095	,09258
Freedom for work methods (IND2)	CL2	96	4,3125	,70056	,07150
	Others	229	3,3537	1,28136	,08467
Create and sell new products (INOV1)	CL2	96	4,0833	1,13941	,11629
	Others	229	3,5590	1,25036	,08263
Follow technological innovation (INOV2)	CL2	96	3,9792	,99450	,10150
	Others	229	3,1354	1,33246	,08805
Many products ideas (INOV3)	CL2	96	4,2083	1,07524	,10974
	Others	229	3,6900	1,24778	,08246
Market opportunity (INOV4)	CL2	96	4,5938	,64201	,06552
	Others	229	4,2314	1,01033	,06676
For children inherit (PA1)	CL2	96	1,8542	,98386	,10041
	Others	229	2,1397	1,33365	,08813
Family tradition (PA2)	CL2	96	1,4792	,91742	,09363
	Others	229	1,4410	,88470	,05846
Follow examples (PA3)	CL2	96	3,6667	1,01221	,10331
	Others	229	2,5502	1,25074	,08265
Importance in market –society (REC1)	CL2	96	4,1354	1,03232	,10536
	Others	229	3,6856	1,26935	,08388
Society´s acknowledge (REC2)	CL2	96	3,2500	1,16980	,11939
	Others	229	2,5633	1,30843	,08646
Friend´s respect (REC3)	CL2	96	1,3854	,70142	,07159
	Others	229	1,2707	,59683	,03944

Source: Research data.

APPENDICES 07 TABLE 13 COMPLETE

TABLE 13: BRAZILIAN CLUSTER 2 INDEPENDENT SAMPLES TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
Equal variances		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Self-accomplishment (AR1)	assumed	9,525	,002	4,318	323	,000	,54167	,12545	,29487	,78846
	not assumed			5,185	276,675	,000	,54167	,10447	,33601	,74732
New challenges (AR2)	assumed	24,316	,000	6,311	323	,000	,73622	,11666	,50671	,96572
	not assumed			8,054	310,411	,000	,73622	,09141	,55635	,91608
Learn as a person (AR3)	assumed	23,444	,000	6,202	323	,000	,71875	,11588	,49077	,94673
	not assumed			7,814	304,330	,000	,71875	,09199	,53774	,89976
Lead and motivate others (AR4)	assumed	27,461	,000	6,528	323	,000	,94400	,14461	,65952	1,22849
	not assumed			7,727	267,658	,000	,94400	,12217	,70347	1,18454
To have power to influence a company (AR5)	assumed	16,556	,000	6,783	323	,000	1,05272	,15519	,74740	1,35804
	not assumed			7,708	242,364	,000	1,05272	,13657	,78370	1,32174
Financial success (FIN1)	assumed	10,416	,001	3,138	323	,002	,38296	,12205	,14284	,62308
	not assumed			3,512	233,445	,001	,38296	,10904	,16814	,59778
Financial independence (FIN2)	assumed	34,180	,000	4,567	323	,000	,67485	,14776	,38416	,96555
	not assumed			5,366	262,973	,000	,67485	,12577	,42721	,92250
Greater personal income (FIN3)	assumed	5,205	,023	4,101	323	,000	,61795	,15070	,32148	,91442
	not assumed			4,512	223,687	,000	,61795	,13695	,34807	,88783
Financial security (FIN4)	assumed	6,842	,009	-1,455	323	,147	-,23140	,15901	-,54422	,08143
	not assumed			-1,557	208,648	,121	-,23140	,14864	-,52443	,06164
Build wealth (FIN5)	assumed	14,065	,000	1,625	323	,105	,26742	,16452	-,05625	,59109
	not assumed			1,775	219,403	,077	,26742	,15068	-,02955	,56440
Flexibility (IND1)	assumed	10,302	,001	5,416	323	,000	,87436	,16144	,55676	1,19197
	not assumed			5,903	218,412	,000	,87436	,14813	,58241	1,16631

Freedom for work methods (IND2)	assumed	40,786	,000	6,907	323	,000	,95879	,13881	,68571	1,23187
	not assumed			8,651	301,351	,000	,95879	,11083	,74070	1,17688
Create and sell new products (INOV1)	assumed	6,078	,014	3,539	323	,000	,52438	,14819	,23285	,81592
	not assumed			3,676	194,478	,000	,52438	,14265	,24303	,80573
Follow technological innovation (INOV2)	assumed	17,925	,000	5,585	323	,000	,84380	,15109	,54655	1,14104
	not assumed			6,280	236,078	,000	,84380	,13437	,57908	1,10851
Many products ideas (INOV3)	assumed	6,203	,013	3,554	323	,000	,51838	,14586	,23143	,80533
	not assumed			3,776	205,282	,000	,51838	,13727	,24774	,78901
Market opportunity (INOV4)	assumed	21,109	,000	3,248	323	,001	,36231	,11155	,14285	,58177
	not assumed			3,873	272,344	,000	,36231	,09355	,17814	,54647
For children inherit (PA1)	assumed	19,766	,000	-1,893	323	,049	-,28557	,15090	-,58243	,01129
	not assumed			-2,137	238,708	,034	-,28557	,13360	-,54877	-,02238
Family tradition (PA2)	assumed	,362	,548	,351	323	,726	,03812	,10875	-,17584	,25207
	not assumed			,345	172,579	,730	,03812	,11039	-,17976	,25600
Follow examples (PA3)	assumed	12,220	,001	7,745	323	,000	1,11645	,14415	,83285	1,40004
	not assumed			8,439	218,275	,000	1,11645	,13230	,85570	1,37720
Importance in market –society (REC1)	assumed	7,369	,007	3,072	323	,002	,44983	,14645	,16171	,73794
	not assumed			3,340	217,229	,001	,44983	,13467	,18439	,71526
Society´s acknowledge (REC2)	assumed	6,145	,014	4,450	323	,000	,68668	,15432	,38308	,99028
	not assumed			4,658	198,077	,000	,68668	,14741	,39598	,97738
Friend´s respect (REC3)	assumed	5,433	,020	1,498	323	,135	,11467	,07653	-,03588	,26523
	not assumed			1,403	155,451	,163	,11467	,08173	-,04678	,27613

Source: Research data.

APPENDICES 08 TABLE 14 COMPLETE

TABLE 14: GROUP STATISTICS

CL3		N	Mean	Std. Deviation	Std. Error Mean
Self-accomplishment (AR1)	CL3	92	4,2609	,84995	,08861
	Others	233	4,1202	1,13075	,07408
New challenges (AR2)	CL3	92	4,2935	,81925	,08541
	Others	233	4,1631	1,08239	,07091
Learn as a person (AR3)	CL3	92	4,3370	,82910	,08644
	Others	233	4,1631	1,06634	,06986
Lead and motivate others (AR4)	CL3	92	3,9348	,91152	,09503
	Others	233	3,5193	1,36167	,08921
To have power to influence a company (AR5)	CL3	92	2,7935	1,25390	,13073
	Others	233	3,3691	1,37128	,08984
Financial success (FIN1)	CL3	92	3,6957	,82194	,08569
	Others	233	3,8455	1,08365	,07099
Financial independence (FIN2)	CL3	92	3,2283	1,18696	,12375
	Others	233	3,6996	1,25425	,08217
Greater personal income (FIN3)	CL3	92	2,6522	1,06322	,11085
	Others	233	3,4163	1,28086	,08391
Financial security (FIN4)	CL3	92	1,7283	,92704	,09665
	Others	233	2,5236	1,37107	,08982
Build wealth (FIN5)	CL3	92	2,5109	1,19977	,12508
	Others	233	3,0901	1,38201	,09054
Flexibility (IND1)	CL3	92	3,0326	1,24434	,12973
	Others	233	3,4936	1,41762	,09287
Freedom for work methods (IND2)	CL3	92	3,3261	1,21446	,12662
	Others	233	3,7597	1,20441	,07890
Create and sell new products (INOV1)	CL3	92	3,6957	1,06636	,11118
	Others	233	3,7210	1,30461	,08547
Follow technological innovation (INOV2)	CL3	92	2,9348	1,27361	,13278
	Others	233	3,5622	1,26856	,08311
Many products ideas (INOV3)	CL3	92	3,5978	1,22304	,12751
	Others	233	3,9399	1,20909	,07921
Market opportunity (INOV4)	CL3	92	4,0761	,99707	,10395
	Others	233	4,4421	,88441	,05794
For children inherit (PA1)	CL3	92	1,8696	1,15993	,12093
	Others	233	2,1288	1,27330	,08342
Family tradition (PA2)	CL3	92	1,2500	,58601	,06110
	Others	233	1,5322	,97823	,06409
Follow examples (PA3)	CL3	92	2,4130	1,13052	,11786
	Others	233	3,0644	1,30324	,08538
Importance in market –society (REC1)	CL3	92	4,0109	1,02168	,10652
	Others	233	3,7425	1,28410	,08412
Society´s acknowledge (REC2)	CL3	92	2,8804	1,29956	,13549
	Others	233	2,7210	1,30791	,08568
Friend´s respect (REC3)	CL3	92	1,2065	,50357	,05250
	Others	233	1,3433	,67124	,04397

Source: Research data

APPENDICES 09 TABLE 15 COMPLETE

TABLE 15 - INDEPENDENT SAMPLES TEST

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equal variances										
Self-accomplishment (AR1)	assumed	4,225	,041	1,079	323	,281	,14070	,13042	-,11588	,39728
	not assumed			1,218	220,411	,224	,14070	,11550	-,08692	,36832
New challenges (AR2)	assumed	4,812	,029	1,043	323	,298	,13039	,12500	-,11553	,37631
	not assumed			1,175	218,885	,241	,13039	,11101	-,08840	,34918
Learn as a person (AR3)	assumed	4,502	,035	1,405	323	,161	,17387	,12377	-,06963	,41736
	not assumed			1,564	213,044	,119	,17387	,11114	-,04521	,39294
Lead and motivate others (AR4)	assumed	25,999	,000	2,696	323	,007	,41547	,15408	,11234	,71860
	not assumed			3,188	246,847	,002	,41547	,13034	,15875	,67219
To have power to influence a company (AR5)	assumed	3,719	,055	-3,491	323	,001	-,57562	,16490	-,90004	-,25120
	not assumed			-3,629	181,376	,000	-,57562	,15862	-,88860	-,26264
Financial success (FIN1)	assumed	4,193	,041	-1,197	323	,232	-,14984	,12520	-,39614	,09646
	not assumed			-1,347	218,420	,180	-,14984	,11128	-,36916	,06948
Financial independence (FIN2)	assumed	,394	,531	-3,098	323	,002	-,47131	,15215	-,77064	-,17198
	not assumed			-3,173	175,547	,002	-,47131	,14854	-,76447	-,17815
Greater personal income (FIN3)	assumed	5,360	,021	-5,072	323	,000	-,76414	,15065	-1,06051	-,46776
	not assumed			-5,496	199,482	,000	-,76414	,13903	-1,03829	-,48998
Financial security (FIN4)	assumed	31,679	,000	-5,119	323	,000	-,79534	,15538	-1,10102	-,48966
	not assumed			-6,028	244,524	,000	-,79534	,13194	-1,05524	-,53545
Build wealth (FIN5)	assumed	2,786	,096	-3,529	323	,000	-,57926	,16416	-,90221	-,25631
	not assumed			-3,751	190,789	,000	-,57926	,15441	-,88383	-,27468

Flexibility (IND1)	assumed	8,626	,004	-2,731	323	,007	-,46095	,16882	-,79307	-,12884
	not assumed			-2,889	188,729	,004	-,46095	,15955	-,77568	-,14623
Freedom for work methods (IND2)	assumed	,381	,537	-2,917	323	,004	-,43357	,14865	-,72602	-,14112
	not assumed			-2,906	165,606	,004	-,43357	,14919	-,72813	-,13901
Create and sell new products (INOV1)	assumed	7,628	,006	-,166	323	,868	-,02538	,15294	-,32627	,27552
	not assumed			-,181	202,591	,857	-,02538	,14023	-,30188	,25112
Follow technological innovation (INOV2)	assumed	,121	,728	-4,012	323	,000	-,62745	,15638	-,93509	-,31981
	not assumed			-4,006	166,252	,000	-,62745	,15665	-,93672	-,31818
Many products ideas (INOV3)	assumed	1,515	,219	-2,290	323	,023	-,34209	,14936	-,63593	-,04824
	not assumed			-2,279	165,138	,024	-,34209	,15011	-,63847	-,04571
Market opportunity (INOV4)	assumed	3,651	,057	-3,239	323	,001	-,36597	,11298	-,58824	-,14370
	not assumed			-3,075	150,622	,002	-,36597	,11901	-,60111	-,13083
For children inherit (PA1)	assumed	2,843	,093	-1,694	323	,091	-,25919	,15298	-,56015	,04177
	not assumed			-1,764	182,033	,079	-,25919	,14691	-,54906	,03068
Family tradition (PA2)	assumed	26,670	,000	-2,588	323	,010	-,28219	,10903	-,49669	-,06769
	not assumed			-3,187	272,175	,002	-,28219	,08854	-,45650	-,10787
Follow examples (PA3)	assumed	,916	,339	-4,208	323	,000	-,65133	,15477	-,95583	-,34684
	not assumed			-4,475	190,933	,000	-,65133	,14554	-,93840	-,36426
Importance in market –society (REC1)	assumed	10,999	,001	1,793	323	,074	,26838	,14972	-,02616	,56292
	not assumed			1,977	208,158	,049	,26838	,13573	,00080	,53596
Society´s acknowledge (REC2)	assumed	,005	,943	,992	323	,322	,15940	,16076	-,15686	,47567
	not assumed			,994	167,817	,321	,15940	,16031	-,15708	,47589
Friend´s respect (REC3)	assumed	12,396	,000	-1,768	323	,078	-,13683	,07739	-,28909	,01543
	not assumed			-1,998	220,841	,047	-,13683	,06848	-,27179	-,00186

Source: Research Data