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# **HUMAN CAPITAL AS A DETERMINANT FOR SUCCESSFUL FUNDRAISING IN EARLY-STAGE START-UPS IN LATVIA**

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# **Human capital as a determinant for successful fundraising in early-stage start-ups in Latvia**

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## *Abstract*

This paper contains a study identifying human capital determinants which may influence the fundraising process of Latvian start-ups and therefore their future performance.

Competition between start-ups to attract funding is very large, also in Latvia. Consequently, the start-up must have high ambition, a good team and, preferably, appropriate experience in the area in which it wants to develop its product. Human capital is one of the most important factors, because in the course of implementation of the idea a business model or product can change; therefore, in the beginning, investors often invest in people.

The start-up environment of Latvia is relatively new. Only in recent years the start-ups of Latvia have been able to use funding from both European funds and private investors who see potential in the Baltic states. Because of this, the author has chosen to investigate whether human capital factors — which many scholars indicate as having great importance — have a similar effect in the Latvian start-up business environment.

The author selected qualitative research using the exploratory method. Data collection was performed by first conducting semi-structured interviews with investors' representatives and then sending out invitations to 50 start-up companies to participate in a survey consisting of predefined questions that formed the source of primary data. As secondary data, publications and other publicly available information on the fundraising process in Latvia and on individual start-up business successes were used.

The research results showed and confirmed that previous experience and a good team are crucial for successful fundraising, as well as that in order to obtain more value in the future, start-ups are ready to partially sacrifice their independence by giving part of their equity to investors.

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## ***1. Introduction***

As it can be established from scholars' articles and other publicly available sources, the entrepreneurs' characteristics and their impact on financial decisions are of great interest. Human capital such as self-determination, experience, education, and the founders' team are the most mentioned characteristics in the scholars' articles (Brixy & Hessels, 2010; Cooper, Gimeno-Gascon and Woo, 1994; Seghers, Manigart and Vanacker, 2012) and other public sources, thus these characteristics and traits are analyzed in this paper and serve as the basis for the research in this study.

Nowadays, start-ups have become one of the driving forces behind the development of innovation, often providing export potential for an innovative product. Of course, not all start-ups become successful and growing companies. One of the main challenges of start-ups, as well as their stumbling block, is to develop their ideas and attract funding for their future development.

In the last decade, many studies and articles have examined start-ups, their finance capital structure, sources and types of funding available, as well as possible financial behavior models that would facilitate start-up survival in the very early stage; however, the aim of this paper is to focus on entrepreneurs' characteristics and human capital as determinants that may influence the Latvian start-ups' fundraising process and thus their performance.

While investing in a start-up may be explained by investors' choices, taking into account certain criteria of the start-ups and the business idea or product that they offer, also in need of examination are the start-ups' preferences and decisions taken during the fundraising process, based on certain characteristics or circumstances to which the entrepreneur gives some meaning. According to Cassar (2004) the financing decisions may influence future operations and performance of business, as well as may affect the potential of business expansion in the future. The characteristics of the entrepreneur, such as self-determination, experience, education, and human capital, may explain decisions made on financing of the start-up and the use of funding sources.

The author of this study focuses on identifying human capital factors that affect the fundraising decisions and strategy of early-stage start-ups and their interactions with investors in Latvia. The aim is to understand whether such factors could have a significant impact on the fundraising process from both the entrepreneur's perspective and the supply side, i.e.,

investors. Examination of specific factors gives a better understanding of the entrepreneur's mindset and the determinants they consider to be significant in the fundraising process, as well as provides an insight into the supply side's evaluation criteria, thus confirming the importance of these factors on both sides, or on the contrary, highlights the points that do not coincide and which would be taken into account when creating a fundraising strategy.

Through this study, the author seeks to identify whether the most common human capital determinants proposed by the theoretical background are applicable in the start-ups' fundraising process in Latvia, or if there are other factors the importance of which cannot be missed.

The most important part of the studies has turned to investors, i.e. the supply side, by providing findings and theories about both venture capital and business angels, as well as other external financing providers, their impact, requirements, valuation criteria, and other elements taken into account in the fundraising process. However, the author of this paper joins the argumentation that “the literature is more scant on the demand side and generally follows the paradigm applied to suppliers. The concept of mixed motives for entrepreneurs has received some attention in the demand-side literature, but no over-arching framework exists” (Sapienza, Korsgaard, and Forbes, 2015).

The literature on investments in start-ups is quite broad, *inter alia* providing several studies on what criteria the investors consider when investing in start-ups. In addition, many articles present their author's opinion on what start-ups should do to attract funding, however, these mostly cover studies in well-established economies while studies in post-Soviet countries are slowly developing.

Human capital has its impact on the capital structure of the company. The founders make their decisions based on their experience and knowledge, as well as look for the best options for the capital structure of a start-up in particular stage of its life. The latest monitoring of European start-ups shows that in general, European start-ups initially use the “founders' personal savings (84.5%), then friends and family financing (29.6%), third most frequent is governmental subsidies/funding (26.5%), while business angels funding is about 24%” (Kollmann et al., 2016, p.76). However, these facts cannot be generalized as the proportion and funding model differs when it comes to specific countries. “For example, in Finland start-ups have high shares of formalized financing, e.g., business angels, venture capital, incubators/ company builders/accelerators and bank loans (56-76%), combined with a high share of bootstrapping (52.0%)”, while in Switzerland almost all funding (97%) is provided by the founders themselves (Kollmann et al., 2016, p.76).

As Latvia's economy and market are relatively new in comparison with other "old" European countries, the author is going to investigate the Latvian entrepreneurs' characteristics in context of start-ups' fundraising. Taking into consideration that in most cases the young Latvian entrepreneurs do not have sufficient personal savings to invest in early stage of start-up, the fundraising process is a most important task for them.

According to Olga Baretto Goncalves, Chief StartUp Instigator at the Investment and Development Agency in Latvia, interviewed by Skreija (2018), the Latvian early-stage start-ups have access to EUR 15 million from acceleration funds, while EUR 60 million soon will be available for growth stage start-ups. This means that Latvian start-ups need to develop and refresh their human capital to achieve the necessary funds successfully. As the minister of Economy in Latvia Arvils Aseradens pointed out during the TechChill 2018 conference<sup>1</sup>, the one of area that needs to be developed and which will contribute to human capital of Latvian start-ups is education in ICT (Information and Communications Technology) as at this moment we do not have such knowledge in Latvia. According to Aseradens, negotiations have been initiated with the main state universities providing studies in IT and other technology fields in order to develop and provide such study programs in the future.

In her interview, Olga Baretto Goncalves (Skreija, 2018) emphasizes that the most important thing for Latvia is to have the "brain" in Latvia, meaning that for the Latvian business environment human capital can be one of the most important elements and a cornerstone for the future's success.

### ***Research question***

The purpose of the study is to investigate how human capital of the entrepreneur influences the Latvian start-ups' fundraising process, whether it plays a significant role during the fundraising process, and if the expectations of the demand side (the start-ups) and the supply side (investors) are the same. By using capital structure theories and research on entrepreneurs' characteristics previously made by other scholars (Debrulle, 2012; Gimmon & Levie, 2010; Minola, Cassia and Griaco, 2013), it can be established whether in the Latvian start-ups' environment human capital has different patterns in terms of choice of the capital structure and fundraising process. This leads to the following question:

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<sup>1</sup> TechChill-2018 conference held on 8-9 February 2018 in Riga.

***RQ: How does human capital of the entrepreneur influence the fundraising process of early-stage start-ups in Latvia and performance of the start-up?***

Based on the theoretical background established during the literature review, the aim is to find out whether determinants such as the entrepreneur's self-determination, education, experience and team capabilities are the ones that impact the fundraising process and the further performance of the start-up. Since there are two sides in the fundraising process - the demand side (the start-ups) and the supply side representing investors - the study requires evaluating the importance of abovementioned factors on both sides.

Based in the author's more than 20 years of professional experience as a business attorney-at-law and personal observations in practice, the author suggests that Latvian start-ups operate in an economic environment where there are no significant family savings or funds from businesses of previous generations, thus the novice entrepreneurs need to use their skills and preferences wisely in order to obtain necessary funds for their business idea. The entrepreneur's characteristics needs to be taken into consideration as they might influence decisions of the entrepreneur, as well as decisions made by potential investors. The aim is to establish which parameters dictate success of the fundraising strategy, e.g., whether an education of entrepreneur and/or a human capital of the start-up attracts the interest and trust of potential investors, or if there are other factors beyond this study, existence of which make the fundraising process easier.

Since start-ups operate in business and regulatory environments that may vary from country to country, this paper will contribute firstly to studies about the business environment of Latvian start-ups, as well as to other studies which have been done regarding start-ups' fundraising process and human capital as determinants for a successful outcome.

In some research papers (European Startup Monitor, 2016; Organization for Economic Cooperation and Development [OECD], 2015) it has been noted that data from Latvia or Baltics do not have a necessary quality or are not sufficient in order to give a well-grounded analysis to the reader about the capital structure and fundraising. The Latvian Start-up Association, the investors interviewed during the data collection process, and some respondents from the start-ups community have also expressed their interest in results of the research as they find it useful for further knowledge about the young entrepreneurs' opinion on importance of human capital in the fundraising process.



The remainder of this paper consists of the following sections:

Next section 2 contains a brief overview of the literature outlining various start-up definitions, and the most common theory when question arises about correlation between the entrepreneurs' characteristics and financial capital. Section 3 describes the research methodology used through the study. Results and discussion are presented in Section 4, while conclusions and recommendations for further research in Section 5 conclude the study.

## ***2. Literature Review***

In this chapter, the author reviews the theoretical background that gives insight into the human capital consisting of the entrepreneurs' characteristics and a team and its capabilities, and their impact on the creation of a start-up's financial capital, which is one of the main reasons why a start-up is involved in the fundraising process.

To better understand the fundraising process and factors influencing start-ups' success therein, this section addresses both the theory of financial capital structure and the theory that focuses on the entrepreneur's psychological perspective and other characteristics commonly mentioned in scholars' articles.

### **2.1. Defining Start-ups**

Many definitions of start-ups can be found in publications; however, no fundamental and clear definition exists that is accepted by all researchers and scholars. A definition provided in the laws of Latvia states that a "start-up company is a capital company with a high growth potential the basic activity of which is related to the development, production or improvement of scalable business models and innovative products" (Law on Aid for the Activities of Start-up Companies, November 2016). Another source says that a "start-up is an early stage in the life cycle of an enterprise where the entrepreneur moves from idea stage to securing financing" ("Start-up", n.d.).

In order to avoid naming as start-ups those new businesses the main purpose of which is to ensure their founders' livelihood, and which are not prone to innovation (for example, a barbershop), three criteria which characterize start-ups are proposed by Kollmann, Stöckmann, Hensellek and Kensbock (2016):

- "younger than 10 years
- feature innovative technologies and/or business models
- have (strive for) significant employee and/or sales growth".

According to the latter's argumentation, a company can be considered as start-up when the first criterion is met along with one or both remaining criteria.

However, another definition suggests that start-ups are new companies the lifecycle of which do not exceed five years. Robehmed (2013) reports that according to Paul Graham, a head of accelerator Y Combinator, a start-up five years old can still be considered as start-up while ten years old would look like a stretch.

It is stressed in many articles and publications that start-ups are a driving wheel in economies, that they are sources of innovation and export (Cassar, 2004). In their starting phase financial capital is one of the most important resources, therefore the entrepreneur's characteristics are one of the drivers in the fundraising process. Research on personal factors of the entrepreneur, such as human capital which includes education, experience, skills and technical knowledge of the team, suggests that these are characteristics of a successful entrepreneur and lead to higher business performance of small to medium enterprise (Sarwoko, Surachman, Armanu & Hadiwidjojo, 2013).

## **2.2. Finance Capital Theory and Human Capital**

The success of the start-up to some extent depends on the initial capital structure; therefore, it may be a subject of interest to what extent the start-ups follow the established theories on the structure of capital. Along with capital structure theories other determinants such as human capital play a significant role in the capital structure and in success of fundraising. Human capital as education, experience, skills and knowledge helps the entrepreneur discover and exploit business opportunities, as well as succeed in acquiring of financial resources, thus establishing a solid structure of capital (Unger, Rauch, Frese & Rosenbusch, 2011).

### THEORY ON CAPITAL STRUCTURE

Many research topics discuss the funding structure of novice companies by using *pecking order theory*.

According to the pecking order theory introduced by Myers (1984), a company uses funding in a specified manner: first using internal funds, then focusing on external financing, starting with debt, and finally accessing equity financing. The pecking order theory mostly relates to the big and well-established companies; however, several studies have investigated whether this model is applicable to novice companies.

Given the fact that start-ups are new businesses, without prior history, such a model seems to be the most appropriate for start-ups when the founder initially invests his/her own capital, along with funds from family and friends, and seeks external funding afterwards (Markova & Petkovska-Mircevska, 2009).

Founder (owner) funding in most cases is an initial investment into a company. According to Kollmann et al. (2016), almost all European start-ups initially use the owners'

personal investments as a primary source of funding. Family and friends also play an important role in funding during the starting phase of a novice company. Studies of the European market show that family and friends make one third of initial investments (Kollmann et al., 2016), however, this proportion differs among specific countries. In literature one can find references to “fools” or foolhardy strangers whose financial help and investment is one of the financing resources of the start-ups as well (Kotha & Gorge, 2012). Thus, we can find out that one of the sources is so called 3F’s (family, friends and fools). However, it should be noted that the scholars’ articles use this meaning quite rarely and avoid the term “fools”, while in the business environment and the popular press this expression is quite commonly used.

Bootstrapping is a method which entrepreneurs use as an alternative to other types of internal financing. Bhide (1992) indicated bootstrapping as the possibility to apply a different strategy and approach in starting a business with limited funds. “Bootstrap financing is often easier to acquire, perceived as less expensive and can be an important source of capital when traditional sources are unavailable” (Neely & Auken, 2012, p.10).

However, several studies indicate that the sequence of the pecking order model is often changed in practice, and that new companies do not always follow it, or even exclude one of its elements (Atherton, 2010; Howorth, 2001). According to Atherton (2010) the pecking order theory is not explaining sufficiently the way of start-up financing. In many cases the “new ventures were funded by equity alone or by a combination of equity and grants”, while in other cases, “even though new venture founders may prefer internal finance in the first instance, lack of trading history excluded this funding option”, and thus no internal funds were used (Atherton, 2010, p. 42). Some entrepreneurs see it as an opportunity to have equity investors in place as they can provide more management experience, as well as the equity financing does not require personal guarantees or collateral, and does not affect working capital (Paul, Whittam & Wyper, 2007).

In the start-up world the most popular equity investors are so-called business angels, as well as venture capitalists. Business angels as investors play a significant role in the early phase of start-ups. Mason and Harrison (2008, p. 309) define a business angel as “a high net worth individual, acting alone or in a formal or informal syndicate, who invests his or her own money directly”, and points out that there is no family connection between the business angel and the founder of start-up. Business angels usually are first-level investors who invest in start-ups in their seed or early stage. “The typical angel’s investment size is in the range of USD 25,000 – 500,000” (OECD, 2015, p. 86).

Venture capital is an equity investment made by venture capital firms. These firms raise funds from pension funds, insurance companies, wealthy individuals and others, and have their investment portfolios consisting of various asset classes (OECD, 2015). Venture capitalists in most cases invest in start-ups after there have been one or numbers of investments provided from the business angels and require shares in the company's equity in exchange for money.

Regarding equity financing, it can be mentioned that it may have an impact on the independence and self-determination of the entrepreneur, since involving an investor, to a greater or lesser extent, will have an influence on the direction and decisions of the company. Consequently, the pecking order model gives the company the opportunity to reduce such influential factors.

The pecking order is explained by the costs and risks associated with each of these types of funding. According to this theory, the structure of financial capital is dictated by the entrepreneur's desire for self-determination. According to Myers (1984), pecking order theory does not consider managerial choices to have a significant impact on financial decisions and capital structure, but they can be explained for some reasons. In turn, Sapienza et al. (2000) explains that the entrepreneur's self-determination and its importance to the entrepreneur himself determines which capital structure is chosen.

The fact that the owner management companies may introduce other factors in a financing decision, such as the owner's desire to keep ownership and control over the company, a choice to prefer equity capital over the debt needs to be taken into account as well (Berger & Udell, 1998).

Taking into account the opinion of the literature that factors such as an entrepreneur's education and available human capital have a positive effect on the attraction of funding and the choices made both on demand and on the supply side (Slavec & Prodan, 2012; Kotha & Gorge, 2012), then the start-ups' capital structure can be assessed from the capital theories point of view. However, the characteristics of the entrepreneur whose influence on fundraising decisions and the capital structure can play an important role should not be ignored. Thus, the entrepreneurs' characteristics discussed further in this section are taken into account when assessing fundraising of start-ups.

#### HUMAN CAPITAL

As the author mentioned before in this paper, the most described human capital factors in the scholars' articles are self-determination, experience, and education, as well as

the team behind the enterprise. In this chapter the author analyzes these factors in more detail in the context of the existing literature that describes and explains studies and results regarding the mentioned factors.

### ***Self-determination***

One of the important factors in attracting funding is the entrepreneur's attitude toward the specific type of funding and its impact on the firm and the independence of the entrepreneur himself. Sapienza et al. (2015) propose that "wealth maximization and self-determination are the two primary motives driving entrepreneurial financing choices" (Sapienza et al., 2015, p.106), pointing out that one of the primary goals of an entrepreneur is to be the creator and the commander of their company, while for others self-determination is a way to increase the company's wealth.

Self-determination, alternatively – fear of loss of decision-making control, in Sapienza's et al. (2015) opinion, is more related to the psychological factor. It is important to evaluate what is the main motive for the entrepreneur when the business has started. If one of the entrepreneurs will prioritize gaining independence and building a business the way he/she sees it, then for another entrepreneur it will be more important to develop a product that contributes to the common wealth, and thus the entrepreneur is ready to give up full or partial control by involving other external decision makers.

When deciding on funding, an entrepreneur who does not want to lose control over the business will prefer debt financing and not equity. Equity funding means that an entrepreneur would sacrifice part of self-determination, as equity investors usually acquire a certain amount of control and may therefore influence future decisions.

The most traditional debt capital is the long-term or short-term loans offered by the banks or other financial institutions. However, according to Kollmann et al. (2016), the study of European start-ups provides evidence that only about 15% of start-up funding consists of bank loans. A bank loan usually requires collateral to secure the debtor's obligations towards the bank, thus this source of funding is not always available to start-ups due to lack of necessary assets. "The financing constraints can be especially severe in the case of start-ups or small businesses that rely on intangibles in their business model, as these are highly firm-specific and difficult to use as collateral in traditional debt relations" (OECD, 2015, p. 11).

The author of this paper agrees with the argument that the extent of the entrepreneur's control, his/her objectives, and the plans for growth have influence on the financing decisions (Romano, Tanewski & Smyrnios, 2000).

In the context of performance, the entrepreneur's desire for independence may show greater personal performance because he/she takes responsibility for own decisions and trust them; however, in terms of a firm's business performance it can have a negative impact (Omerzel Gomezelj & Kusce, 2013). It can be explained by the fact that the entrepreneur is careful in evaluating the risks and thus is not willing to assume additional financial liabilities which in other scenarios might be a driving force to achieve better performance.

Other findings suggest that those start-ups that initially used external funding (equity), thus sacrificing the founders' independence to some extent, are more likely to survive and develop more rapidly (Hechavarría, Matthews & Reynolds, 2016).

Thus, the author proposes the following proposition:

***Proposition 1: A start-up's fundraising and performance is more successful when the founder has less degree of self-determination.***

### ***Experience and Education***

Another factor considered as having an impact on funding decisions is the experience of the entrepreneur. This has been investigated by several scholars, however, there is no consensus on the results obtained.

According to Zaleski (2011) and Zhang (2009) the experience of the entrepreneur matters as the entrepreneur with experience more often attracts external funding than those with no experience. Slovec and Prodan (2012) point out that the level of the entrepreneur's education has a positive effect on financing of the small firm.

In turn, Cassar (2004) argues that entrepreneur's characteristics like experience and education do not have substantial impact on start-up financing. It has been mentioned that individuals with moderate experience tend to be more accurate and stable in their assumptions on success of funding than those who are very experienced or inexperienced, as inexperienced individuals tend to rely on incomplete information while very experienced individuals tend to have an illusion of control (Sapienza et al., 2015). By their studies, Robb and Robinson (2012) point out that different experience makes different decisions on funding, since entrepreneurs having a start-up experience prefer to access and use external funding, which is not the case in terms of the industry experienced entrepreneurs.

In order to attract external financing, the entrepreneur has to prepare more information, such as a business plan or prospectus, which means that the entrepreneur needs to evaluate the business idea, product, development opportunities and other conditions more

carefully. Accordingly, the entrepreneur's experience and education play some role in this process.

Research by Dyke, Fischer and Reuber (1992) indicates that differences in the experiences of the entrepreneurs may have an impact on success of the firm since those firms, including start-ups, the owners of which had previous managerial and industry experience, showed more successful performance in terms of profitability. The same research shows that education level did not have a significant impact on the firm's performance, which led to conclusion that most likely importance of education plays a greater role in industries that require specific knowledge or skills (Dyke et al., 1992).

Oe and Mitsuhashi (2013) suggests that the founders' previous experience (e.g., start-ups, job, industry) has a positive effect on a start-up's success and growth, however, such effect may vary according to the nature of experiences. While previous start-up experience increases with every start-up launched and thus makes every next process more understandable for the founder, job experience might be moderated due to the specific type of start-up business.

Ruiter (2016) stresses that prior start-up experience is regarded as power for success, while a higher level of education does not play a significant role. He notes that founders with a master's degree perform best, following by the founders with a bachelor's degree. "Entrepreneurs with a doctoral degree are too analytic... they think that their product is never good enough to enter the market" (Ruiter, 2016).

Thus, the author proposes the following propositions:

***Proposition 2:*** *The founder's experience (start-up, job, industry, managerial) has a positive effect on fundraising and future performance of the start-up.*

***Proposition 3:*** *The level of founders' education has a moderate or low impact on the fundraising process.*

### ***Team capabilities***

Along with the previously described characteristics, the start-up's team is indicated as a factor that may have a significant impact on attracting of the funding. Bernstein, Korteweg and Laws (2017) report that the operational and technical capabilities of the founding team provide more chance for successful outcome in fundraising, which can be explained by signaling the quality of the idea. Bernstein et al. (2017) also point out that "the founding team is important if human assets are the critical resource that differentiates one start-up from



another”. The opinion is shared by Kotha and Gorge (2012), who stress that in cases where the team of a specific industry has previous experience, this increases the chance to get more equity. However, Åstebro and Bernhardt (2003) argue that in cases of a bank loan, the human capital factor does not have any significant value because banks are focused more on creditability in making loan decisions.

An interesting opinion is provided by Ruitter (2016) on the size of the founders’ team – an ideal start-up team has three founders, with master’s degrees and previous start-up experience. According to Ruitter (2016), it is an optimal setup of the start-up team since investors are more interested to invest in the company where there are not many stock holders.

Asere (2018) suggests that in the early stage investors are primarily investing in people, which means that it is not the most genius idea that will survive, but the most ambitious and resilient start-up team.

Thus, the author proposes the following proposition:

***Proposition 4:*** *A start-up team with previous experience, skills and knowledge is one of the keys to successfully obtain necessary financing and to escalate performance of the firm.*

### **2.3. Literature Summary**

The purpose of this paper was primarily to focus on the start-up fundraising process and the human capital factors that determine it. However, the literature indicates that both parties, start-ups and investors, are interacting, and as such provide success or failure in the fundraising process. Factors that determine the start-up success in the fundraising process can be important on both sides - on the supply side and on demand side. Consequently, it is important to assess which factors play a significant role in achieving of successful outcome.

The author has created Table 1 which provides a summary of the literature on human capital determinants that have significant influence in start-up fundraising.

Table 1. Factors influencing fundraising process

THEORETICAL BACKGROUND	FACTORS HAVING AN IMPACT ON FUNDRAISING
Pecking order theory	<p>“Loss of control” aversion (Myers &amp; Majluf, 1984)</p> <p><i>Lack of tangible assets</i> that hinder getting external funding (Berger &amp; Udell, 1998)</p>
Human capital - Entrepreneur’s characteristics	<p><i>Self-determination</i>: fear of loss of decision-making control or, vice versa, desire to maximize company’s wealth (Sapienza et al., 2000)</p> <p><i>Experience</i>: previous managerial experience or experience in industry or in start-ups (Dyke et al., 1992; Zaleski, 2011; Zhang, 2009)</p> <p><i>Education</i>: level of education, specific knowledge, skills and expertise (Dyke et al., 1992; Slovec &amp; Prodak, 2012)</p> <p><i>Team</i>: operational and technical capabilities of founding team (Bernstein et al., 2017)</p>

The human capital factors outlined above are to be investigated in this paper as those influencing the entrepreneur’s attitude and financing decisions when it comes to the fundraising; however, they might be of high importance for the investors when assessing the start-ups and applying specific criteria on which the investment is made.

Therefore, the author has defined the propositions on each factor that shall be investigated in order to establish whether the theoretical background on human capital and its influence on business performance coincides with the actual results obtained during the data collection process.

### ***3. Methodology***

#### **3.1 Research approach**

Taking into account that the author of this paper is going to investigate early-stage start-ups in Latvia, the units of analysis do not create enough number of samples for appropriate quantitative analysis. Therefore, this case study was based on qualitative research method where the surveys, which are usually common for quantitative studies, in this paper were used to get more data to be used as statistical background for description and explanation of the results.

##### ***Measures***

The factors selected for this study are human capital factors specified in the literature summary – self-determination, experience, education, team capabilities, and for which the author has defined the propositions. Propositions were tested based on the interviews and the surveys. In the surveys the factors are measured using agree/disagree answers' scale starting from “strongly disagree” and ending with “strongly agree”, and for some of questions a scale of importance (absolutely unimportant to very important) was used. Descriptive overview is provided for statistical results arising from the surveys and compared with the information obtained from the interviews with the investors.

To analyze success and performance of the start-ups during the fundraising process the amount of attracted investment and number of employees are used as criteria. Data on amount of investments were obtained from the answers provided by the respondents, as well as about the number of employees that has been also indicated by the respondents. Initially the author was planning to verify those data with information provided in the public databases, such as *firmas.lv* and *lursoft.lv*, providing information on companies registered with the Commercial Register of Latvia. When during data collection process the author searched for additional data in the mentioned public data bases, it was found that data from public databases is inadequate and does not reflect the situation at the moment of data analysis. In public databases, financial and other numerical data are submitted with a delay of at least one and a half years, so the author did not have the opportunity to analyze them. Theoretically, the total funding indicated by respondents is reached during previous fiscal year, for which precise data in the public databases are not yet available. Consequently, the author did not analyze these data and the impact of human capital factors were analyzed on the basis of data obtained through interviews and surveys.

Since the start-ups' business sector in Latvia is new and is still developing then there are no many academic researches made regarding Latvian start-ups. Another obstacle is that there is no unified register of start-ups available in Latvia where the interested person can get precise information on the company, e.g., the year of establishment, founders, size of investments and other. This fact creates limitations in obtaining relevant information and additional data which can be used to measure success and performance of the start-ups. The information and data had to be collected through several sources, including the founders themselves, thus limiting the number of sample available for research. Taking into account the above-mentioned the author indicates that the possibilities of generalization of the results obtained during this study is very limited.

### **3.2. Sample**

As a sample, early-stage start-ups were chosen that had attracted at least EUR 20,000 in financing. This amount was chosen as the criteria based on the size of investment which is provided by the business accelerators' programs as an initial capital for new start-ups to develop their skills and idea. The information on start-ups that meet criteria of this study was obtained through the Latvian Startup Association, as well as using other available contacts, e.g., Labs of Latvia and private contacts.

Because of the fact that investors (business angels, venture capitalists) or intermediaries (e.g., business incubators) have an influence on the fundraising process and the strategies applied, it was decided that these information accumulators need to be involved to some extent in the research process as well. The data obtained from those persons might provide valuable information on what are the key human capital factors considered by investors during the fundraising process and whether the factors that are the aim of this study are among those. The approach to obtain data also from the supply side is explained by the fact that the opinion expressed by the entrepreneur can be different from the investors' point of view.

As there is no specific register of all start-ups in Latvia and data need to be collected from several sources, the companies as well as representatives from the supply side were selected from publicly available sources like the Latvian Startup Association web page, Labs of Latvia (a start-up community platform), as well as from the publications in mass media providing information on the success of start-ups.

The survey was sent through the Latvian Startup Association to 50 start-ups by

inviting them to participate and with a promise to represent the results (anonymized). The response rate to the survey was not very high – 28 responses in total, where part of them were received after repeated personal invitation had been sent to non-responsive participants.

Before sending out the survey the author interviewed three practitioners from the investors' side in order to verify if the human capital factors presented in this paper are considered by the investors, as well as to receive their opinion on importance of such factors. The investors' side were represented by two persons with over ten years' experience in investment field and representing the fund and the venture capital – Toby Moore from Imprimatur Capital Fund and Andris K. Berzins from Change Ventures. One of the investors represents investments in the seed and early-growth phase, another also provides pre-seed investments. The third interviewee — Egita Polanska, Program & Partnerships Manager at Startup Wise Guys — operates in the business accelerator where the start-up teams get their first funds in an amount up to EUR 20,000 plus are involved in a training program where they have an opportunity to learn basics of entrepreneurship, management, marketing, and similar skills. The author chose to invite them for open and valuable discussion as they all have got a remarkable experience in working in the Latvian start-ups' environment.

### **3.3 Research Design**

According to Yin (2014) the sources of evidence in case studies can be documentation, interviews and observations.

As primary data sources interviews and surveys were used.

The interviews and the surveys were designed to analyze the research topic – the main factors having influence on fundraising process, their importance in the success of the fundraising process, and how the data collected during the study correlate with the theories provided on the entrepreneurs' characteristics influencing the financing decision and process.

In order to gather more information about the fundraising that have been successfully completed and the factors playing a significant role during the fundraising processes, initially the author was planning to conduct semi-structured interviews (see Appendix A) with the persons representing the supply side, e.g., business angels or representatives of venture capitals. This approach helped the author to explore and find out information unknown to the author and to look for some patterns which can be used for further data collection when it turns to the demand side – the start-ups. It also gave insight into the supply side and clarified what human capital determinants they consider as important ones when evaluating the start-

ups and their ideas and making decision on investing. As already mentioned, the start-ups and the capital providers interact with each other, therefore, to analyze data received from the start-ups, it was necessary to obtain opinion and information from the other side of that game. The verification interviews with three persons representing the investor's side were conducted also for the purpose to verify the theories established in the scholars' articles, and to find out whether the factors analyzed in this paper are related to the Latvian market. In addition, the data gathered from the investors might highlight factors that have not been analyzed in this paper but may be interesting and important for understanding the pattern typical for Latvia.

When the interviews with the investors were completed, the information obtained during the interviewing process was analyzed and the importance of human capital determinants was established. The author took into account the level of importance of human capital determinants indicated by each participant of the interview individually, as well as evaluating commonly highlighted factors by all interviewees. The data obtained were compared with the human capital factors that the author of this paper has summarized in the literature review section and whose influence on the fundraising process the author is going to test in this study.

Interviews were chosen as they allowed the researcher to contact with the participant directly and through the conversation obtain deeper insight in the entrepreneur's attitude towards the fundraising process, to identify other relevant issues and sources that might be helpful for further research, and to define additional factors or criteria that need the researcher's attention. As Yin (2014) points out, the person can be the key informant by interpreting and giving his/her opinion on issue, as well as by suggesting another person to be approached and thus making the whole research process more fruitful. However, the author needs to consider some disadvantages associated with the interviewing process. For example, it can be time consuming, which may prevent gathering of a larger data set from a larger number of samples and thus the researcher may not rely on the assumption that all analyzed data gives a reliable picture of the research.

Based on the theories and factors summarized in the literature review and the data obtained from the verification interviews with the investors, the author designed the survey (see Appendix B) to be sent to the start-ups that were chosen as the sample. The start-ups were contacted through the Latvian Startup Association, which assisted on sending out the questionnaires to the start-ups by e-mail, following by reminder to those delaying the answers.

The survey was chosen as one way how the researcher can reach a larger number of respondents in a short time. Since the surveys are structured and organized, the researcher gathers the data set which is easier to analyze and does not require much of the researcher's time in looking for additional patterns or issues to be clarified, as may happen during the interviews.

However, the surveys may lack some questions which might have been identified later in the research process, and due to the volume of the surveys it cannot be possible to revert to the respondents to clarify specific issues.

Using observation as a tool for interaction and building of general competence, the author participated in some of the social events (seminars, conferences) where it was possible to communicate with the entrepreneurs directly. Recently the author participated in Riga Venture Summit 2018 and TechChill 2018 – events that bring together a large number of start-up enthusiasts, new start-ups, investors and just interested persons. Observation in the data collecting process allows to the researcher to see what people actually do or say, their real behavior instead of what they say they do. Observation was used to gain an initial idea and to raise the author's competence in a topic. During the observation, there were no concrete criteria chosen to be measured, since the aim of the observation was to gain an understanding of what would be analyzed in the course of the study.

In interviews and surveys there is a risk that the person discloses information based on his/her idea about what is right and what is wrong or tries to show the subject of discussion in a way that shows it in the best light. Therefore, observation can tell the researcher about the real behavior and culture of the start-up society and show what is going on. The negative side of this source of evidence is that observation research can involve a certain degree of bias since the researcher is a human being and his/her opinion on observations can be too subjective. It is also can be time consuming and can be superficial in terms of its context.

In parallel, the secondary data sources, such as mass media publications are web pages of the participants, are checked to gather any additional information about the respondent's business and product offered and to look for any additional information about the success of fundraising, if such information is provided in public.

After the data from the surveys and the interviews were gathered, the author transcribed the audio-recorded interviews, as well as prepared a preliminary overview on findings by using some charts for statistical purposes. Further analysis was made on the data in order to exclude data and information not related to the research topic. The remaining data

have been analyzed to find connections with the theoretical background provided in this research, as well as to identify factors that are different. Combining the interviews with the surveys, the author could collect the data she may rely on.

Limitation of the Study. A couple of limitations need to be recognized. The sample analyzed is small (28 responses, 3 investors' interviews) and cannot be used to generalize findings, therefore the analysis has more of a descriptive nature. The analysis of surveys was based entirely on information and responses provided by the respondents who might have presented the answers in a way what they consider as more positive or appropriate. Thus, the answers might have biased the results.

Taking into account all advantages and disadvantages of the sources of evidences used in this study, the author considers that the data collected through these sources can still be analyzed in terms of the research topic and they can provide a reliable and sufficient data set based on which the theories can be compared with the actual situation in the fundraising in Latvia. When the data analysis and verification were completed, the conclusion was made on the study.



## 4. Results and Discussion

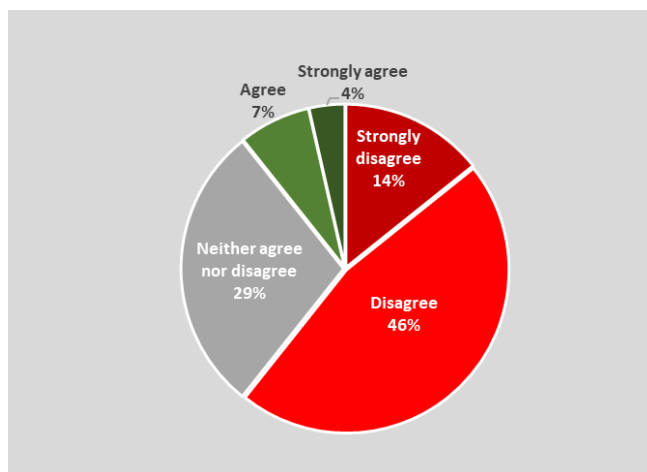
Further data is based on information and data obtained and gathered during the interviews and from the surveys sent to the start-ups. The overall sample includes the start-ups with acquired financing starting from EUR 20,000 and up to EUR 6 Million. One start-up indicated EUR 21 million as attracted funding, however as it operates in the fintech field then it can be mentioned as an exception among others providing answers to the survey.

The results are described in the context of the propositions the author made in this paper.

### Self-determination

The author stated Proposition 1 suggesting that a low degree of self-determination can give more benefits and success in fundraising process. Having examined the start-ups' responses to the survey, it can be seen that more than 60% of the respondents are of the opinion that daily management and operations of the firm need to be done by the start-up team itself, neither involving a representative of the investors nor giving them a seat in the management board. This can be seen in Figure 1<sup>2</sup> below, which reflects an average proportion of respondents' answers.

Figure 1. *Do investors need to participate in day-to-day management (board)*



The Latvian investors interviewed by the author did not support an idea that their representative should be on the management board of the start-up. It is mostly explained by the legal background in commercial area where the board members of the company bear all

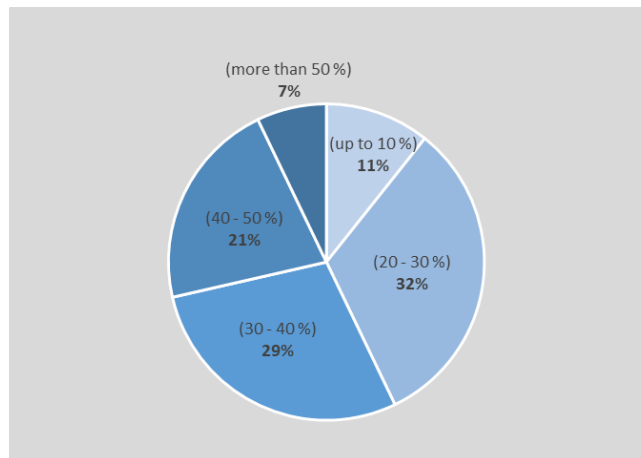
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<sup>2</sup> Figure 1 and all further Figures in this paper are created by the author of this paper during analysis of data.

the liability and responsibility for actions of the company. Thus, the investors based locally in Latvia do not want to take any additional external liability. According to the author's observations during the start-ups events, investors from foreign countries share a bit different opinion about participation on the management board of start-ups. Mrs. Colette Ballou, an entrepreneur, business angel and limited partner in venture capital firms, in her presentation at TechChill 2018 spoke about participation of business angels on the board of start-ups as an option how investors provide their daily support to start-ups. However, she noted to the audience that the start-up founders have to consider limiting the term of angel investors' office in order to avoid retaining members who no longer meet the start-up's needs. The author suggests that such difference in opinions of investors can be explained by different legal regulations in countries where the question of liability is important for both the start-up's management and investors.

If we look further in context of equity, then all the respondents are ready to share some part of equity with the investors as they see it mainly as a possibility to acquire necessary funds. However, most of them find 20-40% of the equity as an appropriate part that can be shared with external investors (see Figure 2).

Figure 2. *Equity share which founders are ready to share with investors (%)*



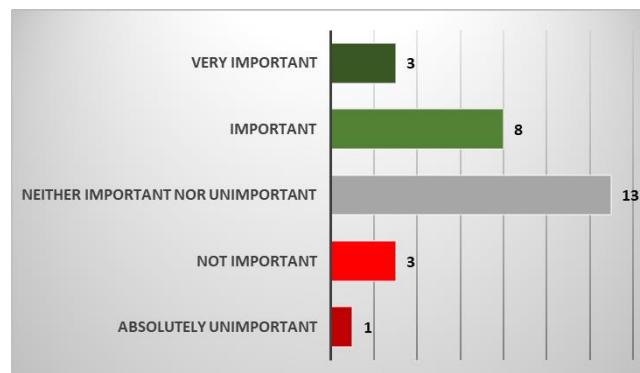
In this context the interviews with the investors showed that investors require shares in equity which, depending on the investor's profile, could range from 8% (business accelerator) up to 50% (venture capitalists). However, the investors try to keep their shareholding to a level that still gives to the start-up founders majority in equity (at least 51%). Toby Moore from Imprimatur Capital outlined: *“We want the founders to be motivated. If they have less than 50%, they will not feel as they own and control the business”*. According to the latter during the start-up's life cycle the founders are sharing with investors up to 40-50% of equity. Usually in the first two years, when the start-up attracts

either business angels' or business accelerators' funding, the founders give 10 – 20% of the equity to investors. This proportion grows with each stage of the life cycle and reaches up to 50% when the venture capitalists steps in.

The data analysis shows that for those start-ups the founders of which accept to share a larger part of the equity with investors, the fundraising results are quite good. For example, two respondents were of the opinion that they can give to investors more than 50% of the equity. The results of their performance indicate that the total funding acquired is around EUR 23,000,000 and they employ together more than 300 employees. Also, those respondents that accepted the investors' share to be in range of 40-50% are performing well in the fundraising process by attracting from EUR 90,000 up to EUR 500,000 during the first two years from their establishment.

An interesting fact that has appeared out of the survey is non-existence of a clear opinion on whether daily support of the investor is necessary. Only 11 respondents of 28 indicated the investor's daily support as important or very important while other respondents did not have a clear opinion about it or considered it as less important (see Figure 3).

Figure 3. *Importance of investors daily support (start-ups' opinion)*



Similar results showed up regarding the investors' need to receive regular updates, e.g. in form of reports or similar, on the start-ups activities, business decisions and development. This contradicts the opinion on investors' side which stressed necessity for regular reports or participation on the supervisory level during the investment period. "We want keeping control over the start-ups' decisions of foremost importance, like acquiring of financing, product development, etc., either through the shareholders agreements or by taking position in the supervisory board" says Andris K. Berzins, the representative of Change Ventures. In the author's opinion such a result can be explained by the fact that the Latvian start-up community is still young compared with the other countries and relationships between investors and start-ups are yet to develop.

The results of analysis support *Proposition 1* in the context of Latvian start-ups, proving that readiness to give away some part of control over the equity and thus losing some degree of self-determination turns out to be more beneficial for the start-up in the fundraising process. The investors' aim is to gain profit on their investments, even if they are risky ones, thus they are giving either a convertible loan or requiring respective share in the equity; at the same time start-ups need funds to start and develop their product or business idea and that requires to sacrifice a part of independence. The principle "you give, you get" works in both ways.

### *Experience and Education*

To test the Proposition 2 several questions were included in the survey to find out how previous experience, in the start-ups' opinion, can influence fundraising. Almost 80% of respondents agree that previous start-up experience helps in the fundraising process, as well as they agree that mistakes and failures which they have faced in the past gave them better understanding on how to act and behave in the next rounds of fundraising. The previous start-up experience may give skills and knowledge, as well as a network of necessary contacts.

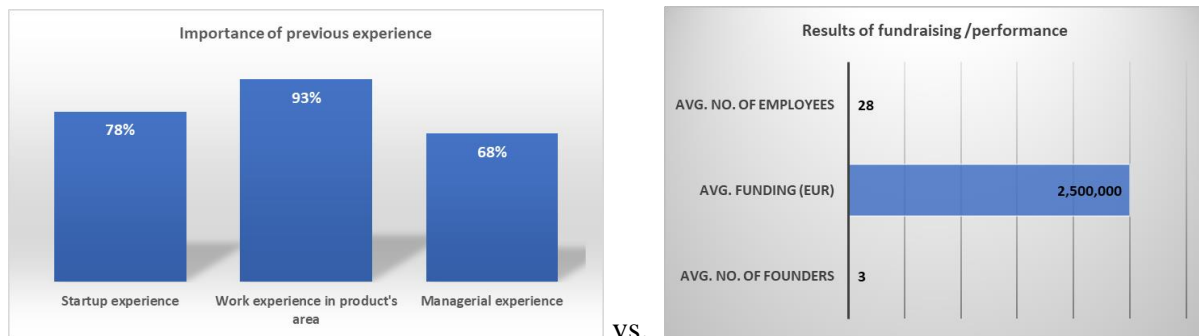
A bit different result appeared when the analysis came to the previous experience in the area of product / idea vs. previous managerial experience. From 28 respondents, twenty-six (93%) share a common understanding that previous work experience of the founders in the field in which the product or idea is offered is advantageous when seeking /funding. On the other hand, in terms of managerial experience, the respondents are no longer so consistent, and their views differ. While most still agree that prior managerial experience has helped them in the fundraising process, some respondents either disagree with it or do not specifically support any of the opinions. In a phone interview with one of the respondents currently performing most of their business activities in the United States and interacting with US investors, the respondent underlined that the managerial experience definitely is not a decisive factor and will not be considered as a benefit on that "side of the world", because managing an ordinary business and start-up are two different things. This respondent has attracted EUR 6 million investment without having previous managerial experience, and it shows that lack of previous managerial experience may have no effect on start-up performance.

The interviews on the Latvian investors' side gave some hints what kind of experience could be more beneficial. Although the investors tolerate the lack of previous start-up or managerial experience, they consider it an advantage if some of the founders have

previous experience (business or as an employee) in the field of the potential product or idea, as well as if they had a managerial experience. As Toby Moore pointed out, a managerial experience can be beneficial in terms of cooperation inside the team as a founder with managerial background can be able to see some necessary patterns for more effective work among the team members.

Summarizing the views on both the demand side and the supply side, the author has created a chart (see Figure 4) showing the experience that is being evaluated higher, as well as how it affected the amount of attracted funding and start-up performance, where the number of existing employees was used as a criterion. The given data is calculated as the average of the data provided by start-ups which support the importance of the previous experience in the fundraising process and performance of the company.

Figure 4. *Previous experience and results of fundraising*



In their responses some of the respondents indicated that previous start-up or business experience helps in terms of networking and in finding “the right” contacts among the investors.

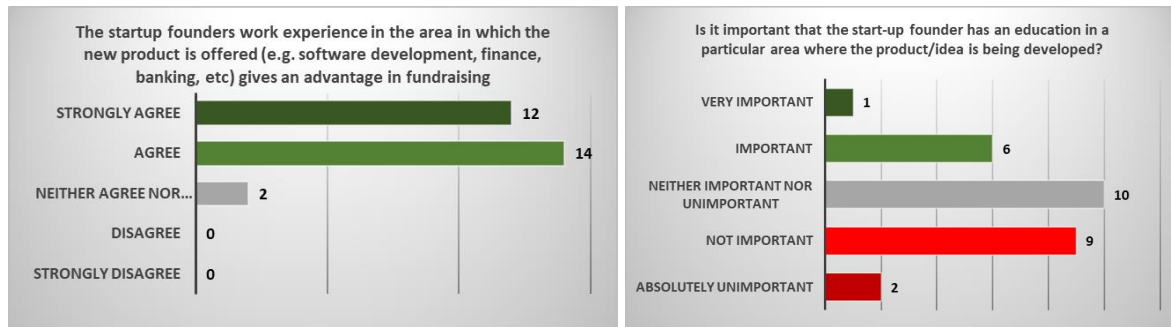
Therefore, the data analysis supports *Proposition 2* confirming that the founders’ previous experience has a positive effect on the fundraising process and influences further performance of the start-up.

When testing the Proposition 3 about the impact of education on financing decisions and therefore the fundraising process, the results obtained show that majority of the respondents consider that the level of education and even the field in which the education is acquired does not affect the outcome of the fundraising. As can be seen in the summary of results included in Appendix C, the number of respondents who deny the importance of education is dominant. When analyzing data on the impact of education, the author faced the highest degree of uncertainty among respondents. Around 10 respondents, representing 36% of all respondents, did not have a clear opinion. Consequently, the author accepted this part

of the answers as more negative, thus the aggregate amount of negative answers was 72%.

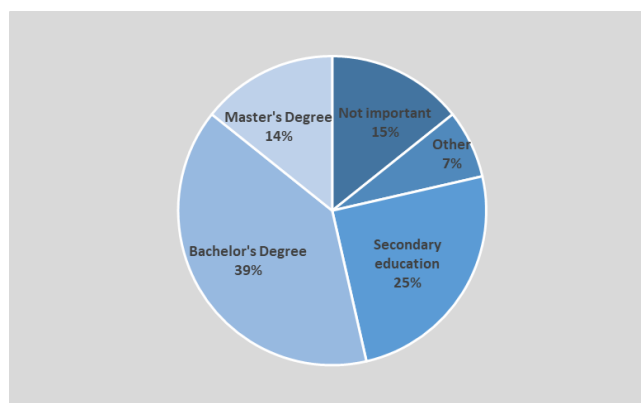
However, the author noticed an interesting feature in the answers of respondents when comparing their views on previous work experience in the area where products are developed, with an opinion on education acquired in the respective field. In Figure 5 the author included the summary of responses which shows that among the start-ups the preference is given to the previous work experience and not to the education in specific field.

Figure 5. *Work experience vs. education?*



The most popular educational degree among the respondents that they considered as sufficient for successful performance was the bachelor's degree followed by the master's degree; however, other respondents emphasized the non-importance of the level of education or accepted a secondary (non-university) education as sufficient for business development (see Figure 6). Some respondents mentioned that an education or studies in area of start-ups' business, its differences from life-style business, would be a good supplement to an existing educational system.

Figure 6. *Sufficient educational level to be successful (start-ups' opinion)*



On the investors' side the master's degree is outlined as a benefit because that shows the human's ability to analyze information, the way of thinking, the skill of cooperation, and discipline. Both representatives of venture capitalists prefer the master's degree, at the same time emphasizing that it does not mean that only founders with the mentioned degree of education will succeed in the fundraising process. Egita Polanska, the representative from the

business accelerator, also confirmed that the level of education needs to be at least the bachelor or higher, however, it is *not* the main criterion when evaluating the founders' application for financing.

From the data obtained it can be concluded that the level of education for most of the respondents is in the university level (bachelor, master, MBA or doctoral degree) and only one respondent has a secondary education. However, the data about the attracted funding and employees employed by the respondents do not indicate a link between education level and the amount of funding attracted. There is no indication that founders with a higher educational level have attracted more investments or employ more employees, on the contrary, the data is different in each case.

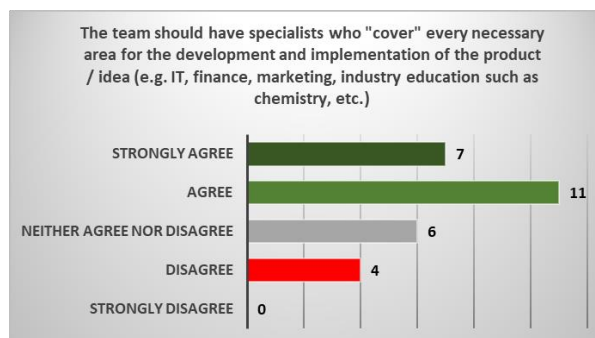
Therefore, the author concludes that the obtained results support *Proposition 3* that the education level has minimal impact on the fundraising process.

*Team capabilities*

*Proposition 4* is supported by the research results as they show the importance of the team's previous experience, skills, and knowledge, according to the data gathered from the respondents and interviews with the representatives of investors.

61% of the respondents emphasize and agree that previous work experience of the team, also cooperation experienced while studying or working together, is important for success. All respondents share the opinion that motivation is one of the most important drivers of the team. The respondents agree that the team needs to have members with previous experience in specific fields like finance, marketing, entrepreneurship or business administration as that helps to be more successful in the fundraising process and also in development of the product; however, most important for them was the requirement that certain roles and responsibilities (e.g., finance, marketing, etc.) are shared between team members, and each performs certain work in the implementation and development of the product (see Figure 7).

Figure 7. *Distribution of responsibilities*



For example, the respondent implementing a product in the field of medicine is of the opinion that such distribution of duties is very important, so that everyone is responsible and focused on a particular task. This start-up is in the active fundraising phase now having attracted already EUR 0.5 million and is still successfully gathering more investors' interest on the product which is highly recognized in the United States as well. The team consists of specialists with medical education as well as specialists with IT and visual arts background, which together form a good team for the successful implementation of the product. This also could be the next "success story" of Latvian start-ups.

During the interviews the investors stressed that the team is the most important human capital which plays a significant role in the fundraising process. *"We observe how the founders cooperate to each other, do they have previous "records" on working, studying or having friendship together. For us it is important that the team stay together not only when everything is perfect but also when things are going down or wrong,"* says Andris K. Berzins, the representative of Change Ventures, and adds that the team is criterion No. 1 evaluated during the investment decision procedure. Egita Polanska, the representative from the business accelerator Startup Wise Guys, indicated the team and its capabilities as one of the main factors that investors take into account when choosing the participants for the accelerator's training program. *"If we see that the team is not open for any kind of feedback, we exclude them from the candidates' list. We give knowledge and support, also an opportunity to interact with other teams and exchange ideas, but, if the team is not open to such opportunities then we see it problematic to work with them in future,"* pointed out Egita Polanska.

The respondent from the start-ups' community indicated that *"the team members have to trust each other's opinion, knowledge and experience, and should not be afraid to ask for help or advise"*. This respondent's team success can be evaluated by the raised funding in amount of EUR 90,000, taking into account that the start-up is very young – established only in 2017.

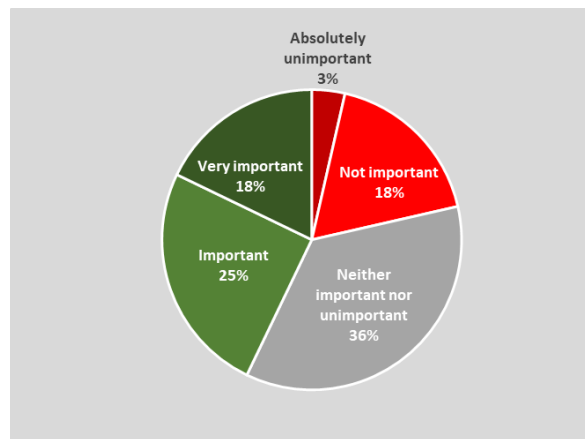
As it was mentioned then in the early stage the investors are primarily investing in people. Human capital is even more necessary than finances for successful development and growth of a start-up.

During the interviews with investors the author got confirmation to the opinion which popular among foreign investors (as can be seen from the popular press) that it is better if the founders' team consists of more than one person. According to Toby Moore, their investment fund does not even consider applications from start-ups where there is only one founder.



They see that as a risk for their investment. Another investor, Andris K. Berzins did not exclude a possibility for one founder’s start-up to receive financing; however, he also stated that a team of more founders would be preferable. Both interviewees agreed that in most cases the investors expect that founders do not leave the team before the product has been deployed on the market (reason why the one founder is not accepted by some of investors). To get start-ups’ opinion and understanding on this matter the author asked the same question to the respondents of the survey and received quite opposite opinion (see Figure 8):

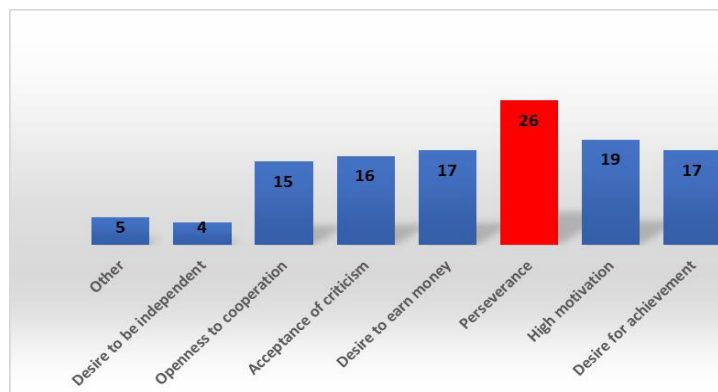
Figure 8. Importance for founders to stay in the team until product’s exit on the market



Less than half of the respondents agreed with an opinion that the founders should stay and participate in the start-up’s product development, while majority of the respondents do not see (or do not have a clear opinion) participation of the founders in the start-up until the product is introduced on the market as an important precondition.

The author has also asked the respondents to indicate important characteristics of the team in order to achieve a start-up’s successful development. As it can be seen in Figure 9, a perseverance is a leader among all.

Figure 9. Most important characteristics of the team to succeed



It is also in line with the opinion of the interviewed investors, who pointed out that the most important thing is perseverance of the team. The team should be persistent and do not

have to stop because of rejections, as there will be a lot of such during the fundraising process.

According to all the investors interviewed, one important issue should not be forgotten which is of utmost importance for the team – references. As the investors explained, the founders and their team may have very good background in terms of education and previous experience, however, if most of their cooperation partners, ex-colleagues, or other fellows give unpleasant references regarding cooperation with particular persons or on individual characteristics of the founders, then it is most unlikely that the investors will consider the future investment and cooperation with such a team or founder.

## *5. Conclusions and Recommendations*

With this study the author aimed to examine the influence of human capital on the start-up fundraising process in Latvia. According to the results and findings the author can support the scholars' opinion (Gimmon & Levie, 2010; Minola et al., 2013; Seghers et al., 2012) that previous experience, education, and team capabilities play significant roles when start-ups seek financing or make decisions influencing the capital structure of the company.

This paper contributes to the literature on the influence of human capital on start-ups' fundraising process in context of Latvia. The findings and analysis of the results may be of value to the start-ups' founders and teams, since they already demonstrated their interest in the summary of results after the study is completed.

As the study confirmed, in Latvia, where the start-up environment is comparatively young, the founders' main tools in acquiring of funding are their team and previous experience. The author concludes that the start-ups have a different business model than traditional companies, thus the start-ups need funding before they start to make a profit. In this study the author finds that the Latvian start-ups want to keep control over their day-to-day business and decision making, but at the same time they are keen to develop their product and grow. The results of the obtained data show that the founders of Latvian start-ups are ready to transfer part of the equity to investors as they see it as an opportunity to obtain the necessary financing for the development of the product. However, this also means losing a part of self-determination, and there is a certain tendency to maintain self-determination through day-to-day management. However, further analysis revealed that those start-ups that were less afraid to lose their independence showed good results in the fundraising process and in further growth of the company. Thus, it is important to start-ups to not be afraid and accept an external influence on their business and to be ready to share a part of their equity with investors, and that will allow them to gain more funding. It can also be concluded that external funding disciplines the founders and to some extent puts on them a responsibility to work hard to get better results. A pre-investment made by first investors can as well give a signal to other investors with greater funds and networks that the respective product or idea has potential.

The study also confirms the importance of human capital such as previous experience and the team for success of the start-up both in the fundraising process and development of product or idea. Previous start-up experience may give the founders a broader access to the network that can be exploited for funding needs, as well as acquired knowledge and even past

mistakes or failures can serve as ground for building more successful platform for the new start-up. The same applies to the previous experience in the field where the start-up intends to offer a new product, as the team's work or industry experience may provide or generate necessary reliability and knowledge (know-how) that is needed to access financial sources. This conclusion was supported also by the results of the study. In context of Latvia the author can conclude that the Latvian start-ups' founders are lacking previous start-up experience or have it in less degree than those operating in other European countries. This can be explained by relatively young start-up business environment in Latvia and other Baltic countries, but which is constantly growing and successfully developing.

Regarding the educational level of the start-ups' founders the author finds that it may, to some extent, influence the outcome of the fundraising process, however, the study did not provide strong results confirming that. This factor the author finds as the one for which there is no consensus in the literature as well and which could be a subject for further researches in context of Latvia and other Baltics.

The findings of this study have implications for start-ups in general, as well as for investors acting in the Latvian market. From the results the start-ups can obtain information about what human capital determinants are considered as more influential to the fundraising process from the demand side and what is the opinion of the supply side on that. For the investors it can be interesting to see the dominant understanding and opinion on the start-ups' side and to get an insight into what human capital factors the start-ups consider as important for obtaining funding. As the study shows, there are some issues (for example, reporting to investors), where the views do not completely match.

As previously stated in the Limitations paragraph of this paper, the results cannot be generalized due to the small size of the sample. Therefore, it would be advisable to expand the research to all Baltic states since all three Baltic countries now are going through an intensive development of the start-up environment. The research on influence of human capital determinants during the fundraising process in the Baltics can provide broader insight into the mindset and behavior of the start-ups, as well as can show possible differences due to some specific background or reasons. Another characteristic which deserves attention for research and which is not studied in this paper is communication and presentation skills of the start-ups and how the founders are coping with this challenge. The author's observations at the start-ups' events indicate that communication and presentation skills play a very important role in the fundraising process, especially in the beginning. So-called "pitching" is one of the keys to accessing investors and raising their interest into the idea of a start-up.

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## ***7. Appendices***

### ***Appendix A. Guidelines of the interview with the investors***

#### ***1. Investor's profile***

- Are you investing as a business angel, venture capitalist, or other type of investor?
- How many start-ups you have invested in?
- What kind of monetary funding have you provided to start-ups (loan, equity, syndicated investment, crowdfunding, etc.)?
- Do you provide support to the start-ups in the form of networking, knowledge, or mentoring?

#### ***2. Factors considered when deciding on investing***

##### START-UP FOUNDERS' SELF-DETERMINATION

- Do you pay attention to the founders' desire to keep control over the business? Will it have an impact on your investment decision?
- Do you require participation in management of the start-up? If the answer is yes, then how exactly are you taking part in the management (board, supervisory board, managers, counselor, other)?
- Is it important for you to have shares in the equity of the start-up?
- Are you sharing management, technical, or other experience with the founders of the start-up, or would you prefer not to intervene in business decisions of the start-up team?
- What are your requirements regarding control over the start-up, if any, for the founders to receive funding?
- Will you sacrifice possible control over the firm if you see the firm's or product's potential to grow rapidly?

##### FOUNDERS' EXPERIENCE

- Is it important that the founder or his/her team members have previous experience in a particular industry?
- Does the founders' previous managerial or entrepreneurial experience influence the investor's decision on funding?

- How does the previous start-up experience of the founders impact the fundraising process? Does it have an advantage over those founders who do not have such experience?
- Are founders with previous experience (industry, managerial, start-up) more successful in the fundraising process?
- Do you take that experience into account as one of the important factors when deciding on investing?
- What kind of experience of the founders (e.g. industrial, managerial, entrepreneurial, start-up) is more beneficial in the fundraising process?

#### FOUNDERS' EDUCATION, SKILLS, EXPERTISE

- Does the educational level of the founder and his/her team play a significant role in the fundraising process?
- Does education in a particular industry or area help the founder obtain necessary funding?
- Will the skills and expertise of the founder and the team play a significant role?
- Do you see the start-up team's operational and technical capabilities having an impact on the investor's decision to invest?
- To what extent is this factor significant in the fundraising process?
- What other education, skills, or expertise are important in the fundraising process?

#### ***3. Other issues to be considered***

- Are there any issues, factors, or criteria not covered by the questions herein that you consider to be worth mentioning as important in the fundraising process?

**Appendix B. Survey for start-ups**

*(translated from Latvian, was conducted through Google Forms)*

Hello!

Your company has been chosen for a survey because you have proven yourself as a successful and development-oriented start-up. Given your experience in attracting funding and developing a product / idea, it's important for us to listen to your point of view, since it can help us to identify the human factors that play an important role in these processes.

Your responses will constitute part of a study that is being performed within the EMBA program at the Stockholm School of Economics in Riga and will be treated in a confidential manner.

Completing the questionnaire will not take more than 10 minutes.

We sincerely thank you in advance for the time spent!

Question	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	1	2	3	4	5
1. Start-up founders must have 100% control over the equity					
2. Start-up founders have to make their own decisions on development of business and product, without investors' influence					
3. The investor should receive only regular reports on use of financing and development of the product / idea					
4. The investors' representative does not have to be on the management board of the start-up					
5. Investors need to participate in the day-to-day management and decision-making of the start-up, with at least one member on the management board					
6. It's easier to get funding if you have previous experience in setting up a start-up					
7. The start-up founders work experience in the area in which the new product is offered (e.g. software development, finance, banking, etc.) offers an advantage in fundraising					
8. Previous management experience allows successfully running of the start-up team, giving more benefits in fundraising					
9. Past mistakes and failures make for better understanding and knowledge of how to attract funding					
10. The higher the start-up founders' level of education, the more successful they will be in negotiations for funding					
11. The start-up founders' team with collaborative experience (e.g., working or studying together)					

will be able to attract funding and develop a business more successfully

- 12. The team should have specialists who "cover" every necessary area for the development and implementation of the product / idea (e.g. IT, finance, marketing, industry education such as chemistry, etc.)
- 13. Team members must have obtained previous work or business experience in the area/sector which they are responsible for in the new start-up

	<b>Absolutely unimportant</b>	<b>Not important</b>	<b>Neither important nor unimportant</b>	<b>Important</b>

- 14. Is it important that the investor provides daily support for start-up business management (e.g., consulting)?
- 15. Is it important that none of the start-up founders leave the team until the product/ideas are successfully deployed on the market?
- 16. Is it important that the start-up founder has an education in a particular area where the product/idea is being developed?
- 17. Is it important that among the start-up founders are people with education in business administration?
- 18. How important is the start-up team's motivation to develop a product/idea?

- 19. What part of equity do you consider to be the most appropriate for an investor during the start-up's life (% of equity):
  - \_\_\_\_\_ up to 10%
  - \_\_\_\_\_ 20 - 30%
  - \_\_\_\_\_ 30 - 40%
  - \_\_\_\_\_ 40 – 50%
  - \_\_\_\_\_ more than 50%

- 20. What level of education of start-up founders is sufficient for successful business development:
  - \_\_\_\_\_ secondary education
  - \_\_\_\_\_ Bachelor's Degree
  - \_\_\_\_\_ Master's Degree
  - \_\_\_\_\_ Doctoral Degree
  - \_\_\_\_\_ other

21. Which of the following characteristics of a team do you consider as important for start-up's successful development (can choose more than one):

- \_\_\_\_\_ desire for achievement
- \_\_\_\_\_ high motivation
- \_\_\_\_\_ perseverance
- \_\_\_\_\_ desire to earn money
- \_\_\_\_\_ acceptance of criticism
- \_\_\_\_\_ openness to cooperation
- \_\_\_\_\_ desire to be independent
- \_\_\_\_\_ other

22. Based on your experience, please indicate which factors not mentioned in this questionnaire are important for a start-up to attract funding and develop its business:

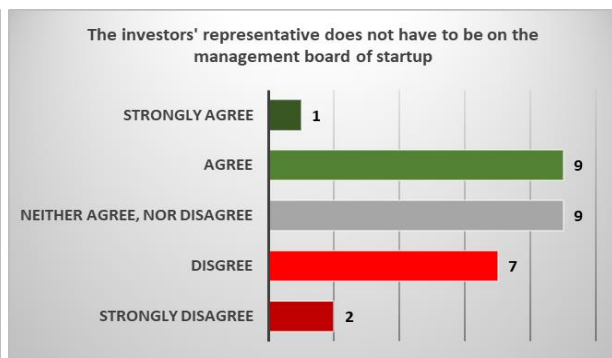
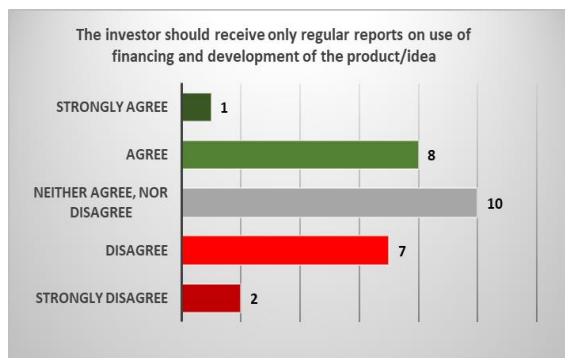
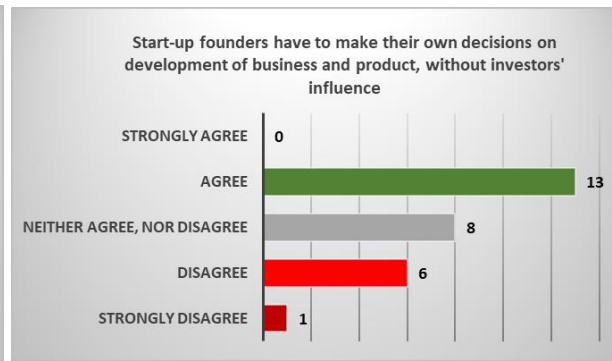
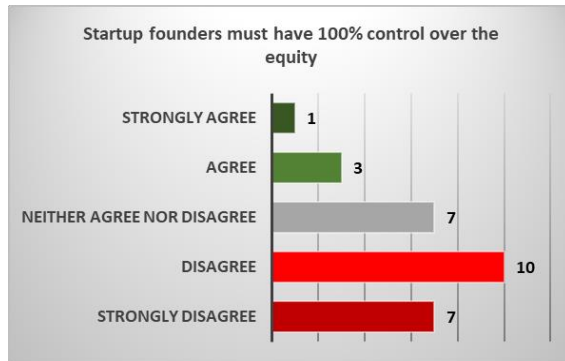
**Please provide information about start-up:**

- 1. Name of start-up \_\_\_\_\_
- 2. Year of establishment \_\_\_\_\_
- 3. Number of founders (at present) \_\_\_\_\_
- 4. Number of employees (excluding founders) \_\_\_\_\_
- 5. Total funding raised (EUR) \_\_\_\_\_
- 6. Position of the respondent \_\_\_\_\_
- 7. Respondent's education (earned degree or qualification): \_\_\_\_\_

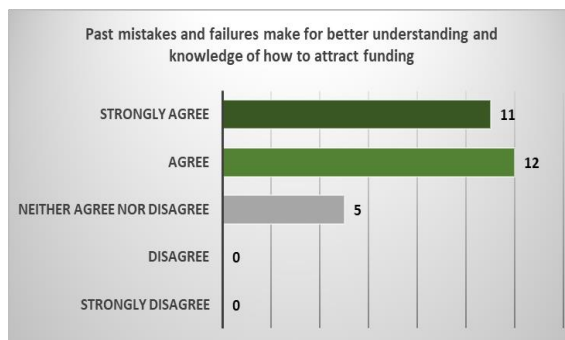
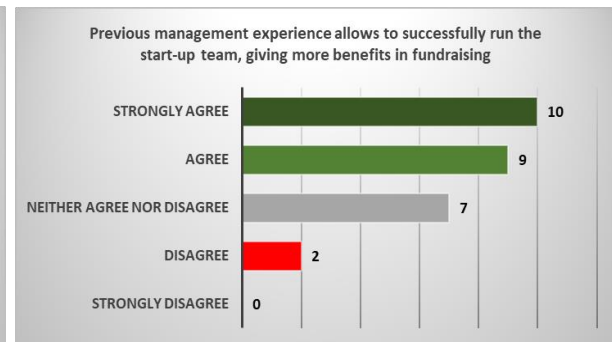
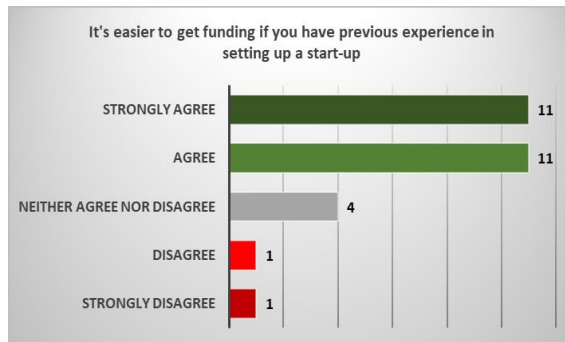
***Many thanks for the responses and your time spent!***

## Appendix C. Other graphical results of the survey for start-ups

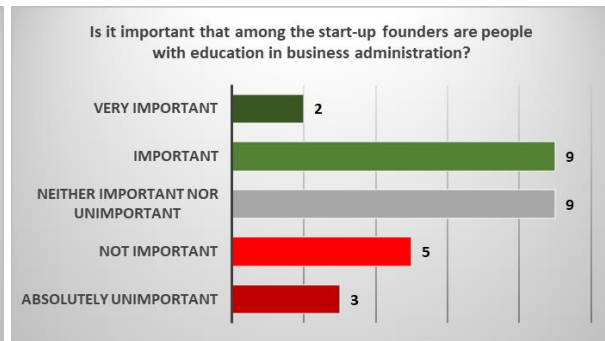
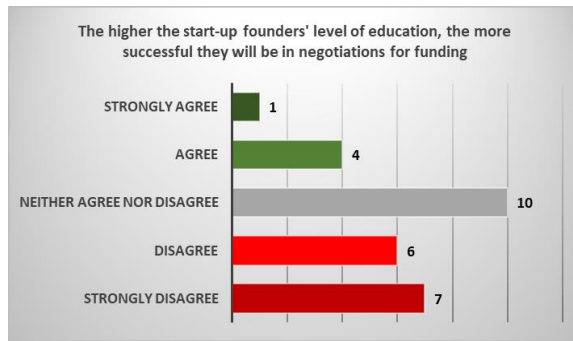
### SELF-DETERMINATION



### EXPERIENCE



## EDUCATION



## TEAM CAPABILITIES

