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# How do startups prevent encountering the funding gap?

A qualitative case study of entrepreneurs and how they prevent encountering the funding gap that prevails between early stage and commercialization stage by undertaking internal actions.

## **Abstract**

**Purpose** – This paper aims to address the issue with securing finance in the funding gap that has negative effects on the entrepreneurial eco system as a whole since many business ideas never gets commercialized into the market. Furthermore, we seek to contribute to existing research and increase the chances for the entrepreneur to succeed in terms of commercializing their service or product. Thus, the purpose of this study is to gain knowledge in what preventative internal actions the entrepreneurs behind a startup can take in order not to encounter the funding gap.

**Methodology** – This multi-case study follows a qualitative research approach where the empirical data was obtained through eight semi-structured interviews with seven tech companies based in Sweden and one in U.S.A. Through an inductive approach we have let the theory emerge from our empirical data.

**Findings** – In line with the theory, we concluded that entrepreneurs can prevent facing the early-stage funding gap on an entrepreneurial level by adopting a proactive mindset, actively and persistently searching for funding, taking a risk, using bootstrapping, and on organizational level by building highly competent team and strong external relationships. Our findings also identified new elements, indicating that adopting a strong business model with a clear value proposition and education on running the business will help prevent the gap.

**Research limitations** – This study is based on tech startups mainly based in Sweden which limits general applicability of the findings to other industries, contexts and countries. The reader should also bear in mind that the study does not address other contextual factors such as gender. Therefore, the results of this study should be viewed within its limitations.

**Practical implications** – This study suggests several practical advices for entrepreneurs trying to prevent encountering the funding gap and reach commercialization stage. Some of the primary contributing implications indicate that high reputation as an entrepreneur, knowledge about raising funding, being aware and actively searching for funding, utilizing bootstrap techniques, and engaging with external support organizations is crucial to increase the chance of obtaining external funding.

**Keywords** – Funding gap, Financial gap, Valley of Death, Entrepreneurial finance

**Paper type** – Master thesis

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## **1. Introduction**

*In this chapter following parts are presented; background, purpose and research question, and thesis outline. To begin with, an overview of the financial struggle for entrepreneurs to secure funding will be presented.*

### **1.1 Background**

Being an entrepreneur and running a venture or startup is no easy task seen from several aspects. One of them, and the current situation that is evident in practice is the issue to secure funding as it is a major part and obstacle of the journey in order to grow and succeed since organic growth is usually very limited in early stages of the venture. In fact, most ideas or ventures fail to attract any external capital at all (Landström, 2017), and even fewer percentage of the ventures manages to get a bank loan, business angel (BA) or venture capital (VC) (Gompers & Lerner, 2001). The reasons for so are, but not limited to: information asymmetry, as entrepreneurs are often reluctant to disclose information about their ventures and therefore more likely to be better informed about his or her venture than external capital providers; agency problems, as the agent (entrepreneur) holds hidden information towards the principal (VC) creating uncertainty of capital providers and increased rate of returns which results in adverse selection where only bad and overvalued projects will be left; too small amounts of capital are involved where the relative transaction and monitoring costs are too high in relation to the amount raised; high extensive risk of failure prevails, as regional- seed- and financial gaps prevails where parts of the market is left with insufficient financing (Landström, 2017; Osano and Languitane, 2016).

With respect to above, many ideas never exceed to meet daylight as ventures fail to attract funding to commercialize their product or service. This is despite the fact that many contexts have a solid support system in the formation stages, providing financial and educational support from government, private actors, incubators, accelerators, institutes, and foundations (Driva Eget, 2020) to stimulate the entrepreneurial eco system and to minimize the funding gap that prevails, particularly if derived from research and development. However, in order to fully understand the phenomenon one must fully understand how the funding gap – also known as Valley of Death – emerges.

Much is already known and presented in existing literature and research on the topic financial/funding gap and how to stimulate these to obtain external finance in order to bridge

the gap between basic research and commercialization of the idea (Landström, 2017; Beard et al., 2009; Beck et al. 2005; Berger and Udell, 2006; Guiso and Minetti, 2010; Jackson and Box, 2012; Osano and Languitane, 2016). Moreover, some research has been conducted on firm-level internal factors (Xiang et al., 2014; Mina et al., 2013) such as size profitability, number of employees, declared business strategy and life-cycle as for how these factors affect the behavior when it comes to finance seeking. Also, external factors such as socio-political factors, including government regulations and political situation, are factors beyond the control of the entrepreneur that affects the possibility to obtain external finance. In other words, external and internal factors constrain the growth potential in young ventures. However, to our knowledge little research is particularly made on what internal actions the entrepreneurs can take in regards to business strategy to obtain external finance and to prevent from falling into the funding gap that prevails between seed stage and commercialization stage.

Therefore, an insight and knowledge into this would bring many benefits to entrepreneurs who will be able to increase their likelihood of securing funding in order to commercialize their service or product into the market. In turn, this contributes to the whole financial eco system where in Sweden alone, small companies (0 – 49 employees) account for about 45 percent of employees in the business sector (Tillväxtverket, 2020).

## **1.2 Purpose and research question**

We aim to address the issue with securing finance in the funding gap which is highlighted in the introduction as a complex and multifaceted problem that has negative effects on the entrepreneurial eco system as a whole since many ideas never gets commercialized and hit the market. We would like to especially focus on the funding gap that prevails when a startup has passed the early stage and access to soft money and other research resources, but not yet reached commercialization stage to generate revenue and positive cash flow and thus in need of debt or equity financing to carry it through commercialization (Jackson and Boxx, 2012; Savaneviciene et al., 2015; Beard et al., 2009). This is a critical moment for a startup in order to survive and reach commercialization stage and generate revenue in order to grow the company. In other words, the funding gap refers to the difficulty of covering the negative cash flow in early stages of a venture before the new service or product is commercialized and generating revenue big enough to be self-sufficient.

Based on the above insights, we aim to contribute to existing research and increase the chances for the entrepreneur to succeed in terms of commercializing their service or product into the market. Thus, the purpose of this study is to gain knowledge in what preventative internal actions the entrepreneurs behind a startup can take in order not to encounter the funding gap. Based on these insights, we also aim to discuss what actions startups can take to escape and survive if they have fallen into the funding gap as described above.

We have emanated from the following research question:

What internal actions can the entrepreneur take to obtain external finance in order to prevent from falling into the funding gap?

In order to achieve the research questions, a case method is selected because we want to conduct a study from the perspective of the entrepreneur to gain first hand insight into what internal actions entrepreneurs can take to obtain external finance and to prevent falling into the funding gap that occurs between early stage and commercialization stage.

### **1.3 Thesis outline**

This thesis is divided into six main sections. Following the introduction, the literature and theoretical framework is outlined. For this, a review of the most relevant existing scientific journal articles and literature in the area of financial gap, funding gap and attracting funding as a young venture are undertaken. After that, the methodology applied in this study is described, including the chosen research design, the sampling criteria as well as the data collection, reliability and validity of the data collection, ethic and methodological limitations. Then the following chapter concerns the empirical analysis and discussion of the study's findings and main research results. Finally, this chapter is followed by summary of our findings including theoretical implications, practical implications, and research limitations and potential areas for future research.

## **2. Theoretical Framework**

*In this chapter following parts are presented; definition of the funding gap, reasons why startups fall into the funding gap, and suggested methods to prevent the funding gap. Furthermore, this chapter discusses and analyses the relevant literature based on which it formulates the research design and interview guidelines.*

### **2.1 Definition of the funding gap**

To build a ground to further investigate and drive a conclusion on how startups prevent encountering the funding gap, it is necessary to define and understand the phenomenon of funding gap. There are several definitions of the financial/funding gap – one of them being that a part of the capital market is left with insufficient funding, evidently leading to the funding gap as there is an insufficient supply of capital to meet the demand for entrepreneurial ventures obtaining finance, also known as Valley of Death.

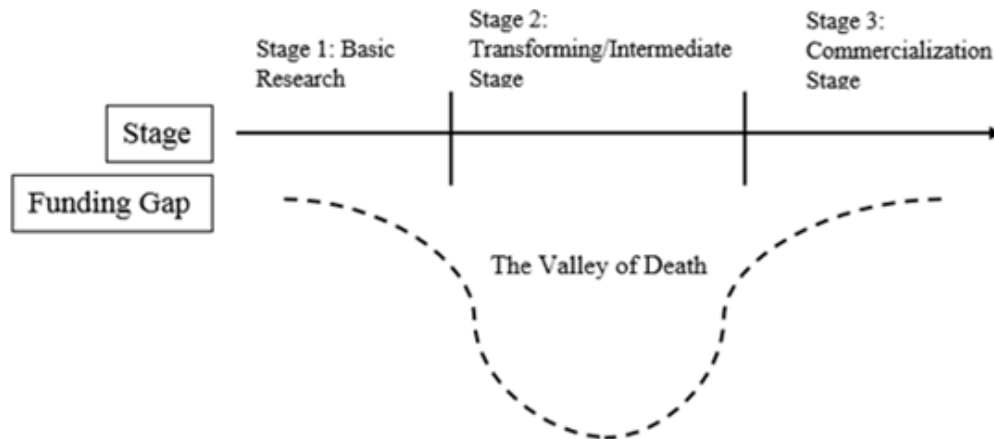
According to Landström (2017) there are two kinds of financial gaps, namely seed capital gaps and regional capital gaps. Seed capital gaps indicate that early-stage ventures might experience problems acquiring external capital as venture capital markets have moved into later stage investments where the returns are higher and less risk occurs for the investor. Business angels have followed this development towards later stage investments, thus leaving a financial gap for ventures at early stage. In turn, regional capital gaps refers to entrepreneurs geographically located in different regions leading to that they might experience either more or less difficulties obtaining finance to their ventures due to for example that metropolitan areas have a more extensive range of financial possibilities (bank finance, VCs, and BAs angels) compared to more peripheral regions (Landström, 2017).

Savaneviciene et al. (2015), on the other hand, defines the phenomenon as a financial gap which constrains early-stage startups' ability to innovate and commercialize. In that regard, Beard et al. (2009) conceptualize the innovation sequence in three stages, where Stage 1) consists of basic research, Stage 2) also known as the intermediate stage, consists of transforming an idea or discovery generated by Stage 1 research into potentially marketable product or service, and Stage 3) consists of the commercialization and distribution of a new product or service (see Figure 1). According to Beard et al., in order for there to be a 'valley' in the innovation sequence, a shortfall of funding must be observed at an intermediate stage that is more profound than the funding shortfall to either 'side' of the intermediate stage (see



Figure 1). Similarly, Jackson and Boxx describe the funding shortfall at intermediate as follow:

Valley of Death – the stage of a young firm’s life when seed funding is running dry but the firm has yet to secure sufficient additional funding to carry it through to product commercialization (Jackson and Boxx 2012, p. 1).



**Figure 1:** An adapted overview of the early stage funding gap (Beard et al 2009).

This is a critical moment for a startup to overcome the funding gap and reaching commercialization stage to generate revenue and to grow the business. In other words, early stage funding gap refers to the difficulty of commercializing the product or service and running the business due to the funding gap that the startups encounter in the early stage of development.

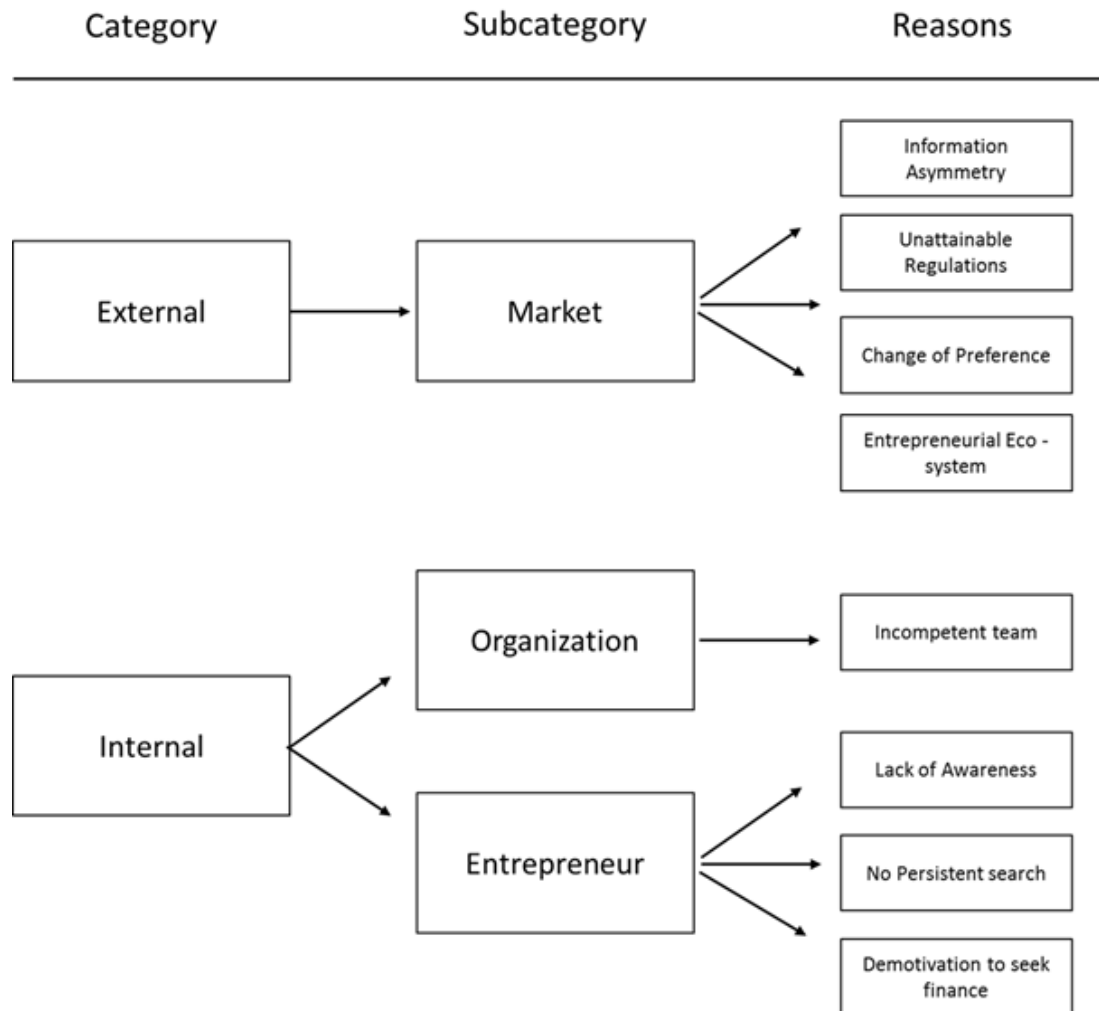
In turn, Investopedia (2020) defines Death Valley Curve as the period in the startup’s life where they have begun operations but not yet generated revenue. During this period, the startup must operate without any existing revenue and thus relying on initial invested capital.

Unlike Landström (2017), we aim not to delineate what kind of different financial gaps there are, but rather to understand the overall phenomenon of the funding gap in order to drive a conclusion on how startups prevent encountering funding gaps. Moreover, as it appears from above, several funding gaps prevail at different stages which are outside the scope of this study, whereon we have decided to go with a broader definition of the funding gap for this thesis. Thus, in line with Savaneviciene et al. (2015), Beard et al. (2009), Jackson and Boxx (2012), we have adapted and decided to use the following definition of the funding gap for this thesis:

A funding gap prevails when a startup has passed the early stage and existing funding is running dry, but not yet reached commercialization stage to generate enough revenue in order to have a positive cash flow, and are thus in need to obtain more financing to carry it through commercialization.

## **2.2 Reasons why startups fall into the funding gap**

According to the literature review that has been conducted by the authors, the reasons why startups encounter financing gap can be divided into two groups: internal and external factors. In this regard, internal reasons refer to the ones that exist within the limits of the company such as the attributes of entrepreneur (i.e. knowledge, experience, motivation) and organization (i.e. team competence, skills, idea development). External factors, however, refer to the reasons driven from outside of the company such as market attributes (i.e. economic conditions, entrepreneurial infrastructure). While internal factors can be controlled and altered by an entrepreneur, external ones cannot (see Figure 2).



**Figure 2:** Reasons why startups face funding gap

To begin with, one of the main determinants that hinder entrepreneurs’ access to external finance is high risk and uncertainty environment that dominates the market. Especially at early development stage the information asymmetry problem that stems from hidden information between an entrepreneur and a capital provider, makes the selection and evaluation process harder and much costly for external fund providers (Landström 2017). In turn, this leads to external financiers acquiring harsh and difficult to attain regulations. To illustrate, in order to compensate the high risk and uncertainty, banks charge higher interest rates and require collateral. For early stage companies that have not yet reached to the level of commercializing their product or services, meeting these requirements is rarely attainable. Therefore, they end up in the early stage funding gap. Moreover, Landström (2017) states that geographic proximity to VCs and BAs facilitates the ventures’ access to funding. As the

allocation of funding companies is imbalanced, companies located in certain areas have difficulty in raising capital. Similarly, nonexistence of incubators, accelerator or science parks hinders capital raising issue for startups. In that regard, Chong and Luyue (2014) claim that, the development of entrepreneurial ecosystem in a certain location in terms of presence of incubators, startup accelerator and science parks will link fund seeking startups with many investors, thereby easing the funding process. Finally, Landström (2017) suggests that BAs and VCs alter their investment preferences over time: they shift from investing in early stage firms to later stage firms, leaving early stage companies on the verge of pre-commercialization funding gap.

On the other hand, from the entrepreneurial perspective, the suggested reasons emanate from entrepreneurs' awareness, persistent search and motivation. In this respect, not only do the available resources create issue, but also the extent to which entrepreneurs are aware of these resources plays vital role in escaping the early stage funding gap. Osano and Languitone (2016) argue that most of the SMEs demonstrate lack of awareness of the available funding programs. Similarly, Jaxon and Boxx (2012) claim that the lack of persistence, especially calculated persistence which is based on thorough research of market, business plan and sixth sense built over experience, will lead to the funding gap. Considering the lack of available financial support in the market, authors conclude that, by actively and persistently searching for various investment opportunities, companies can escape the gap. Furthermore, Xiang, Worthington and Higgs (2014) suggest that the demotivation to seek finance will lead to financial gap. According to their study, majority of new ventures receive rejections from external funding companies such as banks and VCs, which later on discourages entrepreneurs to further seek funding. They conclude that, SMEs that have been denied funding are 16.4-25.3% and 3.2-6.4% less likely to apply equity and debt funding again respectively.

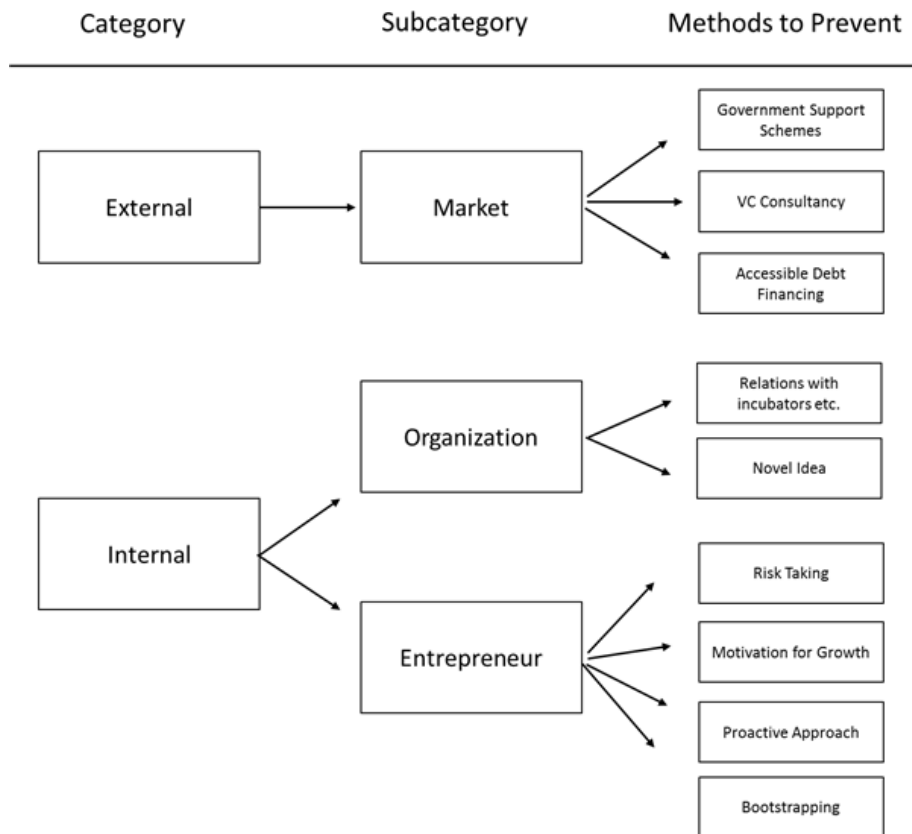
As for the organization perspective, innovativeness of the business idea and team competency are crucial factors leading to the funding gap. According to a study conducted by Croce, Tenca and Ughetto (2017), proposals with no apparent innovativeness are more likely to be rejected by BAs. In that respect, the lack of innovativeness decreases the chances of raising capital by BA investments by 12.91%. The same study, on the other hand concludes that the characteristics of entrepreneur and the management team are more crucial than innovativeness of the idea, as the lack of it decreases the chances of receiving investment by 20.21%. With regards to this, Landström (2017) states that most of the startup teams are incompetent when it comes to cash and financial management. This implies that such companies due to improper

planning of financial resources are more likely to run out of soft money provided for product development and end up in the financial gap phase.

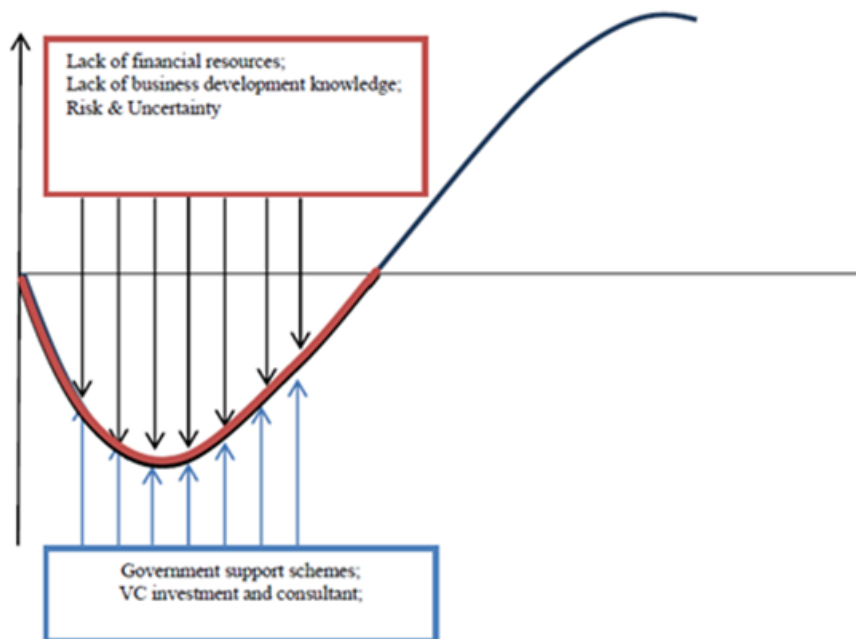
### **2.3 Suggested methods to prevent the funding gap**

In regard to chapter 2.2, the similar pattern of division can be seen in the previous research made on the methods to solve the funding gap. Gathered under internal and external categories, the previous research suggests governmental support schemes, VCs, and accessible debt financing as market driven methods, external relations and novelty of the business idea as organization driven and risk taking, growth motivation, proactive approach and bootstrapping as entrepreneur driven methods to prevent early stage funding gap (see Figure 3).

With respect to above mentioned, the external main solutions to prevent encountering early stage funding gap are the developments in public funding programs (governmental support programs, special loans for SMEs, etc.) and private financing such as VCs and Bas. In that regard, Savaneviciene et al. (2015), introduced the “Valley of Death push and pull forces”, where they identified government support schemes and VC investment as solutions and financial resources, lack of business development knowledge and risk and uncertainty as the main causes of the phenomenon (see Figure 4). To conquer these limitations, VCs provide startups with financial capability, strategic advice and professionalization with their financial capital, monitoring and control and expertise roles respectively.



**Figure 3:** Suggested methods to prevent falling into funding gap



**Figure 4:** “Valley of Death” pull and push forces (Savaneviciene et al., 2015)

However, at this development stage where startups are transforming their invention into innovation and try to commercialize their product or service, they are not very attractive for VCs. Especially for knowledge-based business ideas such as medical technology invention, as they usually have longer time to market, it is harder to attract VCs. According to Fatoki (2014), VCs prefer to finance ventures at middle or later stage of development. In fact, equity funding organizations account for minor percentage of total new venture funding in USA: business angels 3.6% and venture capitals 1.85% (Berger & Udell 2002).

In that regard, Fatoki (2014) claims that communication of loan requirements of banks and investment readiness training to be solutions for avoiding early stage funding gap. As collateral is one of the most significant issues for SMEs to have access to bank loans, awareness on the bank requirements will prepare entrepreneurs to have a plan. Therefore, banks' initiation to communicate their loan conditions will make debt financing more accessible for new venture owners. Similarly, Fatoki (2014) suggests government to engage in providing investment readiness training for small business owners, which will also make debt financing more feasible.

Contrary to external environment and market related solutions, very few researches have been undertaken on internal factors such as firm and entrepreneur. Nourira, Klofsten, and Dahlstrand (2005) conducted a research to identify factors that influence perception of entrepreneurs on early stage financing. According to Nourira, Klofsten, and Dahlstrand (2005), the factors that help determine the significance of initial funding perception of entrepreneurs are classified into 3 subdivisions: the entrepreneur, the firm and the external relations of the firm. Subsequently, this study discovers that risk taking entrepreneurs with high motivation of growth have higher perception of need for initial funding, and therefore, they are inclined to have external financing. Osano and Languitone (2016) on the other hand, argue that majority of SMEs do not have enough knowledge and awareness about funding options and financial programs provided by government or private sector investors.

## **2.4 Summary**

From above analysis, we can state that the internal actions that entrepreneurs can take to prevent encountering funding gap consist of entrepreneurial and organizational levels. In this respect, on entrepreneurial level, entrepreneur's personality in terms of risk taking and persistence, motivation for business growth and simultaneously market awareness can prevent

firms falling into early stage financial gap. Similarly, Bhide (1992) stated that entrepreneur's ability to find and creatively use bootstrapping methods is the evidence of the true entrepreneurial spirit. There are many ways of bootstrapping available for entrepreneurs such as use of credit card, delaying tax payment, sharing resources with other businesses and leasing. In this respect, the firms that are less capable of raising capital from traditional sources are more likely to rely on bootstrapping methods (Auken 2004). According to Winborg and Landstrom (2000), bootstrapping techniques play significant role in filling the funding gap when there is lack of traditional capital sources. Finally, from the organizational level, the research concludes that, the less novel the business idea, the more against the firm is to external financing. As for the external environment perspective, Noura, Klofsten, and Dahlstrand (2005) argue that as in one-sixth of the times the incubators and science parks provide both direct and indirect financial support for firms, the investment opportunities will be increased. This in turns means that business idea and external relations of the firm can indirectly help surviving the financial gap.



### **3. Methodology**

*The objectives of this chapter are to delineate and substantiate the use of certain research methodology. The chapter starts with the research design followed by: participants and data collection, data analysis and processing, reliability and validity, as well as discussion of ethical considerations and limitations. To start with, a description of our case and choice of research method is made.*

#### **3.1 Case and research design**

This research aims to understand and gain an insight into what preventative internal actions the entrepreneurs behind a startup can take to obtain external finance in order not to fall into the funding gap, and based on these insights discuss what actions ventures or startups can take to escape and survive if they have fallen into the funding gap. By doing so, we intend to contribute to existing research and increase the chances for the entrepreneur to succeed in commercializing their service or product into the market. A literature review was conducted to better understand the phenomenon and revealed that there is a lack of research made in this specific area. In this regard, the logical flow emphasizes the significance of theory building over theory testing. We have therefore chosen to use a case study as a research design, that is, a detailed investigation of a specific case (Bryman, 2018).

Based on our theoretical framework and purpose of this study, which contrasts with previous research, we have chosen a qualitative research method and inductive approach with semi-structured interviews. This enables understanding of complex issues and subtle phenomena in depth such as opinions, perceptions, feelings and experiences in the specific research case (Denscombe, 2018). Moreover, we have conducted a multi-case study, which creates a stronger base for a theory developing. This approach of studying multiple cases serve as replications, contrasts and extensions to emerging theory, thereby being the most efficient method in this specific scenario (Yin 1994). According to Bryman (2018) a case study limits generalizability beyond the specific study context, which is dealt with in section 3.4 *Reliability and validity*.

#### **3.2 Participants and data collection**

The data collection has been carried out with the help of eight semi-structured interviews, divided as follows; five Type A, two Type B, and one Type C. Conducting semi-structured

interviews enables participants to freely share their opinion on the topic of discussion, which increases the chance of gathering comprehensive data (Bryman & Bell 2011). The interviewed entrepreneurs were chosen based on the purpose of the study and their relevance, which is described hereafter. To specify companies that fall into these categories, referring to the definition of the funding gap is important (see 2.1 Definition of the funding gap). In this respect, the development stage and the financial performance of the startup are the defining criterion for our data collection:

Type A: has not reached commercialization stage yet and face funding gap

Type B: recently entered commercialization stage and overcame funding gap

Type C: did not reach commercialization stage, faced the funding gap and failed to survive

The five interviewed Type A companies have been selected in a way that enabled us to compare and contrast the results with two Type B companies who recently survived this gap, as well as with one Type C company who failed to survive this gap. Considering that Type A companies are currently facing pre commercialization funding gap and are undertaking different methods to cope with it, which results in different success rates, studying these companies is of utmost importance to identify what preventative internal actions the entrepreneurs behind a startup take in order not to encounter the funding gap. Also some of the interviewed Type A companies have already passed one funding gap, yet facing a later-stage funding gap, and is therefore interesting to compare and contrast with the Type B and C. However, comparing these findings with Type B and C companies has enabled us to validate which of those actions are significant.

To reach above startups, we have contacted incubators, science parks, accelerators, and institutions in Sweden via email wherein we have explained the purpose and background of the research before asking for potential startups that to their knowing might fall into the categories stated above. Any referrals have been followed up, where we have directly contacted the participants via email. Once the suggested startups were gathered, they have been sorted based on the likelihood of meeting the criteria above. Consequently, highly probable startups have been contacted by email, explaining the purpose study before conducting interviews of around 1 hour via video call over Zoom. The individual protection

requirement was taken into account by both authors by drawing attention to the interviewees about the purpose of the study and the ethical research principles described in section 3.5 Ethic. The interviewees were promised anonymity in order to make it difficult, or even impossible, for an outsider to identify who contributed information to the study. All interviews were recorded with permission from the interviewees with a sound recording device. The interviewees have been asked if they are interested in the research results and, in those cases, have been informed that a compiled report can be sent via e-mail. All interviews were conducted over a period of two weeks.

The interview guide (see 7.1 Interview guide) is based on theory and previous research presented in the theoretical framework. The following topics were addressed in the interview; introduction, awareness, bootstrapping, external relations, idea, team, personality, and motivation. When we conducted the semi-structured interviews, the interviewees were asked to explain his or her entrepreneurial experience, including what went good and bad in the different stages – starting from the business idea, raising initial funding, expanding the business, and reaching the commercialization stage. By doing so, we were able at each stage to ask any of the supplementary questions, presented in the interview guide, depending on how the interviewee explained their experiences.

### **3.3 Analysis and data processing**

To facilitate the data analysis as a first step recorded interviews have been equally distributed and transcribed by the authors. In line with inductive research type, the grounded theory approach was adopted in data analysis (Strauss & Cobin 1990). The data gathered from interviews, were divided into different themes and tagged with different codes based on the applicability to the research question. Thus, the empirical data has been reduced and sorted so that only meaningful data for the purpose of the study and the theoretical framework have been selected (Ahrne & Svensson, 2015). As the data was collected, it has been sorted and analyzed to reveal connections and correlations. First, each interview transcript has been carefully analyzed and different sentences and paragraphs have been highlighted and coded under different themes related to the research question. This method allowed the authors to group coded data into concepts and then into categories. In this regard 2 major categories of Entrepreneur and Organization have been emerged. Both categories have been also divided into known and new findings. To realize these 1<sup>st</sup> order and 2<sup>nd</sup> order coding, a software called NVIVO has been utilized.

Moreover, to see the broader picture, further analysis has been conducted both within each category (i.e. two Type A companies) and between different categories (between Type A and Type B). On one hand, as type A companies are the ones who currently face the funding gap, studying them enables us to attain broader perspective on which methods they are using to combat the gap. On the other hand, comparative study of Type A, B and C has led to substantiate those actions. Additionally, as this thesis study aims to contribute to existing theory, the emerging dimensions and the relevant theory were compared to reveal similarities, dissimilarities, contradictions and evidences regarding to the theoretical framework. Finally, the whole process has been operated separately by both authors, which was then followed by comparing the results. This makes sure of the objective and transparent view of the research.

### **3.4 Reliability and validity**

With a qualitative research method, it is important to point out that it can be challenging to achieve high reliability and validity as, like quantitative research, we cannot assess the reliability of figures. In addition, according to Bryman (2011) the relevance of these concepts to qualitative research is a debated issue among several researchers. An important aspect, however, is to process the data collection systematically and correctly. Basically, validity means that what you measure is relevant in the context, while reliability means that what you measure is done in a reliable way. Bryman also explains that a position is to assimilate these concepts in qualitative research without fundamentally changing the meaning of the concepts but that less emphasis is placed on questions regarding measurement.

By reliability and validity in this qualitative case study, we mean the dimensions of external validity and reliability in its basic form, that is, the reliability of what we study. External validity is about transferability and whether the results of a survey can be generalized beyond the specific study context. Due to the reason that we have decided to use a case study as a research design, this limits the generalizability and the results are not generalizable to other cases or contexts. The results are only valid for the participating interviewees within the respective startup company. On the other hand, it is important to point out that the results can give a hint of what internal actions the entrepreneurs can take to obtain external finance and to prevent from falling into the funding gap.

The authors of this thesis have had no former relation to any of the interviewees which may have affected the reliability positively and negatively. Positive in the sense that all interviews

have been unbiased. On the contrary, the interviewees may have embellished their entrepreneurial actions to appear as skilled entrepreneurs, or they may have felt uncomfortable to reveal any sensitive information or actions taken as they do not want the authors of this thesis to carry such sensitive information. In such cases, this may have disadvantaged the empirical data in that they are not as inclined to answer the questions extensively. The reliability of the study is also partly affected by the fact that some interviewees may have distorted certain information, perceptions, or experience as the actions taken to encounter the funding gap may have taken place several years back in time. These aforementioned factors, that affect the reliability, would normally have been addressed by conducting interviews until achieving saturation in the empirical data. However, due to the narrow selection criteria of the interviewees this has not been possible. Furthermore, a direct contact was established with the desired interviewees.

Considering the multidimensional nature of entrepreneurship and different external factors influencing the access to funding in different contexts, and to maintain validity and applicability of the research findings, it is crucial to study homogenous group. Therefore, the sample companies will all be technology companies mainly from Skåne region in Sweden, where startups are influenced by same external factors. This approach will enable us to keep the main focus on internal factors, thereby eliminating variances to some extent.

### **3.5 Ethic**

As the data collection in this research has been conducted mainly through interviews, ethical consideration prior to interviews had to be undertaken. In this respect, five ethical aspects: information requirement, consent requirement, confidentiality and anonymity requirement, usage requirement and false pretense suggested by Bryman and Bell (2011) have been implemented.

Research ethics and good research practice have been applied according to the Swedish Research Council (2017) for this study. Participants were informed prior to each interview about the purpose of the study, according to the information requirement, and that the study was completely confidential and that the result would not identify individuals. Due to this the name of the startup and interviewees were omitted in the study, partly to meet the confidentiality and anonymity requirement but also because we chose to omit parts of demographic characteristics such as age and background from this study.

Furthermore, the interviewees were informed that participation was voluntary and took place on their own terms and that they can withdraw their consent to participate in the study without any further explanation at any time during the process. In the same way, participants were informed about the usage requirement and that the information from the interviews will not be used for commercial or other non-scientific purposes than this study. It was also guaranteed to present interview results transparent and unbiasedly. Moreover, a copy of the final research will be offered to all participants. Lastly, consent was obtained from the participants and an approval to record the interviews. Participants were also informed that all recording material would be destroyed after transcription.

## **4. Empirical analysis and discussion**

*This chapter presents a description of the eight cases, the analysis of the empirical data as well as the discussion. In line with the theoretical framework, the empirical findings have been presented from entrepreneurial and organizational perspectives. The new findings have also been categorized and presented accordingly.*

### **4.1 Cases**

Type A companies consists of technology-based companies that have not reached commercialization stage and are facing a funding gap. While some of them have raised a couple of funding rounds and some has not, all of them are still stuck in the funding gap and are seeking more funding to develop their prototypes and commercialize. In this regard, the first participant **Interviewee 1** is the owner of a U.S.A based company that is developing a new generation of automotive two-wheeler headlights. To develop the prototype, the initial capital has been raised by bootstrapping, mainly self-funding and funding from family and friends. Currently, they aim to raise external funding via VCs or BAs and they are in the process of contacting external parties. The next participant, **Interviewee 2** is the founder of a company based in Sweden that is developing smart home systems. They started with investing self-savings and raised a seed funding for one round. However, the raised capital was not enough to complete the product development. Simultaneously, they faced funding gap, as investors preferred later stage startups. Therefore, they reinvested self-capital and started conducting consulting business utilizing the technology they are using to develop the main product. Moreover, the third participant, **Interviewee 3** is the founder of a Sweden based company that develops cancer diagnostic device for pets. They raised initial funding from mixed resources of private capital, loans, soft loans and grants. Even though they encountered early stage funding gap, they successfully managed to raise seed capital from Almi and BAs. Currently, the company is in the process of raising their 2<sup>nd</sup> round of investment. The next participant, **Interviewee 4** is the owner of a Sweden based company that is developing a matchmaking platform for investors and startups using AI algorithm. The company raised initial capital through private capital. They are also raising funding from their parent consulting company. Finally, the 5<sup>th</sup> participant **Interviewee 5** is the founder of a Swedish process intelligence company. They raised initial capital by bootstrapping and through an accelerator program. Currently they are seeking seed round funding.

As for Type B, all of the companies have faced early stage funding gap and have managed to successfully overcome it and commercialize their product/service. The **Interviewee 6** is the owner of an online meeting platform based in Sweden. With the help of hybrid financing such as funding from family and friends and different grants, they managed to survive the early stage funding gap and reach commercialization. Currently, they are running the business as a side project with organic growth priorities. **Interviewee 7** is the co-founder of the medical technology company based in Sweden. Similar to the other type B company, they survived the pre-commercial funding gap and financed the prototype development with bootstrapping in terms of self-savings and family and friends' money. As for Type C, the **Interviewee 8** was the cofounder of a music discovery platform based in Sweden. They raised initial funds from various grants, soft money and bootstrapping. However, when they faced funding gap the company could not reach to commercialization and was liquidated.

#### **4.2 Type A companies**

Even though the above-mentioned Type A companies have not reached commercialization stage and encounter funding gap, the analysis reveals both similar and different patterns. To begin with the entrepreneurial perspective, all the interviewees stated that they have control motivation to become an entrepreneur, meaning that the main reason why they wanted to become entrepreneurs was to have the control on decision making. Similarly, all participants have been identified to have risk taker personalities. Even though all companies were able to demonstrate their awareness of funding opportunities, some of them highlighted the lack of funding opportunity in the market and irrelevancy of funding types.

For instance, Interviewee 1 illustrating lack of funding opportunities:

*At least in the United States or United States based company, that does not seem to be the case. There are not too many grants available in my experience.*



Also, Interviewee 5 illustrating non suitable funding options:

*I mean non that I felt are particularly suitable for our needs,  
like we can do a crowdfunding or something like that but not  
being a consumer product that becomes quite difficult to pull off.*

Only two participants – Interviewee 1 and 3 – stated that they had previous startup experiences. Moreover, to measure the proactivity of the interviewee following subgroups have been emerged as a result of analysis: 1) Planning personality, 2) Market research, 3) Foreign financing, and 4) Active Search. In this regard, all participants have demonstrated proactive approach, however, with different factors. While all of them, except Interviewee 2, have conducted market research (in other terms validation analysis) only Interviewee 3 has raised capital in a foreign country. Only Interviewee 1, 3 and 5 have been actively searching for raising capital, while the rest were mainly focusing on bootstrapping practices. As a final element of personality trait category, only Interviewee 1, 2 and 3 demonstrated persistency.

*One thing that that really counts in the end in that would be like  
persistence, because you will be turned down over and over and over  
again. And you will run out of money over and over and over again. – Interviewee 2*

Furthermore, interestingly all the participants were benefiting from different types of bootstrapping techniques. Most common types were investing personal savings, family and friends' money, preselling to customers and not taking out salaries. Another interesting finding was that Interviewee 1 and 5 demonstrated that they are afraid to disclose business details to investors.

Considering that all Type A companies were able to raise initial capital from external sources, we can argue that awareness of the available funding, actively and persistently seeking funding, having proactive approach and risk taking can lead to preventing falling into funding gap. In turn, this aligns with what our theoretical framework suggests.

From organizational perspective, all companies except Interviewee 1 were engaged with external support such as incubators, accelerators, science parks et cetera. In this regard, all of

the participants – except Interviewee 1 and 4 – found the external support organizations helpful in either raising capital or developing business strategies.

*They can do X, Y and Z. Okay, so to do that, I need to buy this or pay this engineer that, you know, I would always just do the next steps that I need to do. So I never saw a need for an incubator. – Interviewee 1*

*They support with some, like some sales training but I have not yet got any help to look for external funding. – Interviewee 4*

However, referring to above mentioned quotes we can see that Interviewee 1 has not engaged in any support organization, which makes the question under investigation irrelevant. In case of Interviewee 4, considering that their company recently started partnering with a science park and they do agree on the nonmonetary support of these kinds of collaborations, we can argue that external support is of high significance to prevent facing funding gap.

Moreover, all participants highlighted that their business idea is novel, not per say but the way they are exploiting and approaching it. When we asked whether they have faced any issues regarding the novelty of their business ideas in the context of raising capital, none of them stated any problems. Therefore, contrary to Croce, Tenca and Ughetto (2017), we cannot reach the conclusion that lack of novelty of business idea leads to funding gap.

*If we just consider Tesla, there were thousands of the car companies before but there was still room for one more car developer. If you tweak the business just a bit, I think there is a room. – Interviewee 2*

When it comes to the team, all participants stated that their team is competent enough to run the business. However, regarding necessary skills, three participants mentioned that they have lack of sales, marketing and fund-raising skills in the team. Interviewee 5 even mentioned that they have different views of how to run the company which leads to back and forth discussions:

*Our sales guy has a quite different background in selling very large enterprise projects. And me and my CTO are more from a Lean Startup perspective. So, coming from quite different backgrounds in terms of that mindset leads to a lot of discussions back and forth. – Interviewee 5*

As for new findings, we have detected that lack of knowledge in terms of focusing on wrong factors played a role in raising capital. According to Interviewee 2, their team did not have knowledge and experience in raising capital, and therefore they ended up spending a lot of time on hunting investors, rather than focusing on product development. As their development process was delayed, they faced funding gap, mainly because investors required proof of concept. The similar pressure was expressed by Interviewee 3:

*We can show that we're a lot closer to the market and we should be really finished the development and going into manufacturing by that time. If that does not work, it would be a lot harder to get funding for us.*

Moreover, Interviewee 1 expressed that having a wrong focus namely on funding merely is not the best alternative:

*I think not concentrating on funding is good, because it develops skills and you solve problems that money shouldn't solve. That makes money want to invest in you. Right? If I asked \$8,000 at first, you know, hey, I have an idea. I want to test it out. No one's going to give you \$8,000 just to figure out something that they don't even know works. – Interviewee 1*

In this regard, Interviewee 3 and 5 emphasized the importance of education program on how to run business and suggested engaging in incubators. Another method to survive the funding gap that our interviews revealed was to alter business model. In case of Interviewee 2, when they faced the gap, they changed business model and started offering consultancy service in addition to their focus of developing smart home technology. Similar to this, 4th participant

used another method to prevent falling into funding gap, which we call “umbrella bootstrapping”. In case of Interviewee 4, they raised funding from their parent company’s capital. Final suggestion that we can identify from Type A companies, is the entrepreneur’s and team’s reputation.

*It is very important that we can show who they are and what they have done both in business and in science. The chairman of the board, she has worked her entire life within the diagnostic business and have a lot of contacts and so on.*

*Sometimes I take her with me to meetings. – Interviewee 3*

### **4.3 Type A, B and C comparison**

In order to substantiate the findings from the analysis of type A companies, the comparison between all types is necessary. In this respect, our analysis revealed several similarities in addition to differences among these companies. To begin with the entrepreneurial perspective, all 3 types demonstrated, control motivation, awareness of available funding options, benefiting from bootstrapping and proactive mindset in terms of actively searching for capital and financing in foreign country. We were also able to detect the factor of lack of knowledge such as no experience in capital raising and focusing on wrong development in case of all 3 types. In case of Interviewee 7, they struggled to raise funding due to not being able to calculate the valuation of the company. Furthermore, representatives of all types demonstrated persistent and risk taker personalities and have conducted market validation analysis. In regard to chapter 2.2 and 2.3, above mentioned empirical findings align with the theoretical framework. Therefore, in line with Osano and Languitone (2016); Jaxon and Boxx; Nouria, Klofsten, and Dahlstrand (2005) and Auken (2004) we can conclude that by having proactive mindset, conducting market validation research, persistently and actively searching for funding ,being aware of the funding options and by bootstrapping entrepreneurs can prevent falling into early stage funding gap. However, in terms of motivation to become an entrepreneur and growth motivation, we are not able to deduct a conclusion. As all participants demonstrated control motivation, we cannot compare them, thereby identifying the differences and reaching a conclusion. in terms of growth motivation, the analysis of the interview data was not sufficient to reach any conclusion. Similarly, our finding regarding growth motivation was that the participants with organic growth motivation were prioritizing bootstrapping over any other external funding option. This alone does not lead to any

conclusion related to capital raising. In terms of previous startup experience, type C, some type A and B companies did not have it, yet as the success level for raising capital varies for each of these companies, we could not conclude a consistent relationship between previous startup experience and fundraising success. When we raised the question of post rejection impact, results revealed persistency rather than demotivation for all companies. In this respect, contrary to Xiang, Worthington and Higgs (2014) who suggest that rejection from external funding organizations cause entrepreneurs to become demotivated to seek financing, we cannot reach to same conclusion.

When it comes to organizational perspective, all three types of companies were engaged with external support organizations such as incubators, accelerators, science parks etc. According to general results, even though the external support is of great help in terms of business development, both type B companies expressed that they did not help in this regard:

*We kind of suggested different ideas on how to make money on the platform and we were hoping to get feedback on those ideas. The people who came thought that we had a clear idea and wanted to kind of criticize the idea. We had different ideas of what to expect from that meeting, which kind of made it not that good. – Interviewee 6*

*When we presented our company in different forms, they said to change a little bit here, a little bit there and then it will be okay. When we presented it to some new guys, they had some other changes that they would like us to have. So it could be ongoing for a year after year if it didn't stop. We wasted time running into those different parties – Interviewee 7*

However, all companies agree that engagement with external support organization helped them to reach the correct network, which in case of most interviewees lead to raising capital. Therefore, in line with Nourira, Klofsten, and Dahlstrand (2005), our empirical finding emphasizes the importance of external relationships with incubators, accelerators, science

parks etc. in raising capital. In terms of the teams, we have detected that only Interviewee 8 from Type C had experienced problems regarding different views among team members:

*I would say we were too many. That is seven people with seven different wills, and seven different personalities. And not all of those went well with the other personalities... And as a company, you don't need seven people's opinions. Sometimes you just have to be a bit faster. – Interviewee 8*

Considering that type B companies who successfully overcame pre-commercialization funding gap did not face team related problems, we can conclude that competent team will increase the chances of raising funds, thereby preventing falling into funding gap. This finding also aligns with Croce, Tenca and Ughetto (2017). As for the novelty of the business idea, all participant identified their idea as innovative and novel. Considering that they reached various success levels, this finding by itself is not sufficient to draw any conclusion. The final interesting finding was that lack of differentiation or a weak value proposition can lead to encountering funding gap. In case of Interviewee 6, we have identified that as they could not demonstrate clear value propositions to investors, then ended up in the funding gap. Later on with the help of bootstrapping, they managed to commercialize. Similar pattern can be detected in case of Interviewee 8. The main reason why they had to liquidate the company was because they could not maintain competitive advantage against their main competitor, which eventually lead them to lose the value of their business model.

*We haven't been clear on where the value in the business is and how to pay back the investor. We, did talk to two investors in the beginning when we started this business up, but with the model we were running back then they didn't think that this would have any chance of flying at all. – Interviewee 6*

*I had no idea what we were going to sell but we had a successful desktop app, especially with a couple of hundred thousand users. There was no real prospect of making money. So at least for me, I would have hard time going out around and talking to investors again. – Interviewee 8*

In case of Type C, where conflicting view of team members lead to inefficient business strategies and weak competitive position in the market which eventually lead to funding gap, we can argue that competent team is of high significance to prevent the early stage funding gap. In addition to that, the case of Interviewee 3 supports this argument. This company managed to raise many founding rounds without completing product development with the help of highly competent team.

## **5. Conclusion**

*In this chapter a summary of our findings, including theoretical implication will be provided. Thereafter, practical implications are presented as for what internal actions the entrepreneur can take to obtain external finance to prevent encountering the funding gap. Furthermore, the chapter will end with limitations of the study and suggestions for future research.*

### **5.1 Summary of findings**

In summary, the empirical finding of this research aligns with most of the theoretical framework, however; as our interviews were conducted in semi-structured method, we were able to identify new attributes that had not emerged as a result of our literature review. In line with the theoretical framework, the thematic analysis made on the interview transcriptions has revealed two major categories: Entrepreneur and Organization. From entrepreneurial perspective, entrepreneur's personality, background, experience, personal motivation, business motivation and the actions undertaken by the entrepreneur have been measured. As the result of the analysis on the eight interview transcriptions, we have revealed five different subcategories that fall into the Entrepreneur category. These subcategories are 1) Previous Startup Experience, 2) Afraid to disclose the business idea, 3) Personality traits, 4) Motivation, and 5) Bootstrapping. Within personality traits category we have identified 1) Risk aversion, 2) Proactive approach, 3) Persistency, and 4) Awareness factors. To measure the proactivity approach of the interviewees, following factors have been measured: to what extend the entrepreneur is disciplined; whether the market validation analysis has been made; whether capital has been raised in foreign country; to what extend entrepreneur is actively searching for funding options. As a result, following sub-factors have been detected 1) Planning personality, 2) Market research, 3) Foreign financing, and 4) Active Search. Additionally, new findings regarding to the impact of entrepreneur's reputation and lack of knowledge on raising funding and a unique bootstrapping technique have been revealed.

In terms of organizational perspective, the founding team, the business idea and the external relations of the company have been analyzed. Under team category following factors have been measured: whether the team is competent to run the business; whether the team has all the necessary skills; in what frequency the team has conflicting ideas and how they solve it. As a result, sub-factors such as 1) Team competency, 2) Lack of necessary skill, and 3) Different views, have emerged. In addition to already known factors, new factors such as lack



of differentiation, weak value proposition and changing the business model have been detected to influence surviving the funding gap.

Referring to chapter 2, in line with Osano and Languitane (2016); Jaxon and Boxx (2012); and Worthington and Higgs (2014), our theoretical framework suggests that from entrepreneurial perspective lack of awareness, lack of persistence and demotivation to seek funding due to rejection from Bas or VCs causes startups to face funding gap. Whereas according to Osano and Languitane (2016); Bhide (1992); (Auken 2004); and Winborg and Landstrom (2000), risk taking, proactive approach, bootstrapping and the growth motivation can prevent encountering the gap. In this regard from above discussion in chapter 4.2 and 4.3, we were able to argue that by actively and persistently seeking funding, educating themselves regarding available funding options, having proactive and risk taking approach and using bootstrapping techniques, entrepreneurs can prevent falling into early stage funding gap. The case of Interviewee 4 revealed a noteworthy kind of bootstrapping called umbrella bootstrapping, where startups can benefit from the knowledge, expertise and the support of parent organization or partner company. However, contrary to Xiang, Worthington and Higgs (2014) who suggest that rejection from external funding organizations cause entrepreneurs to become demotivated to seek financing, our empirical findings does not reach to same conclusion. Moreover, in terms of growth motivation, the analysis of the interview data was not sufficient to reach any conclusion. The participants with organic growth motivation were prioritizing bootstrapping over any other external funding option, yet it does not lead to any conclusion.

Moreover, from organizational perspective, in line with Croce, Tenca and Ughetto (2017); Landstrom (2017); and Noura, Klofsten, and Dahlstrand (2005) the theory suggested that while incompetent team leads to funding gap, novelty of business idea and external relations with incubators, accelerators, and science parks can help survive the gap. With respect to above discussion, we concluded that engagement with external support organizations entrepreneurs will have access to education program and necessary network, thereby increasing chances to survive the funding gap. Furthermore, with building team proficiency entrepreneurs will benefit from efficient decision making and therefore increase their chances of receiving funding. However, empirical data was not sufficient to conclude that the novelty of idea assist in funding. Finally, different from the theoretical framework, the empirical findings suggests that strong value proposition, valid business model and knowledge on running the business and raising capital are essential factor that entrepreneur need to have to

combat the funding gap.

## **5.2 Practical implications**

The study suggests several important practical implications for entrepreneurs trying to prevent encountering the funding gap and reach commercialization stage. To start with the Entrepreneur category, our findings indicate in line with the theoretical framework that: having previous startup experience; not being afraid to disclose information and/or the business idea; taking a proactive approach to securing finance; being aware and actively as well as persistently searching for different funding possibilities both domestic and internationally; conducting a market research and validation analysis; being educated risk-taker, having a clear motivation for running the business; and using different bootstrapping methods is important to undertake in order to prevent encountering the funding gap. Our primary contributing implications from the Entrepreneur category indicate that having a good or high reputation as an entrepreneur increases the likelihood of including highly competent people in the team which in turn increases the chance of obtaining funding more easily as investors often evaluate the team who will be executing the business idea. Moreover, knowledge about raising funding, including being aware and actively searching for funding as stated above, is crucial as well as utilizing bootstrap techniques are important. For instance, as a bootstrapping technique, two of the interviewees used a parent company for financial support. Moreover, by engaging with external support organization – such as incubator, accelerator or science park – entrepreneurs will have access to educational programs and necessary network and thereby prevent encountering the funding gap and increasing their chances of reaching commercialization stage.

Furthermore, as for the Organization category, our findings indicate in line with the theoretical framework that: building team proficiency through a diverse team with necessary skills and the competence needed to run the business; and the ability to manage different wills and conflicts within the team is important to undertake in order to prevent encountering the funding gap. Our primary contributing implications from the Organization category indicate that a strong differentiation, a valid business model and a strong value proposition are crucial to combat the funding gap and to reach commercialization stage.

### **5.3 Limitations and feature research**

While the qualitative method has been proven to be an efficient way to collect a variety of data, we acknowledge that this thesis comes with certain limitations emanating from the chosen approach and design of this study presented below. Therefore, the findings in this study should be treated with caution.

To begin with, limitations can be found in both the sample sets and the methods used in this study. One of them being the academic framework with regard to master dissertations restricts the authors when it comes to the scope, resources, and time of the study. Moreover, the sample size studied in our qualitative method consists of a very small number of startups in the tech industry, based in Sweden, apart from one startup that was based in the U.S.A. Thus, the results in this study do not represent specific regions, or whole of Sweden or other countries and the findings may therefore not be broadly applicable outside this subset or in other industries and contexts. The reader should also bear in mind that the study does not address other contextual factors such as gender. Furthermore, in an interview environment the participants might be unwilling to share certain information, to be honest, or want to appear as skilled entrepreneurs which may have influenced their answers. To eliminate this to the greatest extent possible, the study was designed to minimize such effects by asking the entrepreneurs in the interview to walk the authors through their entrepreneurial journey and what have went good and bad in different stages, before asking supplementary questions in 7.1 Interview guide.

We acknowledge all limitations discussed above yet believe that the study helps lay the groundwork for future work within the field. Based on this analysis and discussion of implications and limitations of this study, there are a number of implications that could be solved by future research. First, to overcome the limitations of the data used in this research, further studies should be conducted using both qualitative and quantitative research approach within and across different industries and countries. Secondly, our empirical findings were contradictory to that rejection from external funding organizations would cause entrepreneurs to become demotivated to seek financing. In fact, our results revealed that the post rejection impact resulted in persistency rather than demotivation to continue to seek for financing. To conclude this, future research is needed as the participants may have found it embarrassing to reveal that they have been rejected financing and wanted to appear more like skilled entrepreneurs. Thirdly, in terms of growth motivation, the analysis of the sample set was not sufficient to reach any conclusion. The participants with organic growth motivation were

prioritizing bootstrapping techniques over any other external funding option, yet it does not lead to any implication or conclusion as for that this would have been an internal action undertaken by the entrepreneur to prevent encountering the funding gap. Therefore, future research is needed to determine there is a relationship between the two. Neither did our empirical data conclude if the novelty of the business idea helped in raising funding, due to small sample set. This can be addressed by conducting a larger study. Finally, it would be interesting to conduct research on if and how contextual factors such as gender affect what internal actions entrepreneur undertakes to prevent encountering the funding gap.

## 6. References<sup>1</sup>

Ahrne, G. (2015) *Handbok i kvalitativa metoder*. 2., [utök. och aktualiserade] uppl. Liber.

Available at:

<https://search.ebscohost.com/login.aspx?direct=true&db=cat07147a&AN=lub.4702958&site=eds-live&scope=site> (Accessed: 3 May 2020).

Auken, V., H. (2004), The Use of Bootstrap Financing in Small Technology-Based Firms. *Journal of Development Entrepreneurship*. 9(2), pp 1-16

Beard, T. R. et al. (2009) ‘A Valley of Death in the innovation sequence: an economic investigation’, *Research Evaluation*, 18(5), pp. 343–356.

Beck, T., Demirgüç-Kunt, A. and Maksimovic, V. (2005) ‘Financial and Legal Constraints to Growth: Does Firm Size Matter?’, *Journal of Finance (Wiley-Blackwell)*, 60(1), p. 137.

Available at:

<https://search.ebscohost.com/login.aspx?direct=true&db=edb&AN=15545572&site=eds-live&scope=site> (Accessed: 16 April 2020).

Berger, A., & Udell, G. (2002) ‘The ability of banks to lend to informationally opaque small business’, *Journal of Banking and Finance*, 25(2), pp. 2127-2167.

Berger, A. N. and Udell, G. F. (2006) ‘A more complete conceptual framework for SME finance’, *Journal of Banking and Finance*, 30(11), pp. 2945–2966. doi:

10.1016/j.jbankfin.2006.05.008.

Bhide, A. (1992). Bootstrap Finance: The Art of Startups. *Harvard Business Review*, 70, pp.109-117

Bryman, A. (2018) *Samhällsvetenskapliga metoder*. Upplaga 3. Liber. Available at:

<https://search.ebscohost.com/login.aspx?direct=true&db=cat07147a&AN=lub.5084875&site=eds-live&scope=site> (Accessed: 1 May 2020).

Bryman, A., & Bell, E. (2011). *Business research methods* (3 ed.). Oxford: Oxford University Press

Chong, Z., Luyue, Z. (2014) ‘The Financing Challenges of Startups in China’, *International Business and Management*, 9(2), pp. 130-137.

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<sup>1</sup> Harvard reference system

Denscombe, M. (2018) *Forskningshandboken: för småskaliga forskningsprojekt inom samhällsvetenskaperna*. Fjärde upplagan. Studentlitteratur. Available at:

<https://search.ebscohost.com/login.aspx?direct=true&db=cat07147a&AN=lub.5151117&site=eds-live&scope=site> (Accessed: 1 May 2020).

Driva Eget, (2020). Se alla bidrag som kan rädda ditt företag. <https://driva-eget.se/guider/se-alla-bidrag-som-kan-radda-ditt-foretag2/> [Retrieved 2020-04-15]

Fatoki, O. (2014). Factors Influencing the Financing of Business Start-ups by Commercial Banks in South Africa. *Mediterranean Journal of Social Sciences*, 5(20).

Gompers, P. A. and Lerner, J. (2001) *The money of invention: how venture capital creates new wealth*. Harvard Business School Press. Available at:

<https://search.ebscohost.com/login.aspx?direct=true&db=cat07147a&AN=lub.1438600&site=eds-live&scope=site> (Accessed: 15 April 2020).

Investopedia, (2020). Death Valley Curve. <https://www.investopedia.com/terms/d/death-valley-curve.asp> [Retrieved 2020-04-22]

Jackson, G. and Boxx, R. (2012). Persistence and survival in entrepreneurship: The case of the wave energy conversion corporation of America. *New England Journal of Entrepreneurship*, 15(1), pp.19-27.

Landström, H. (2017), *Advanced Introduction to Entrepreneurial Finance*, Cheltenham: Edward Elgar. Ch 1, pp 24

Luisi Guiso and Raoul Minetti (2010) ‘The Structure of Multiple Credit Relationships: Evidence from U.S. Firms’, *Journal of Money, Credit and Banking*, 42(6), p. 1037. Available at:

<https://search.ebscohost.com/ludwig.lub.lu.se/login.aspx?direct=true&db=edsjsr&AN=edsjsr.40784875&site=eds-live&scope=site> (Accessed: 16 April 2020).

Mina, A., Lahr, H. and Hughes, A. (2013) ‘The demand and supply of external finance for innovative firms’, *Industrial & Corporate Change*, 22(4), pp. 869–901. doi: 10.1093/icc/dtt020.

Nouira, S., Klofsten, M. and Dahlstrand, Å. (2005). The Logic of the Entrepreneur. *The International Journal of Entrepreneurship and Innovation*, 6(2), pp.85-95.

Osano, H. and Languitane, H. (2016). Factors influencing access to finance by SMEs in Mozambique: case of SMEs in Maputo central business district. *Journal of Innovation and Entrepreneurship*, 5(1).

Savaneviciene, A., Venckuviene, V. and Girdauskiene, L. (2015) 'Venture Capital a Catalyst for Start-Ups to Overcome the "Valley of Death": Lithuanian Case', *Procedia Economics and Finance*, 26, pp. 1052–1059.

Strauss, A. & Corbin, J., 1990. *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park: Sage.

Tillväxtverket, (2020). Basfakta om företag.

<https://tillvaxtverket.se/statistik/foretagande/basfakta-om-foretag.html> [Retrieved 2020-04-21]

The Swedish Research Council. (2017). God forskningssed. [Elektronisk resurs]. Reviderad utgåva (2017). *Vetenskapsrådet*. Available at:

<https://search.ebscohost.com/login.aspx?direct=true&db=cat07147a&AN=lub.5002562&site=eds-live&scope=site> (Accessed: 1 May 2020).

Xiang, D., Worthington, A. and Higgs, H. (2014). Discouraged finance seekers: An analysis of Australian small and medium-sized enterprises. *International Small Business Journal: Researching Entrepreneurship*, 33(7), pp.689-707.

Yin, R. K. (1994). *Case study research: Design and methods* (2nd ed.). Newbury Park, CA: Sage.

## **7. Appendices**

### **7.1 Interview guide**

Below you will find our interview guide used in all conducted interview. Respective questions have been organized into following main themes: introduction, awareness, bootstrapping, external relations, idea, team, personality, and motivation.

Through this interview guide we will guide and ask the interviewee to explain his or her entrepreneurial experience, including what went good and bad in the different stages – starting from the business idea, raising initial funding, expanding the business, and reaching the commercialization stage. By doing so, we will be able at each stage to ask any of the supplementary questions below depending on how the interviewee explain their experiences. Please notice that not all questions might not be applicable depending on if we are interviewing a Type A, B, C company.

### **Supplementary interview questions**

#### **Introduction**

- Can you introduce the startup or company?
- What educational background do you have?
- Do you have any prior startup experience or running businesses?
- What kind of problems have you faced within the period of running the business?
- Focusing on the financials, have you faced difficulties to raise capital?
- How much funding have you raised or tried to raise?
- In what region do/did you operate, i.e. tried to raise money?
- Did your company face difficulties to raise capital?
- Why did you think the company failed to secure funding and had to shut down?
- Did you consider taking any preventative actions in order not to face financial gap before you faced it?
- What kind of actions have you taken till now to secure funding?
- How was the experience with the previous actions taken to secure the funding needed?
- What would you do differently?
- What actions are you planning to take to secure funding and survive in order to commercialize your product?
- What helped you to secure funding?



## **Awareness**

- How difficult is it to raise investment at early stage?
- To what extent are you aware of the available external financing options?
- How actively were you as a company searching for external funding options?
- Have you applied to any governmental support program to raise soft money?
  - Have you received any soft money?
    - If yes, how did you spend it?
    - If yes, would you in hindsight spend it differently?
    - If no, are you planning to apply?
    - If no, why do you think you did not receive it?
- To what extent are banks, BAs and VCs accessible for this company?
- Have you tried any of these options to raise initial investment?
- Have you tried raising external funding from abroad?
- Have you received investment from a VC?
  - If yes, to what extent was it helpful to commercialize your product /service?
  - If no, how did it affect the operations?
  - If no, did you try again to raise money? How different was it from the previous try?

## **Personality**

- In what way have you conducted a business plan and conducted research of your market?
- Are you afraid to disclose information about your business when seeking funding?
- How do you personally handle and face encountering the financial gap?
- In what way would you consider your team taking a proactive approach?
- To what extent is being proactive helpful in raising capital?
- To what extent do you think your team is risk-taker?
- To what extent is risk-taking helpful in raising capital?
- To what extent do you think your team is persistent?
- To what extent is being persistent helpful in raising capital?

## **Motivation**

- What are your motivations for running the business as an entrepreneur?
- What are your growth predictions?
- How motivated is the team to grow the business?
- To what extent do you believe motivation influences when securing funding?

## **Bootstrapping**

- During your development, have you taken any actions to keep the costs down?
- Have you used any bootstrapping methods in your startup? If yes, what types?
- How was the general experience using bootstrapping?
- To what extent were they helpful to prevent financial constrains?

### **External Relations**

- Do you have any relationship with support organizations such as incubators, accelerators or science parks?
- How often do you discuss investment opportunities with them?
- According to your experience, to what extent is the collaboration with a support organization helpful for company development and raising money?

### **Idea**

- To what extent do you think the novelty of your business idea affect your chances of raising capital?
- To what extent do you think your business idea is novel?
- To what extent do external parties think your business idea is novel?

### **Team**

- To what extent is team important for raising external capital?
- How many people are you in the founding team?
- Any additional team members that have joined the team?
- Would you consider your team as diverse or homogeneous?
- Are you missing any competences today in your team?
- To what extent do you think your team is competent to run the business?
- How often does your team have conflicting ideas?
- How do you manage conflicts?
- To what extent do you think having team conflict affect the chances of raising capital?