

A systematic categorization and analysis of critical factor that determine the success of startups



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Abstract

In today's market, 90 % of all startups worldwide, fail to establish a permanent competitive position (Krishna, et al., 2016). Why does one startup fail to establish itself in the market while another one succeeds? Which factors determine the chance of success of a startup? To answer those questions, this study will analyse and categorize the internal and external factors which determine the success chances of a startup. Multiple publications address those questions, yet no summary paper currently exists. This study develops this systematic summary of those academically assessed factors. It presents the analysis and synthesis of the most important promising firm-external and firm-internal factors that publications have concluded on to influence a startup's success chance.

The research of Van Gelderen et al. (2005) provided the organizational structure upon which all identified factors were categorized into subgroups that are mutually exclusive and collectively exhaustive.

The literature review has shown that internal factors are factors that concern firm-internal aspects (e.g. characteristics of the entrepreneur). External factors concern the external environment of the startup. Furthermore, this study identified, categorize and systematize several critical success factors of startups. The five most relevant factors, regarding the number of related publications, are "Gender of the Entrepreneur" (see Table 4c), "Third Party Money" (see Table 4a), "Management Experience" (see Table 4d), "Ambition to Become Rich" (see Table 4e) and "Policies" (see Table 5b).

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1. Introduction

This chapter will define and describe the problem, its relevance and the method which was used to conduct this research. Furthermore, the research questions, important definitions and an overview of the analysed factors will be given.

Since the start of the new millennium, the number of founded startups has exponentially risen worldwide. Therefore, startups play an increasingly important role in the world economy. Some of them have become one of the biggest companies in the world in terms of market share, such as Facebook and Google. Startups will be defined as ventures that exist no longer than ten years and attempt to increase employee and sales growth significantly (Kollmann, et al., 2016). Startups play an essential role in today's market and contribute significantly more to the overall job creation than established have done so in recent years (Kane, T. J., 2010). Startups also generate significant revenue (Davila, et al., 2015).

Startups are increasingly important not only in the global market but also in political debates. Political debates increasingly propose extended support for startups as a possible solution for dealing with contemporary challenges like youth unemployment (Davila, et al., 2015). The success and impact of modern startups also triggered academic and business journals to cover the determinants of a startup's success or failure (Davila, et al., 2015). 90% of startups (industry standard) worldwide fail to establish a permanent position in the market (Krishna, et al., 2016). Thus, the question arises: which internal and external factors set apart the surviving 10% from the other 90% of the startups? And, how should be dealt with those factors to increase the success chance of a startup?

To fully understand this problem and the success determinants of a startup, internal and external factors have to be distinguished. In this study external factors are defined as factors that refer to the external environment of the startup. The internal factors are related to factors which concern the start-up itself (Everett, et al., 1998) or even the characteristics of the entrepreneur (Van Gelderen, et al., 2005).

The increasing importance of startups in the global market and political debates shows that there is a need for further research on the topic of determinants of a startup's success. This is supported by the fact that 90% of all start-ups fail to be successful.

This study will analyse and systematise the existing literature on the internal and external critical factors of startups. Due to the vast number of influencing factors, this paper addresses the factors which were deemed most relevant. The aim of this research is to systematically review the main critical factors entrepreneurs encounter and give suggestions about how those are best handled, in order to maximize the success chances and increase the number of successful startups. This categorization and systematization strive to increase the success chances of startups by increasing the comprehensibility of the problem. It also strives to decrease the responding time to errors made by the entrepreneur and strive to prevent entrepreneurs from committing mistakes.

1.1. Problem Statement

Startups generally face 3 life cycle stages; the “Bootstrapping stage”, the “Seed stage” and the “Creation stage” (Salamzadeh, et al., 2015).

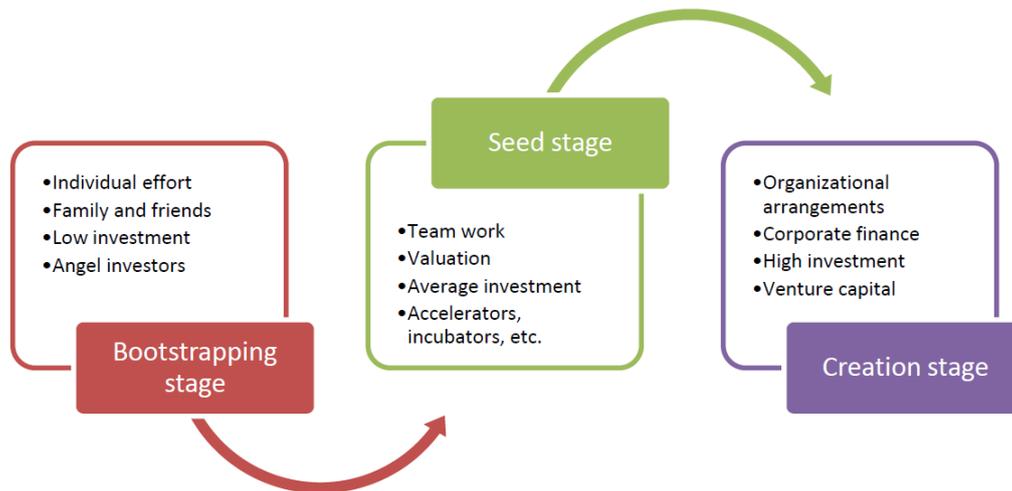


Figure 1: 3 Life cycle stages of startups source: Salamzadeh, et al., 2015

The goals of the first stage are defined as, the capability of the cash management, the manifestation of the service/product and their feasibility, the building of a team of founders and establishing the acceptance of the customer base (see figure 1: “Bootstrapping stage”) (Brush, et al., 2006). The second stage refers to the development of a prototype, the market entry, the ventures valuation and the search for mechanisms which support the startup (e.g. accelerators) (see figure 1: “Seed stage”) (Salamzadeh, A., 2015) (Salamzadeh, et al., 2015). The third stage refers to the sale of the service or product and hiring of employees (see figure 1: “Creation Stage”) (Salamzadeh, A., 2015). After the “Creation stage” the startup is no longer considered a startup but a firm or organization (Salamzadeh, et al., 2015).

Many startups struggle to survive the creation phase. Several factors affect their chance of survival even if they successfully exceed the creation phase (see figure 1) (Tomy, et al., 2017). As previously stated, researchers have shown that 90% of all startups struggle to remain competitive (Krishna, et al., 2016). Therefore, in this thesis a successful startup is defined as one that establishes a stable position in the market and remains competitive.

Many articles analyse some of the internal and external critical factors, but none of those articles categorize them. Hence, to increase the success chances of a startup there is a need for thorough research to structure knowledge regarding the critical factors. Therefore, this study will systematize and evaluate relevant academic publications concerning the most relevant factors influencing the success of startups.

1.2. The relevance of the problem

In this study, startups will be defined as ventures that operates in one of the life cycle stages of startups (see Figure 1) and attempt to increase the number of employees and sales growth significantly.

The literature identifies startups as a driving force behind job creation and impactful in combating unemployment as established companies are “job destroyers” (Kane, T. J., 2010) (Davila, et al., 2015). This holds since startups create, on average, three million new jobs annually in the US. While in contrast, established firms destroy a million jobs per year on average in the US (Kane, T. J., 2010).

Startups are a continually growing subject of relevance in business reviews, academic literature as well as political discussions (Davila, et al., 2015). It is complicated to gather empirical data on startups in the “Bootstrapping stage”, because they are not listed in business registers (Van Gelderen, et al., 2005). The amount of scientific studies done in this specific field is low and lacks quality due to the lack of data (Fielden, et al., 2000).

The relevance of this study is accentuated by the fact that only a fraction of all startups succeeds (Krishna, et al., 2016). This points toward a deficiency in incorporating the critical factors, as well as a lack of education and programs supporting startups. Literature has analysed several essential critical factors, but entrepreneurs seem not to be educated about them because of the low rate of successful startups (Krishna, et al., 2016). This paper will act as a guideline to stated problems so that entrepreneurs can get an insight in the experiences of others.

To further support the relevance of this problem, it should not be neglected that social and political interest groups frequently use startups as catalysts to accelerate significant changes or implement new technologies. A prime example of that phenomenon is the "clean-energy-movement" which promotes the reduction of fossil fuel usage with the help of innovative startups (Davila, et al., 2015).

All articles used in the literature review, which aimed at analysing the critical factors of startups, tend not to cover all of the internal and external factors separately and consequently lack completeness (see Table 2). Therefore, this study will analyse those factors and systematically address the most relevant of them to provide a guideline for nascent entrepreneurs on which critical factors to focus on to increases the startup's success chance.

1.3. Research Questions

The following general research question will be answered during this study; “Which factors significantly contribute to the success chance of startups?”.

To answer this question, a categorical systemization will be applied to differentiate between the different factors and evaluate their individual impact on the aforementioned success chance.

An answer to this general research question will be enabled by separately answering the sub research questions; “What are the internal factors influencing the success of startups?” and “What are the external factors influencing the success of startups?”. This sub research questions will be answered in chapter two and three.

This is important because a differentiation between internal and external factors helps to categorize and summarise all factors to make it easier for the entrepreneur to find and tackle the critical factor that limits his or her startup’s chance of success.

1.4. Method

This article will analyse the existing literature about the factors that influence the success chance of startups. The relevant literature will be chosen based upon the following characteristics: the year of publication, a research focus on small business and startups and the kind of publication (e.g. journal). The following databases have been used: Google Scholar, Scopus. These databases have been used because they are free, cover a broad range of articles and the researcher was familiar with them. Still, the possibility exists, that those databases do not cover all of the relevant articles.

To determine the factors which influence the success of startups, the words "success", “critical factors” and “startups” were used. The subject area was limited to “Business, Management, and Accounting”. The main search engine, which has been used for the literature research, was Scopus and one of the different title search queries, which was used, was: "success" AND ("Start-up*" OR "Startup*") AND (LIMIT-TO (SUBJAREA, "BUSINESS")).

The references of articles that appeared on Scopus, were reviewed. The relevant papers of the reference lists have been found at the Wageningen University Library website or Google Scholar.

All of the utilized information from the articles were either published in scientific journals (like the “Small Business Economics”, the “Journal of Labour” or the “Journal of Small Business and Enterprise Development”) or presented at academic conferences and later published in conference proceedings.

Table 1 presents the title of the shortlisted papers, the authors, the year of publication and the journal it was published in. The table is alphabetically ordered by the name of the authors.

Title	Authors	Publication year	Journal
Market risk analysis, practical financial econometrics	Alexander, C	2008	John Wiley & Sons
Factors affecting the development of clean-tech startups: A literature review.	Bjornali, E. S., & Ellingsen, A.	2014	Energy Procedia
What makes an entrepreneur?	Blanchflower, D. G., & Oswald, A. J.	1998	Journal of labor Economics
Sustainable venture capital–catalyst for sustainable startup success?	Bocken, N. M.	2015	Journal of Cleaner Production
The use of bootstrapping by women entrepreneurs in positioning for growth.	Brush, C. G., Carter, N. M., Gatewood, E. J., Greene, P. G., & Hart, M. M.	2006	Venture Capital
Between facets and domains: 10 aspects of the Big Five.	DeYoung, C. G., Quilty, L. C., & Peterson, J. B.	2007	<i>Journal of personality and social psychology</i> , 93(5), 880.
The rise and fall of startups: Creation and destruction of revenue and jobs by young companies.	Davila, A., Foster, G., He, X., & Shimizu, C.	2015	Australian Journal of Management
Measuring market risk	Dowd, K.	2007	John Wiley & Sons
Small business failure and external risk factors.	Everett, J., & Watson, J.	1998	Small Business Economics
Barriers encountered during micro and small business startup in North-West England.	Fielden, S. L., Davidson, M. J., & Makin, P. J.	2000	Journal of small business and enterprise development
A longitudinal study of cognitive factors influencing startup behaviors and success at venture creation.	Gatewood, E. J., Shaver, K. G., & Gartner, W. B.	1995	Journal of business venturing
Small firm growth: intentions, implementation and impediments.	Hay, M., & Kamshad, K.	1994	Business Strategy Review
The importance of startups in job creation and job destruction	Kane, T. J.	2010	–
Underlying dimensions of business location decisions.	Karakaya, F., & Canel, C.	1998	Industrial management & data systems
Assessing performance outcomes in marketing	Katsikeas, C. S., Morgan, N. A., Leonidou, L. C., & Hult, G. T. M.	2016	Journal of Marketing
European startup monitor	Kollmann, T., Stöckmann, C., Hensellek, S., & Kensbock, J.	2016	European startup monitor
Predicting the outcome of startups: less failure, more success.	Krishna, A., Agrawal, A., & Choudhary, A.	2016	16th International Conference on Data Mining Workshops (ICDMW)
The established and the newcomers: what makes immigrant and women entrepreneurs so special?	Kupferberg, F.	2003	International Review of Sociology/Revue Internationale de Sociologie
The expanded horizon for achieving entrepreneurial success.	Miner, J. B.	1997	Organizational Dynamics
The role of government policy on entrepreneurial activity: productive, unproductive, or destructive?	Minniti, M.	2008	Entrepreneurship Theory and Practice
Marketing and business performance.	Morgan, N. A.	2012	Journal of the Academy of Marketing Science
Reconsidering the use of personality tests in personnel selection contexts.	Morgeson, F. P., Campion, M. A., Dipboye, R. L., Hollenbeck, J. R., Murphy, K., & Schmitt, N.	2007	Personnel psychology
Are women really more risk-averse than men? A re-analysis of the literature using expanded methods.	Nelson, J. A.	2015	Journal of Economic Surveys
The “environmental sustainability” problem.	Newport, D., Chesnes, T., & Lindner, A.	2003	International Journal of Sustainability in Higher Education
Startup companies: Life cycle and challenges.	Salamzadeh, A., & Kawamorita Kesim, H.	2015	In 4th International conference on employment, education and entrepreneurship (EEE),
Innovation Accelerators: Emergence of Startup Companies in Iran.	Salamzadeh, A.	2015	In 60th Annual ICSB World Conference June

Uncertainty Analysis and Success Prediction for Start-Ups.	Tomy, S., & Pardede, E	2017	ICIE 2017-Proceedings of the 5th International Conference on Innovation and Entrepreneurship
Success and risk factors in the pre-startup phase.	Van Gelderen, M., Thurik, R., & Bosma, N.	2005	Small business economics
Strategic marketing and marketing strategy: domain, definition, fundamental issues and foundational premises	Varadarajan, R.	2010	Journal of the Academy of Marketing Science, 38(2)
Startup activities, individual characteristics, and the regional milieu: Lessons for entrepreneurship support policies from German micro data.	Wagner, J., & Sternberg, R.	2004	The annals of regional science

Table 1 Summarization of all shortlisted articles, categorized by Title, Author, Publication Year and Journal

1.5. Definition

This sub chapter will provide some important keyword definitions, which ease the understanding of the importance of the problem and create a lens through which the research questions will be analysed.

In this paragraph, startups will be defined as ventures that exist no longer than ten years and attempt to increase employee and sales growth significantly (Kollmann, et al., 2016).

“Entrepreneurs” are defined as individuals who are willing to take the risk or are innovators, which reject the safety of employment in established companies to create wealth and capital (Blanchflower, et al., 1998).

A distinction between internal and external factors has to be made. Everett et al. defined internal factors as the effectiveness of management and external factors as the general economic environment (Everett, et al., 1998). The definition of internal factors by Van Gelderen et al. (2005) adds an additional layer to the previously mentioned one, as he includes the characteristics of the entrepreneur (Van Gelderen, et al., 2005).

The study at hand will analyse through the lens of an entrepreneur. Next to systematizing the existing literature, the main focus will be to give entrepreneurs a clear view of which factors influence the success of their startups. The paper will incorporate analyses from the literature, to provide interpretations of the factors and their connection to the success of startups.

1.6. Literature Review

This chapter will provide an overview of the factors which will be analysed in the literature review, how those factors are categorized and what methods were used by the researchers of the analysed literature.

The literature shows that there are a lot of factors, which can influence the success chances of startups. All factors are assigned to sub-groups in order to categorize similar factors. The sub-groups were taken from the article by Van Gelderen. The original subgroups are adjusted by complementing them with the factors from the other articles.

Different methods were used by the authors of the analysed articles. For example, Bjornali et al. (2014) and Minniti et al. (2008) have used a literature review to investigate the relevant factors for a startup's success chance and the role of the government policy on entrepreneurial activity. Van Gelderen et al. (2005) made use of a long-term observation of 517 nascent entrepreneurs to identify the crucial factors that their respondents faced. Gatewood et al. (1995) made use of a longitudinal study with 142 participants to identify cognitive factors that influence the success chance of startups.

Table 2 shows the internal or external nature of the factors, the name of the sub-group, the name of the factor and the author who mentioned the factor.

Internal or External	Name of Sub-group	Name of factor	Mentioned by
Internal	Internal Finances		
Internal		Third Party Money	-Bjornali et al. (2014) -Bocken et al. (2015) -Van Gelderen et al.(2005)
Internal		Start-up Capital	-Van Gelderen et al.(2005)
Internal		Money Management	-Bocken et al. (2015) -Fielden et al.(2000)
Internal		Monetary Concerns	-Fielden et al.(2000) -Hay et al.(1994)
Internal	Organization.		
Internal		Team	-Bocken et al. (2015) -Van Gelderen et al.(2005)
Internal		Business Plan	-Bocken et al. (2015) -Van Gelderen et al.(2005)
Internal	No Subgroup	Location	-Bjornali et al. (2014) -Karakaya et al.(1998)
Internal	Individual Demographics		
Internal		Age of the Entrepreneur	-Van Gelderen et al.(2005)
Internal		Gender of the Entrepreneur	-Fielden et al.(2000) -Gatewood et al.(1995) -Kupferberg (2003) -Nelson (2015) -Van Gelderen et al.(2005)
Internal		Type of Personality	-Bocken et al. (2015) -Miner et al. (1997)
Internal		Controls his/her own abilities and efforts	-Fielden et al.(2000)
Internal	Human Capital		

Internal		Work Experience	-Fielden et al.(2000) -Van Gelderen et al.(2005)
Internal		Management Experience	-Bocken et al. (2015) -Fielden et al.(2000) -Van Gelderen et al.(2005)
Internal		Experience in Founding Firms	-Van Gelderen et al.(2005)
Internal		Industry Experience	-Van Gelderen et al.(2005)
Internal		Education of the Entrepreneur	-Van Gelderen et al.(2005)
Internal		Political Experience	-Bjornali et al. (2014)
Internal	Motivation		
Internal		Push Motivation	-Van Gelderen et al.(2005)
Internal		Ambition to Become Rich	-Bocken et al. (2015) -Gatewood et al.(1995) -Van Gelderen et al.(2005)
Internal		Ambition to Grow Large	-Bocken et al. (2015) -Van Gelderen et al.(2005)
Internal	No Subgroup	Fear of Failure	-Wagner et al.(2004)
External	Risks		
External		Risk of the Market	-Alexander (2008) -Van Gelderen et al.(2005)
External		Perceived Risk of the Market	-Van Gelderen et al.(2005)
External		Getting Business and Clients	-Fielden et al.(2000)
External		Industry Type	-Van Gelderen et al.(2005)
External	Support ad Regulations		
External		Access to Financial Support	-Bocken et al. (2015) -Fielden et al.(2000)
External		Availability of Social Support	-Fielden et al.(2000)
External		Information and Guidance	-Van Gelderen et al.(2005)
External		Income Tax Regulation	-Fielden et al.(2000)
External		Policies	-Bjornali et al. (2014) -Minniti et al. (2008) -Van Gelderen et al.(2005)
External	No Subgroup	Price of Property	-Wagner et al.(2004)

Table 2 Summarisation of all factors, categorized by Internal or external nature, Name of Sub-group, Name of factor and articles that mentioned the factors

The table shows that there is not one systematic review on all these factors categorized in a single study. The articles that includes the most of the mentioned factors is the article by Van Gelderen et al. from 2015. Still, the article does not include all relevant factors (e.g. Money Management, Monetary Concerns, Location) (see table 2).

Therefore, the following chapter will present precisely that.

Table 2a: Internal Finances

Name of factor	Mentioned by
Third Party Money	-Bjornali et al. (2014) -Bocken et al. (2015) -Van Gelderen et al.(2005)
Start-up Capital	-Van Gelderen et al.(2005)
Money Management	-Bocken et al. (2015) -Fielden et al.(2000)
Monetary Concerns	-Fielden et al.(2000) -Hay et al.(1994)

Table 2c: Individual Demographics

Name of factor	Mentioned by
Age of the Entrepreneur	-Van Gelderen et al.(2005)
Gender of the Entrepreneur	-Fielden et al.(2000) -Gatewood et al.(1995) -Kupferberg (2003) -Nelson (2015) -Van Gelderen et al.(2005)
Type of Personality	-Bocken et al. (2015) -Miner et al. (1997)
Controls his/her own abilities and efforts	-Fielden et al.(2000)

Table 2e: Motivation

Name of factor	Mentioned by
Push Motivation	-Van Gelderen et al.(2005)
Management Experience	-Bocken et al. (2015) -Fielden et al.(2000) -Van Gelderen et al.(2005)
Experience in Founding Firms	-Van Gelderen et al.(2005)
Ambition to Become Rich	-Bocken et al. (2015) -Gatewood et al.(1995) -Van Gelderen et al.(2005)
Ambition to Grow Large	-Bocken et al. (2015) -Van Gelderen et al.(2005)

Table 2a-f: Summarization of all internal factors divided by Sub-groups and categorized by name of factor and source.

Table 3a: Risks

Name of factor	Mentioned by
Risk of the Market	-Alexander (2008) -Van Gelderen et al.(2005)
Perceived Risk of the Market	-Van Gelderen et al.(2005)
Ambition to Grow Large	-Bocken et al. (2015) -Van Gelderen et al.(2005)
Getting Business and Clients	-Fielden et al.(2000)
Industry Type	-Van Gelderen et al.(2005)

Table 2b: Organization

Name of factor	Mentioned by
Team	-Bocken et al. (2015) -Van Gelderen et al.(2005)
Business Plan	-Bocken et al. (2015) -Van Gelderen et al.(2005)

Table 2d: Human Capital

Name of factor	Mentioned by
Work Experience	-Fielden et al. (2000) -Van Gelderen et al.(2005)
Management Experience	-Bocken et al. (2015) -Fielden et al. (2000)
Experience in Finding Firms	-Van Gelderen et al. (2005)
Industry Experience	-Van Gelderen et al. (2005)
Education of the Entrepreneur	-Van Gelderen et al. (2005)

Table 2f: No Sub-group

Name of factor	Mentioned by
Location	-Bjornali et al. (2014) -Karakaya et al.(1998)
Fear of Failure	-Wagner et al. (2004)

Table 3b: Support and Regulation

Name of factor	Mentioned by
Access to Financial Support	-Bocken et al. (2015) -Fielden et al.(2000)
Industry Type	-Van Gelderen et al.(2005)
Availability of Social Support	-Fielden et al.(2000)
Information and Guidance	-Van Gelderen et al.(2005)
Industry Type	-Van Gelderen et al.(2005)
Income Tax Regulation	-Fielden et al.(2000)
Policies	-Bjornali et al. (2014) -Minniti et al. (2008) -Van Gelderen et al.(2005)

Table 3c: No Sub-group

Name of factor	Mentioned by
Price of Property	-Wagner et al. (2004)

Tabelle 3a-c: Summarisation of all external factors divided by Sup-groups and categorized by name of factor and source.

2. Internal Factors

This chapter will analyse the firm-internal critical success factors, which were obtained by the literature review.

To provide an overview to the reader, internal factors are divided into those that concern the startup itself, namely: “Internal Finances” or “Organization” and those that focus on the characteristics of the entrepreneur; “Individual Demographics”, “Human Capital” and “Motivation”. Those sub-groups are extracted from the article by Van Gelderen et al., because they already incorporated a significant amount of the factors. Per section one such sub-groups of internal factors will be discussed.

2.1. Startup focused Factors

The analysis will start with the factors concerning the startup itself.

All factors are assigned to sub-groups, which are either taken from the article by Van Gelderen et al. (2005). Those sub-groups are complemented with factors from other articles, to similar group factors, to provide a more structured and give an overview of the factors.

2.1.1 Internal Finances

The first sub-group, which will be analysed, is “Internal Finances” (see Table 2a), which relates to the factors “Third Party Money” (Van Gelderen, et al., 2005) and “Start-up Capital” (Van Gelderen, et al., 2005). Furthermore, Fielden et al. (2000) analysed factors which fit to this sub-group and are therefore complemented. Those factors are “Money Management” (Fielden, et al., 2000) and “Monetary Concerns”(Fielden, et al., 2000).

“Third Party Money” concerns about the origin of the capital that has been provided by external actors. This factor is considered an internal factor in this paper because the raised capital belongs to the venture, no matter how it is obtained. The literature shows that taking out a loan decreases the chance of success (Van Gelderen, et al., 2005). Conversely, this means that own equity, e.g. private loan or private money

of the entrepreneur, increases the success chance (Bjornali, et al., 2014), because the private loans (e.g. from family members) can be interest-free and therefore do not harm the long-term economic sustainability of the startup. But the entrepreneur should consider that it is doubtful that family members can give big loans and that those loans can lead to a social problem. The provision of "Third Party Money" can also lead to irresponsible handling of the resources. In cases of companies with limited liability, the person in charge does not have to reimburse the bank in case of bankruptcy (Bocken, et al., 2015).

The factor "Start-up Capital" relates to the amount of required capital. Entrepreneurs with high capital requirements had a low chance even to start their business because it takes more effort to raise a significant amount of capital. In reverse, this means that entrepreneurs who intended to raise less capital had a higher chance of launching their venture (Van Gelderen, et al., 2005).

„Money Management“ is another critical factor that has been analyzed by Fielden et al. (2000). According to her questionnaire in which participants have been asked to name success factors concerning their venture, "Money Management" was the most notable one, with three out of four respondents mentioning it (Fielden, et al., 2000). This factor addresses the anxiety of misunderstanding the workings of taxes (especially VAT), insurance and bookkeeping (Fielden, et al., 2000). Additionally, it includes how startups handle debt and how those dealings affect the success chance. In most cases, increasing the debt leads to a lower success chance, and vice-versa (Bocken, et al., 2015).

"Monetary Concerns" refers to the issues with gaining capital (Fielden, et al., 2000). Two out of three participants of the previously mentioned questionnaire mentioned it as a critical factor for starting their business. This statement is supported by Hay and Kamshad's (1994) article, which identifies insufficient availability of capital as a significant constraint faced by small business startups (Hay, et al., 1994).

2.1.2. Organization

The sub-group "Organization" (see Table 2b) includes the factors "Team" (Van Gelderen, et al., 2005), "Business Plan" (Van Gelderen, et al., 2005).

The factor "Team" addresses whether the entrepreneur works alone or in a team. It appears that working in a group increases the success chance of the startup (Bocken, et al., 2015). However, there is a chance that the team is not assembled homogeneously, which involves the risk of disagreement within the group (Van Gelderen, et al., 2005) (Bocken, et al., 2015). A more extensive elaboration of the composition of a "Team" will follow in chapter 2.1.2.1.

The factor "Business Plan" is important for entrepreneurs, which are classified by Van Gelderen et al. (2005) as unambitious, because a business plan supports them to systematize their activities (Van Gelderen, et al., 2005). Ambitions are defined as the intended scale-size of the startup (Van Gelderen,

et al., 2005). A business plan is a document that elaborates in detail how a venture is going to fulfill its goals. It consists of information about the product or service, marketing and finance. The setup of a business plan at an early stage decreases the chance of success for entrepreneurs with higher ambitions (Van Gelderen, et al., 2005). The reason for this phenomenon is that the entrepreneurs with higher ambitions are often individuals, who are well experienced and knowledgeable, that they do not require the need for a business plan (Bocken, et al., 2015) (Van Gelderen, et al., 2005). However, those with high ambitions can improve their chance of success by creating a business plan in a further stage of their startup (Van Gelderen, et al., 2005).

Another crucial internal factor for the startup's success, which cannot be assigned to the subgroups of this study, is the "Location" of the startup (Bjornali, et al., 2014) (see Table 2f). Competition, taxes, regulations, infrastructure and marketing are just a few factors related to the "Location" (Karakaya, et al., 1998). The impact of the "Location" on the success chance of startups can be of positive or negative nature (Bjornali, et al., 2014).

2.2. Characteristics of the entrepreneur

The internal factors also consist of individual traits and decisions concerning the entrepreneur self. These can be split up into the following sub-groups: "Individual Demographics", "Human Capital" and "Motivation" (Van Gelderen, et al., 2005).

2.2.1. Individual Demographics

The first sub-group "Individual Demographics" was designed by Van Gelderen et al. (2005) and consists of the two factors "Age of the Entrepreneur" and "Gender of the Entrepreneur" (Van Gelderen, et al., 2005). Additionally, the factors "Type of Personality" (Fielden, et al., 2000) and "controls his/her abilities and efforts" (Fielden, et al., 2000) have been added to the first sub-group, to provide a more diverse analysis (see Table 2c).

The "Age of the Entrepreneur" influences the success of a startup in the following manner. The older the entrepreneur, the less likely he or she is to get the business started (Van Gelderen, et al., 2005). Thus, an increasing age decreases the chance of successfully establishing a venture. This idea explains how young people have more energy than the elderly to start their own business (Van Gelderen, et al., 2005). Further influences and connections of this factor will be given in the paragraph of "Human Capital".

Another factor listed under "Individual Demographics" is the "Gender of the Entrepreneur". The article by Van Gelderen, et al. from 2005, has shown that females have a lower success chance when launching their startup (Van Gelderen, et al., 2005). Two reasons for this statement are provided by the literature. First, women tend to be more risk-averse than men (Nelson, J. A., 2015) and therefore are less likely to start their venture. The second explanation given is that women face entry barriers that men do not face (e.g. acceptance problems of employees) (Kupferberg, F., 2003), but also because they launch less ambitious businesses (Van Gelderen, et al., 2005). This is partly counterfactual to the findings of Fielden et al. (2000), because their research has shown that women are more likely to be successful when entering new business ventures than their male counterparts (Fielden, et al., 2000). Their article states that businesses founded by women are more likely to succeed in the first year and are less likely to fail during the expansion process, in turn creating more jobs. Their reasoning for this statement is that women are more likely to reject traditional business practices (Fielden, et al., 2000). A vertical hierarchy leadership is, for example, considered a traditional business practice. Still, the paper has also shown that women in North-West England tend to work less for their business, which affects the size of their business negatively (Fielden, et al., 2000). However, due to the small sample size, it is questionable whether those statements are representative.

The article by Gatewood et al. (1995) has found a connection between "Gender of the Entrepreneur" and "Motivation" (Gatewood, et al., 1995). It states, that female entrepreneur with the intrinsic motivation to be their own boss, are more successful than females with an extrinsic motivation like "money" or "fame" (Gatewood, et al., 1995). Meanwhile, male entrepreneurs with extrinsic motivations have a higher success chance than males with intrinsic motivation (Gatewood, et al., 1995).

The following factor, which will be analysed, is "Type of Personality". In general, there are four personality types with the potential to be successful: „personal achiever“, „emphatic salesman“, „expert idea generator“ and „real manager“ (Miner, et al., 1997). All of them can have a significant impact on the success chance, which makes the "Type of Personality" a critical success factor (Bocken, et al., 2015).

The primary motivation of the „personal achiever“ is the strive for achievements. He or she is highly interested in feedback, often takes the initiative to get work done and is strongly committed to their startup. They also tend to expand too early and have insufficient knowledge about running a business (Miner, et al., 1997).

The „emphatic salesman“ sees sales as the key factor to success and has high emotional intelligence. He or she is defined by the desire to help others and can use the power of persuasion. Still, their main weaknesses are incapability in dealing with business management and a lack of knowledge of their products and services (Miner, et al., 1997).

The strengths of the „expert idea generator“ lie in finding niche markets, developing market strategies. Individuals with that personality type have a desire for innovation, but they often lag the motivation to follow their ideas and are often influenced by outside circumstances (Miner, et al., 1997).

The skills of the „real manager“ are keeping a good overview of the business and being decisive. He or she strives to be a corporate leader, has a positive attitude towards authority and a desire to stand out among others (Miner, et al., 1997). However, he or she tends to have a competitive streak and over-manage their venture and suppress the growth potential (Miner, et al., 1997).

It appears that none of those, as mentioned above, personality types provide a clear competitive advantage. All of them have their strengths and weaknesses.

Thus, as mentioned earlier, in order to make use of a "Team", it could be useful to deal with the weaknesses of the individual "Types of personalities", but also to include all strengths into the startup. To give an example, the "personal achiever" often lacks crucial knowledge on how to run a business and the power of the "real manager" is keeping a good overview and making business decisions. Thus, they complement each other.

Another success factor that concerns the character of the entrepreneur is that he or she is capable to "control his or her own abilities and efforts" (Fielden, et al., 2000). This means that he or she knows about their strengths and weaknesses and can deal with them. Therefore, a personality test can help identify the factor "Types of Personalities". Still, the entrepreneur has to consider that individuals tend to fake personality tests (Morgeson, et al., 2007). This should be considered while building a "Team", but also when the entrepreneur him- or herself is participating a test.

2.2.2. Human Capital

The sub-group „Human Capital“ includes the factors "Work Experience", "Management Experience", "Experience in Founding Firms", "Industry Experience" and "Education of the Entrepreneur", all of which were obtained by Van Gelderen et al.(2005). The factor "Political Experience", which is also included in the sub-group "Human Capital" was analysed by the article of Bjornali & Ellingsen (2014) (see Table 2d).

The factor "Work Experiences" alone does not have a positive influence on success. Still, if low "Work Experiences" is combined with useful "Guidance and Information", it increases the chance of success (Van Gelderen, et al., 2005).

The reasoning behind this idea is that "Work Experience" is directly related to the "Age of the Entrepreneur". Founders with a low amount of "Work Experience" are usually young individuals and are therefore more energetic and open to "Guidance and Information". Reversely, this implies that entrepreneurs with more "Work Experience" are older and thus have less energy and are more stubborn (Van Gelderen, et al., 2005).

Another research has shown that most successful small business entrepreneurs have worked as managerial employees in small ventures or minor divisions of big companies (Fielden, et al., 2000). According to their article, "Work Experience" in small businesses provides more relevant knowledge to entrepreneurs than "Work Experience" in large companies (Fielden, et al., 2000). This contradicts the findings of Van Gelderen et al. (2005).

"Management Experience" seems to have a slightly positive effect on the startup's success chances (Bocken, et al., 2015), but again it goes conjointly with the "Age of the Entrepreneur". The same explanation as for the factor "Work Experience" applies here, as the more experienced entrepreneur is also more stubborn and less energetic (Van Gelderen, et al., 2005). This is supported by Fielden et al. (2000), who have found that geographical areas with healthy social classes of people from managerial social backgrounds tend to have a high rate of successful startups (Fielden, et al., 2000).

The "Experience in Founding Firms" has a marginally positive impact on the success chance of a startup. This is supported by the fact that the entrepreneurs gained essential experiences in their previous positions (Van Gelderen, et al., 2005). However, in some cases, this effect is mitigated because specific individuals are slow to learn from their mistakes and tend to repeat previously made mistakes (Van Gelderen, et al., 2005). This conclusion was obtained through a survey performed among a random and representative sample of nascent entrepreneurs.

"Industry Experience" has a positive impact on the chances of success of a startup. People gain more experience and are likely to network with individuals who can contribute to the advancement of the startup. "Industry Experience" is defined as working experience in the same industry the startup will operate in. But again, the entrepreneur with a higher "Industry Experience" tends to be more stubborn, partly reducing the positive effect gained by their "Industry Experience" (Van Gelderen, et al., 2005).

The factor „Education of the Entrepreneur“ has a significant, positive impact on a startup's success chance. Academic education provides the entrepreneur with useful knowledge preparing them for success and preventing them from committing drastic errors (e.g. misunderstanding of taxes) (Van Gelderen, et al., 2005).

The factor "Political Experience" is a positive force in determining the chances of success. A politically experienced entrepreneur is more skilled in influencing the political agenda (e.g. law voting) and has a better understanding of the decision-making process of politics (Bjornali, et al., 2014). These skills tend

to be useful for startups in highly regulated industries, like the energy sector, because political decisions have a significant impact on the venture's turnover. Thus, being adept at maneuvering in and around political circles can be favourable for entrepreneurs (e.g. public funding, tax deduction), especially those in specific market segments. "Political Experience" can, for example, be obtained by being part of a political party.

2.2.3. Motivation

The following sub-group deals with the "Motivation" of the entrepreneur (see Table 2e). This sub-group is split up into the factors „Push Motivation“, the „Ambition to Become Rich“ (Van Gelderen, et al., 2005) and "Ambition to Grow Large" (Van Gelderen, et al., 2005).

„Push Motivation“ is defined as motivation, a pressure to work effectively, even on undesirable tasks (Van Gelderen, et al., 2005). This type of motivation harms the chances of the success of startups because entrepreneurs should be intrinsically motivated to work on their startup (Van Gelderen, et al., 2005). They should not have to pressure themselves to accomplish their tasks (Van Gelderen, et al., 2005). „Push Motivation“ leads entrepreneurs to stop pursuing their business ideas in case of alternative job offers. This means that founders, who are not fascinated by their work, are more likely to quit on their ideas and look for alternative employment, thus, leading the startup to fail (Van Gelderen, et al., 2005).

The "Ambition to Become Rich" has a marginal, positive effect on the success of the startup, because „high materialistic expectations can motivate but can also be a source of disillusionment“ (Van Gelderen, et al., 2005) (Bocken, et al., 2015). As previously stated, there is a connection to be made between motivation and the "Gender of the Entrepreneur". The "Ambition to Become Rich" has a more modest impact on women because, female entrepreneurs are more successful when they are inspired to become their bosses (Gatewood, et al., 1995). Extrinsic motivations, such as the desire to be rich or famous, have a more significant impact on male entrepreneurs (Gatewood, et al., 1995).

The "Ambition to Grow Large" negatively affects a startup's chance of being successful. This is supported by the finding that growth ambitions are a „source of disillusionment“ (Van Gelderen, et al., 2005). This leads entrepreneurs to make decisions based on the desired future rather than the current state of their venture. The "Ambition to Grow Large" mitigates the positive effect of being motivated by high ambitions (Van Gelderen, et al., 2005) (Bocken, et al., 2015). This state of disillusionment can be combated by the creation of a "Business Plan" in a further development stage. This enables the entrepreneur to envision a pathway to a large-scale startup without making rash decisions (Van Gelderen, et al., 2005).

Another relevant internal factor that cannot be assigned to any of the subgroups of this article is "Fear of Failure" (see Table 2f). "Fear of Failure" was detected by Wanger et al. It is exceptionally high in Germany and in areas where the rate of entrepreneurs is low (Wagner, et al., 2004). The "Fear of Failure" consists of two different fears; the fear of "economic insolvency" and the fear of "personal failure". Both factors impede the entrepreneur to launch their venture and therefore decrease the chance of success (Wagner, et al., 2004).

To answer the first sub-question, this chapter analysed the internal factor that influence the success chance of a startup. The sub-question is, "What are the internal factors influencing the success of startups?". The literature review shows, that internal factors are factors that influence a startup's chances of success. Those factors can concern the characteristics of the entrepreneur, e.g. the "Age of the Entrepreneur", and the internal factors of the startup itself, e.g. "Start-up Capital" and therefore are related to the firm-internal process and characteristics. The overview (Table 2a-2f) provides a clear indication of which internal critical success factors are relevant for an entrepreneur.

3. External Factors

In this chapter, the firm-extern critical success factors will be analysed.

External factors are related to the industry and the segment the startup operates in (Everett, et al., 1998). The external factors will be divided into two sub-groups, "Risks" (Van Gelderen, et al., 2005) and "Support and Regulations" (Fielden, et al., 2000).

3.1. Risks

The sub-group "Risks" incorporates the factors "Risk of the Market" (Van Gelderen, et al., 2005), "Perceived Risk of the Market" (Van Gelderen, et al., 2005), "Getting Business and Clients" (Fielden, et al., 2000) and "Industry Type" (Van Gelderen, et al., 2005) (see Table 3a).

"Risk of the Market" is relevant for entrepreneurs, because lower risk gives lower chances to fail (Van Gelderen, et al., 2005). It is seen as one of the most significant findings (Van Gelderen, et al., 2005) in the category of external factors, because the success chance of a startup always depends on the "Risk of the Market". The explanation behind this phenomenon is that when entrepreneurs realize a high "Risk of the Market" they tend to disrupt the launch of their business (Van Gelderen, et al., 2005). "Risk of the Market" can include, for example, factors like the value of the market, growth, momentum, size,

interest rates and fluctuations (Alexander, C., 2008). There is a significant difference between the actual "Risk of the Market" and the "Perceived Risk of the Market".

"Perceived Risk of the Market" is defined as the risk, which the entrepreneur anticipates to exist in the market in which he or she wants to launch their venture in. The higher the perceived risk, the lower the success chance. The reasoning behind this is the fact that entrepreneurs, who recognize a low market risk, are more likely to get their business started (Van Gelderen, et al., 2005). However, there is a downside to a low "Perceived Risk of the Market". The entrepreneur might assess the market risk as lower than it actually is, and thus, is exposed to the dangers of miscalculations and mismanagement.

The results of the questionnaire performed by Fielden et al. (2000) have shown that 45% of the respondents believe the factor „Getting Business and Clients“ to be an essential determinant for their businesses' success (Fielden, et al., 2000). The reasoning behind this is that perceived difficulties in finalizing contracts and acquiring new clients delay their venture's launch, therefore, decreasing the chances of success (Fielden, et al., 2000).

The factor "Industry Type" deals with the industry segment in which the entrepreneur plans to start his or her business. The literature shows that the highest success chance exists in the manufacturing sector, which in turn also has the most entrance barriers (e.g. high investment in fixed capital like machinery) (Van Gelderen, et al., 2005). Industry types like trade, business services and consumer services are uncomplicated to get involved with but also easy to fail (e.g. because of high competition but low investments) (Van Gelderen, et al., 2005). This correlation between success and entry barriers can be supported by the following two assumptions. First, there are less ill-prepared launches of ventures in sectors with many entry barriers because preparation has to be on point. Secondly, competition is lower in these sectors than in those with fewer barriers of entry, which makes the emerging growth phase easier.

3.2. Support and Regulations

The sub-group "Support and Regulations" deals with the following factors: "Access to Financial Support" (Fielden, et al., 2000), "Availability of Social Support" (Fielden, et al., 2000), "Information and Guidance" (Van Gelderen, et al., 2005), "Income Tax Regulation" (Fielden, et al., 2000), and "Policies" (Bjornali, et al., 2014) (see Table 3b).

"Access to Financial Support" is defined not only as the access to loans and resources handed out by financial institutes. The literature says that financial support can also be a third-party individual who is interested in the potential of the business or wants to support a nascent entrepreneur (e.g. through angel investment, which is defined as individuals that invest and in return receive shares). According to Fielden et al. (2000), "Access to Financial Support" is an important determinant that increases the

chances of success. The reasoning behind this is that financial support helps the entrepreneur to handle monetary problems (Fielden, et al., 2000) (Bocken, et al., 2015). Startups with “Access to Financial Support” can use these resources to either reinvest into their ideas or to cancel the debt and be more financially independent. Still, “Access to Financial Support” through, for example, angel investment could lead to negative aspects like loss of control about managerial decisions because of the independence on the shareholders.

“Availability of Social Support” is characterized as recognition by family, friends and peers as well as the perceived opinions of surrounding social groups (Fielden, et al., 2000). It is a critical success factor for entrepreneurs. It increases their ability to cope with economic and personal difficulties, perceived barriers and social anxiety, all of which are feelings and emotions nascent entrepreneurs are confronted with (Fielden, et al., 2000).

The factor “Information and Guidance” refers to support provided to the entrepreneur by a third party, for example, the government. However, this factor loses its importance, similar to the factor “Work Experience”. This is because more experienced entrepreneurs are less likely to accept support because of their age and stubbornness (Van Gelderen, et al., 2005). Furthermore, startup’s with the intention to stay small-scale do not benefit as much from “Information and Guidance. There are not as many complicated processes in small scale startups (e.g. strategic acquisition of the competition), that need informational support from third-parties, if the entrepreneur is not educated on that specific field (Van Gelderen, et al., 2005).

The article by Fielden et al. (2000) also describes “Income Tax Regulation” as a critical success factor for entrepreneurs. Almost two out of three respondents perceive it as a problem, because it decreases the chance of their startup’s success, as it decreases revenue (Fielden, et al., 2000). Another reason why “Income Tax Regulation” is a perceived problem is the afore-mentioned factor “Money Management”. The fear of misunderstanding the workings of taxes increases worries among entrepreneurs, leading thereby to a decrease in their chances of success (Fielden, et al., 2000).

The factor “Policies” is broad and can have a positive or negative influence on the success chance of the startup. It depends clearly on what the policies say on certain products, firms and processes. (Bjornali, et al., 2014). “Government policy [...] shapes the institutional environment in which entrepreneurial decisions are made” (Minniti, M., 2008, p.779). Research has shown that recent policy discussions have focused on how to diminish barriers for entrepreneurs (Minniti, M., 2008). One of the previously explained factors (“Industry Type”) is, for example, heavily influenced by this factor “Policies”. Entrance barriers into specific market segments are created by policies, which hinder or support entrepreneurs in their strive to launch their business idea (Van Gelderen, et al., 2005). These policies can concern the use of natural resources in the case of the energy sector or the sales regulations (e.g. drug prices) in the medical industry.

Another external factor that influences the success chance of startups, but can not be attributed to any of the subgroups of this paper, is the "Price of Property" (Wagner, et al., 2004). Wagner et al. (2004) detected in their study, which was performed with German entrepreneurs, that a higher "Price of Property" decreases the chances of success (Wagner, et al., 2004). It seems that a connection between "Start-up Capital" and "Price of Property" exists. The "Price of Property" increases the "Start-up Capital" and therefore disrupts the entrepreneur to launch his or her business.

To answer the second sub-question, this chapter analysed the external factors. The sub-question is; "What are the external factors influencing the success of startups?". The literature review has shown that external factors are factors that relate to the firm-extern environment and that those factors can have a significant influence on the success chance of a startup. The tables 3a-3c give an overview of all relevant external success factors that were analysed by this study. An entrepreneur could use those tables to get an overview of which external factors are relevant for his or her success chances.

4. Discussion

The following chapter will discuss the completeness of this research (relevant factors which were not covered by literature), the expectations of the researcher, the reliability of doubtful individual factors and the reliability of certain articles.

The literature review has shown which factors influence the success of a startup and how these are divided into the subgroups "internal" and "external". Still, the analysed literature has not analysed all factors that are expected to have an influence on the success chance of a startup. Potentially relevant factors include the marketing strategy of the startup, the product or service itself, the production process and the innovation or the sustainability of the startup.

"Marketing strategy is an organization's integrated pattern of decisions that specify its crucial choices concerning products, markets, marketing activities and marketing resources in the creation, communication and/or delivery of products that offer value to customers in exchanges with the organization and thereby enables the organization to achieve specific objectives." (Varadarajan, R., 2010, p. 119). Marketing is crucial for the success chance of a startup because it influences, for example, the economic performance (e.g. "Getting Business and Clients"), customer acceptance and loyalty (Katsikeas, et al., 2016) (Morgan, N. A., 2012).

Another crucial factor for the success of a startup is the product, service or production process innovation. This factor is the baseline of every organization or startup. This factor can influence many factors mentioned in this study. Every step of a startup depends on the product, service or production process innovation (e.g. "Income Tax Regulations", "Industry Type", "Risk of the Market").

Sustainability is an increasingly important factor in all fields, namely the social, economic and environmental sustainability (Newport, et al., 2003). The factor “Sustainability” has a significant influence on other factors (e.g. “Getting Business and Clients”, “Support and Regulations”) and is, therefore, an essential factor for a startup's success chance.

All of the above-named factors are not included in the literature research because the individual factors are too substantial to analyse them in one paper.

The influence of all the factors and the division into the subgroups of Van Gelderen et al. (2005) are in line with the expectations that the researcher had before this study was performed. Unexpected was the vast amount of factors that have a significant influence on the chances of success of the startups. The literature review showed that the internal and external environment of a startup is quite broad and many influencing critical success factors do exist. This is supported by the above mentioned finding, that the analysed articles did not cover very important factors like the marketing strategy or the product.

What stands out from the listing is that the existing literature intensively analyses the internal factors which influence the success chance of a startup. Still, the analyses of the firm-extern factors focus on just a few. For comparison, the articles analysed twenty-one internal factors, while the number of external factors is ten (see Table 4a-5c).

Furthermore, this chapter will discuss two specific factors to analyse their reliability.

The first factor with reliability problems is the “Age of the Entrepreneur”. The literature states that a higher age of the entrepreneur increases the success chance of a startup. Still, a more senior age can go parallel with better connections and lower money constraints. Better relationships and smaller money constraints could both increase the success chance of the entrepreneur's startup.

The second factor with reliability doubts is the “Gender of the Entrepreneur”. At first, the articles of Fielden and Van Gelderen disagree about this factor. Van Gelderen found that female entrepreneur`s startups have a lower success chance because they launch less ambitious startups (Van Gelderen, et al., 2005). At the same time, Fielden states that women tend to reject traditional business models and therefore their startups have a higher success chance (Fielden, et al., 2000). Still, there are two more articles that support the findings of Van Gelderen. The article by Kupferberg says that women face entry barriers and for that reason, their startups have a lower success chance than men's startups (Kupferberg, F., 2003). The second article that supports Van Gelderen's findings is the article by Nelson (Nelson, J. A., 2015). Nelson says that women are more risk-averse than men and are less likely to start their own business (Nelson, J. A., 2015). Still, he also reviewed earlier articles and found that the difference between men and women in this specific field is not as relevant as thought. The previous articles that found

a significant difference in the risk-averseness of men and women had a standard deviation smaller than one.

The reliability of individual articles should also be taken under consideration, in particular the year of publication is relevant. Less recent articles could contain outdated findings. The article of Fielden was published in the year 2000 and the article by Gatewood et al. was published in 1995, therefore the reliability of his article is to doubt because there could be new findings on those topics. This holds for the articles of Hay, et al. (1994), Karakaya, et al. (1998) and Miner, et al. (1997).

Furthermore, the article by Bjornali et al. was not conducted with a lens generally on startups, but on clean-tech startups.

This chapter showed that the reliability of some findings and articles is questionable, due to contradictory findings and publication dates. It also showed that the completeness of this research is questionable.

5. Conclusions and Limitations

This chapter will provide an overview about all analysed critical success factors, a summarization of the most mentioned factors, answers to the research questions and the limitations of this research.

This thesis has used a literature research to answer the main and the sub research questions, which were aimed at identifying the factors influencing the success of startups. To answer the main research question, the literature analysed has shown factors that can either have a positive or negative influence on the startup's success chance.

At first, the following table gives an overview of all the factors analysed by this study. The table is ordered chronologically by the appearance in this literature review. In the table, the name, the fact, if the factor is internal or external, the name of the subgroup, the authors which mentioned the factor and the impact of the factor on the success chance are provided.

Table 4a: Internal Finances

Name of factor	Success chance impact	Mentioned by
Third Party Money	-	-Bjornali et al. (2014) -Bocken et al. (2015) -Van Gelderen et al.(2005)
Start-up Capital	-	-Van Gelderen et al.(2005)
Money Management	-	-Bocken et al. (2015) -Fielden et al.(2000)
Monetary Concerns	-	-Fielden et al.(2000) -Hay et al.(1994)

Table 4b: Organization

Name of factor	Success chance impact	Mentioned by
Team	+	-Bocken et al. (2015) -Van Gelderen et al.(2005)
Business Plan	+	-Bocken et al. (2015) -Van Gelderen et al.(2005)

Table 4c: Individual Demographics

Name of factor	Success chance impact	Mentioned by
Age of the Entrepreneur	-	-Van Gelderen et al.(2005)
Gender of the Entrepreneur	+/-	-Fielden et al.(2000) -Gatewood et al.(1995) -Kupferberg (2003) -Nelson (2015) -Van Gelderen et al.(2005)
Type of Personality	+/-	-Bocken et al. (2015) -Miner et al. (1997)
Controls his/her own abilities and efforts	+	-Fielden et al.(2000)

Table 4e: Motivation

Name of factor	Success chance impact	Mentioned by
Push Motivation	-	-Van Gelderen et al.(2005)
Ambition to Become Rich	+	-Bocken et al. (2015) -Gatewood et al.(1995) -Van Gelderen et al.(2005)
Ambition to Grow Large	-	-Bocken et al. (2015) -Van Gelderen et al.(2005)

Table 4a-f: Summarisation of all internal factors divided by Sub-groups and categorized by name of factor, impact on success chance and source.

Table 4d: Human Capital

Name of factor	Success chance impact	Mentioned by
Work Experience	+/-	-Fielden et al.(2000) -Van Gelderen et al.(2005)
Management Experience	+	-Bocken et al. (2015) -Fielden et al.(2000)
Experience in Funding Firms	+	-Van Gelderen et al.(2005)
Industry Experience	+	-Van Gelderen et al.(2005)
Education of the Entrepreneur	+	-Van Gelderen et al.(2005)

Table 4f: No Sub-group

Name of factor	Success chance impact	Mentioned by
Location	+/-	-Björnali et al. (2014) -Karakaya et al.(1998)
Fear of Failure	-	-Wagner et al. (2004)

Table 5a: Risks

Name of factor	Success chance impact	Mentioned by
Risk of the Market	-	-Alexander (2008) -Van Gelderen et al.(2005)
Perceived Risk of the Market	-	-Van Gelderen et al.(2005)
Getting Business and Clients	-	-Fielden et al.(2000)
Industry Type	+/-	-Van Gelderen et al.(2005)

Table 5b: Support and Regulation

Name of factor	Success chance impact	Mentioned by
Access to Financial Support	+/-	-Fielden et al. (2000) -Brocken et al.(2015)
Availability of Social Support	+	-Fielden et al.(2000)
Information and Guidance	+	-Van Gelderen et al.(2005)
Income Tax Regulation	+	-Fielden et al.(2000)
Policies	+	-Van Gelderen et al.(2005) -Fielden et al.(2000) -Björnali et al. (2014)

Table 5c: No Sup-group

Name of factor	Success chance impact	Mentioned by
Price of Property	-	-Wagner et al. (2004)

Table 5a-c: Summarization of all external factors divided by Sub-groups and categorized by name of factor, impact on success chance and source.

The five factors which are mentioned by most of the used articles will be mentioned hereafter (see table 10).

The first factor, the "Gender of the Entrepreneur", is mentioned in five articles (see Table 4c). The findings concerning this factor are a contradiction. The article of Van Gelderen, et al. (2005) has shown that female entrepreneurs have a lower success chance in launching their own business than male entrepreneurs do, while the article by Fielden, et al. (2000) has highlighted the exact opposite (Fielden, et al., 2000) (Van Gelderen, et al., 2005). Further research could clarify if the entry barriers that women face are more negative related to their success in starting a business (Van Gelderen, et al., 2005) than their strive to reject traditional business practices (Fielden, et al., 2000) is positively related to their success.

Another factor was mentioned by three articles, namely Bjornali, et al. (2014), Bocken, et al. (2015) and Van Gelderen, et al. (2005) (see Table 4a). This first factor is the "Third Party Money", which refers to the capital, which is obtained by third parties. "Third Party Money" could be e.g. a loan from a bank. The analysis of this factor has shown, that the interest rates, which have to be paid for "Third Party Money", decreases the success chance of a startup (Bjornali, et al., 2014) (Bocken, N. M., 2015) (Van Gelderen, et al., 2005).

Another factor which was mentioned by three articles is the "Management Experience" (see Table 4d). The factor was mentioned by the articles of Bocken, et al. (2015), Fielden, et al. (2000) and Van Gelderen, et al. (2005) and therefore is relevant to answer the central question of this study. The analysis of the factor "Management Experience" has shown that the success chance of an entrepreneur increases if he or she gained "Management Experience" in previous jobs (Bocken, N. M., 2015) (Fielden, et al., 2000) (Van Gelderen, et al., 2005).

The factor "Ambition to Become Rich" was also mentioned by three articles, namely by Bocken, et al. (2015), Gatewood, et al. (1995) and Van Gelderen, et al. (2005) (see Table 4e). The literature review revealed that the "Ambition to Become Rich" has a marginal positive influence on the chances of success of a startup, its positive impact was explained by the motivation that is generated through ambition (Bocken, N. M., 2015) (Gatewood, et al., 1995) (Van Gelderen, et al., 2005). Still, since intrinsic motivation has a more substantial influence on motivation, the entrepreneur should strive to fulfil inherent goals.

Another factor which determines the success chance of a startup, are the "Policies" in the specific field the entrepreneur wants to operate in, was mentioned in three articles (Bjornali, et al. (2014), Minniti, M. (2008) and Van Gelderen, et al. (2005)) (see Table 5b). The factor "Policies" neither has a generally positive or negative influence on the chances of success of a startup. It depends on how beneficial the "Policies" for the startup are, e.g. some industrial sectors have to pay taxes on Co² Emission. In this example, the factor "Policies" would have a negative influence on the success chance of a startup, because revenue decreases as costs increase (Bjornali, et al., 2014) (Minniti, M., 2008) (Van Gelderen, et al., 2005).

The table and the summarization of the most mentioned factors show how this literature review has answered the main and sub research questions.

The first sub-question is, "What are the internal factors influencing the success of startups?". To answer the first sub-question, internal factors are factors that influence a startup's chances of success. The literature review has shown that internal factors refer to the characteristics of the entrepreneur, e.g. the "Age of the Entrepreneur", and the internal factors of the startup itself, e.g. "Start-up Capital".

The second sub-question is; "What are the external factors influencing the success of startups?". To answer the second research question, external factors are factors that address the external environment in which the venture is operating in, e.g. "Industry Type".

The tables above show all analysed internal and external factors (see Table 4a-5c). To answer the main research question: "Which factors significantly contribute to the success chance of startups?", a look on those tables should be taken. They show the answer to the main research question, as they provide the factors that influence the success chance of a startup. Furthermore, the above analyzation of the five most mentioned factors, gives a summarization of which factors (among others) influence the success chances of a startup.

Limitations

This leads to the first limitation of this research. Namely, the literature review yielded enough findings to answer the main and the sub-questions. However, it is still doubtful whether all relevant factors have been found and evaluated due to the significant amount of success determinants. Relevant literature has been found on Google Scholar and Scopus. To gain access to those articles, the Wageningen University Library was used. The results of this study can be considered as analysis and summarization of the used, available literature. The study does not consider all the literature that is relevant in this case because the amount of research in this particular field is too extensive to be covered in this paper. Therefore, this paper addresses the factors which were deemed most relevant, with a particular focus lying on the factors the entrepreneur or the government can influence.

Another limitation is that the exact impact of the individual factors, is not clear, because no sensitivity analysis has been done on all the factors and the weight they carry. Nevertheless, this study provides some indication of what influential elements to focus on.

Besides the answering of the leading and sub research questions, and the systematization of all relevant factors, other outcomes of this research are suggestions to entrepreneurs and policymakers on what elements to focus on. The results of the study at hand enable the researcher to provide recommendations to current and nascent entrepreneurs and politicians or economic advisers. However, the suggestions are not as detailed, as they are not the main subject of this study. Therefore, the recommendations shall not be understood as an ironclad suggestion but more as a guideline.

6. Suggestions

This chapter will provide suggestions for entrepreneurs, government and further research.

Suggestions for the Entrepreneur

The first suggestion concerns the origin of the entrepreneur's capital; the factor "Third Party Money". Literature has shown e.g. that the interest payments of a loan decrease the chances of success of a startup (Van Gelderen, et al., 2005) (Bjornali, et al., 2014). Therefore, the entrepreneur should work with his or her own money or use interest-free loans (e.g. from family members) to increase the chance of success another idea is to make use of angel investment. Through angel investment, the entrepreneur does not have to pay interests, instead, the investor gets shares for his money. Still, the entrepreneur could lose control over his startup if investors acquire too many shares. Non-voting stocks could provide a solution because the shareholder does not gain voting right with his share.

The second suggestion relates to the factor of "Start-up Capital". Van Gelderen, et al. (2005) have found that the amount of capital, which is required to launch the business, is an essential determinant for the success chance. The greater the required capital, the lower the chances of success (Van Gelderen, et al., 2005). For that reason, the entrepreneur should strive to keep the required budget as low as possible, e.g. plan every action in detail to work as efficiently as possible.

The third suggestion for the entrepreneur is dealing with the factors "Team" and "Type of Personality". Both factors have a crucial influence on the success chance of startups (Bocken, N. M., 2015). To increase the prospects of success, the entrepreneur should be aware of his or her personality type and require prospective team-members to take a personality test during the hiring process. The personality test of the SAPA-Project is scientifically constructed and make use of scientific articles like "Big Five

Aspect Scale” of DeYoung et al. (DeYoung et al., 2007). His or her team should then consist of individuals who fit and complement his or her skills. The entrepreneur should also educate him or herself about team building by reading relevant articles or taking seminars.

Another suggestion for the entrepreneur addresses the factor "control his or her abilities and efforts". To improve the success chance of the venture, the entrepreneur should, as suggested in the paragraph above, take a personality test, to gain knowledge about his or her capabilities and then participate in training to increase the control about him or herself. Furthermore, the skill of self-reflection is invaluable to learn from mistakes.

Another suggestion concerns the "Political Experience" of the entrepreneur. These suggestions are aimed toward the entrepreneur, but also towards the government. The government could e.g. create programs supporting nascent entrepreneurs to provide them with "Political Experience". One way of accomplishing that could be seminars or lectures, which are free to take part in for first-year business owners and given by government officials. Said events would help the entrepreneur understand the complications of the political landscape.

On the other hand, the entrepreneur has to utilize the possibilities that are already provided by the government. Additionally, it could be useful for prospective entrepreneurs to explore the political environment, in which one’s startup would operate in, before the launch. Even being part of a political party could increase the relevant knowledge of the entrepreneur.

The last suggestion in this paragraph addresses the "Education of the Entrepreneur". This factor concerns not only the entrepreneur him or herself but also the government. The government has to make education and knowledge accessible to the entrepreneur, and the entrepreneur has to actively engage with the multiple educational channels e.g. university education, books or seminars. A good example is the Malaysian government which provides guidance programs for entrepreneurs (e.g. Federal Agricultural Marketing Authority (FAMA) or Perbadanan Usahawan Nasional Berhad (PUNB)), these programs aim to increase entrepreneur's knowledge in specific fields like marketing.

The entrepreneurs can address the factor "Getting Business and Clients" by e.g. participating in seminars that educate about client acquisition. If the business owner him or herself is not able to attend continued-education programs in that field, he or she should be looking to hire someone with that skill to ensure a steady influx of new customers/clients.

The last suggestion in this paragraph concerns the "Availability of Social Support". If there is no social support from family and friends, the entrepreneur should nevertheless take his or her doubts seriously and seek external help. One way of getting anonymous support is the possibility of joining self-help groups that address the mental health issues one has been struggling with. The exchange with other

entrepreneurs, who are dealing with the same problems, could increase the capability to deal with social anxiety and other emotions.

Suggestions for Government and Policies

At first, this paragraph will deal with recommendations for government and policies concerning the internal factors of a startup's success chance.

The first suggestion addresses the "Money Management" of an entrepreneur. Fielden, et al. (2000) have found that the anxiety of misunderstanding financial law (e.g. the workings of taxes) disrupts entrepreneurs from launching their business (Fielden, et al., 2000). Bocken, et al. (2015) have found that the way debts are handled is also vital for the success of startups Bocken, N. M., 2015). The government could intervene and provide seminars or educational commercials for entrepreneurs, to increase their knowledge of finance and deal with their anxiety.

The second suggestion to the government is dealing with the "Monetary Concerns" of the entrepreneurs because those concerns are an essential determinant that impedes individuals from launching their business (Fielden, et al., 2000). Entrepreneurs stated that they have difficulties acquiring the necessary capital to start their venture and that they worry about their income (Fielden, et al., 2000). The government could provide interest-free loans to entrepreneurs and unconditional basic income to deal with these concerns. These policies could be disturbed by capital constraints that the government is facing, there governmental startup funding is a more realistic idea. A real-life example is Germany, where the Employment Agency provides entrepreneurs, next to support programs and one-to-one advice, with governmental supported loans. This intervention would also decrease the problems created by the external factor "Access to Financial Support", which a lot of entrepreneurs are impacted by.

There is also a suggestion for the government, which addresses the external factors a startup has to deal with.

The research by Wagner, et al. (2004) has shown that a high "Price of Property" decreases the number of individuals starting a business (Wagner, et al., 2004). Therefore, the governments could intervene and, if possible, offer the state-owned property to entrepreneurs for a discount. Another, more realistic, suggestion is subsidizing the acquisitions of ownership for an entrepreneurial use. That way, the startup would operate under less of a financial burden, which in turn makes it more likely to succeed and bring in tax revenues that offset the subsidy.

Overall, a suggestion that applies to most factors is the cooperation between both major actors. The government's goal should be to make knowledge accessible. At the same time, the entrepreneurs should

be willing to make use of the provided opportunities to learn about the factors influencing their business venture. Knowledge is the key to a high success chance. Both actors have to work together to increase the number of successful startups.

Suggestions for further Research

Although the findings of this study can have an impact on (future) entrepreneurs, there is still the need for further research. A suggestion would be the execution of a sensitivity analysis in a controlled and clinical environment, where all factors, one by one, will be changed and the influence on the outcome will be measured. This could be done to gain knowledge about the degree of leverage the individual factors have on a startup's success chance. After that, a new systematization and summarization should be done, with the aim to systematize and order all of the most important factors.

As mentioned earlier, it attracts attention that the existing literature mostly deals with the internal factors which influence the chances of success of a startup. Therefore, another suggestion for further research is to execute more studies in the field of external factors that influence the success chance of a startup. The relevance of external factors can be seen for example in startup hubs, where startups share the common factor "Location" like Silicon Valley or Boston.

The paper can be used by entrepreneurs to get an overview of the several factors that influence their (future) business from the in- and outside and provides the groundwork of essential entrepreneurial information that can be used for further research.

7. References

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