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Which Factors Determine the Success or Failure of Startup Companies?

A Startup Ecosystem Analysis of Hungary, Germany and the US

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2 Index of Abbreviations

AI	artificial intelligence
API	application programming interface
AR	augmented reality
B2B	business-to-business
B2C	business-to-customer
B2G	business-to-government
ca.	circa
CD	compact disk
CEO	chief executive officer
COI	cluster of innovation
COO	chief operating officer
e.g.	exempli gratia (for example)
et al.	et alii (and others)
etc.	et cetera (and so on)
EU	European Union
Fintech	financial technology
GmbH	Gesellschaft mit beschränkter Haftung (Limited Liability Company)

GPS	global positioning system
IPO	initial public offering
IT	information technology
KYC	know your customer
LED	light-emitting diode
LP	long playing (record)
m.	million
NRW	North Rhine-Westphalia
PCI	payment card identification
PIN	personal identification number
R&D	research and developemnt
SaaS	Software as a Service
SDK	software development kit
SMS	short message service
SQL	structured query language
UK	United Kingdom

US	United States
USO	university spin-off
VC	venture capital

3 Tables and Figures

4 Introduction

As more and more startup companies are founded every year worldwide, building up one's own business does not get easier. Since 9 out of 10 startups fail (Patel 2015), future entrepreneurs are well advised to take a look at potential reasons for failure and success. Learning from others' mistakes and studying success stories can improve their own performance and help to avoid critical errors.

The academic paper at hand will provide valuable insights for entrepreneurs. After delivering an overview of the most commonly used terms and definitions in the startup scene, chapter 6 will describe the components of a business idea and how experts can assess a company's value.

Subsequently, the most important factors for a startup company's success, according to literature review, will be listed and illustrated. Various standpoints of academic research and studies will be discussed. Delineating both internal and external factors, this thesis not only delivers a synoptic view of potential challenges inside a startup as well as in its ecosystem, but also juxtaposes these influences in opposition.

The second part of this paper analyzes a series of interviews with twelve startup founders from three different regions (the province of North-Rhine Westphalia in Germany, Budapest in Hungary and the state of California in the US). Their views and experiences will be summarized and put into the context of their respective startup ecosystem.

This way, the study is able to provide an understanding of the distinctive attributes of these ecosystems. Furthermore, the interviewees' challenges and advices will be compared to previously reviewed literature. Therefore, the reader is able to gain insights from an academic perspective, as well as from real-life examples.

5 Definitions

This chapter will provide the definitions necessary for the further research and analyses conducted throughout this paper. Oftentimes, authors and researchers use similar terms with different meanings. The following sections will help to clarify these differences, as well as give an outlook on subsequent chapters.

5.1 Startup Company

"A startup is an organization formed to search for a repeatable and scalable business model."
(Steve Blank, Silicon Valley based serial entrepreneur; source: Blank 2010)

The business model of a company describes the concept of how it is going to make a profit. However, this concept is by default created under enormous uncertainty and is yet to be verified. If startups are successful, they often grow extremely fast.

A large company on the contrary, would usually only execute proven concepts. They also have much smaller potential for additional growth.

In most cases, the founder of a startup writes a business plan, which contains information about opportunities and risks, as well as the problem that this new venture will solve for its customers. It usually also includes a long-term forecast for income, cash flow and profits. The business plan is written prior to creating a product or executing any part of the concept. Afterwards, the plan can help to foresee unknown difficulties and can also be presented to potential investors (Blank 2013: 67).

When startup companies are built, they are placed into a pre-existing system of economic activities, resource constellations and business networks. Their aim is towards establishing themselves and their idea in the market place. If a startup can do so, they will profit from other companies resources, activities and initiatives (Oukes/Raesfeld 2016:).

5.2 Startup Ecosystem

The startup ecosystem consists of multiple types of organizations and individuals that interact witch each other and influence the startup company. These organizations, such as universities, funding organizations, big companies and others, play different roles depending on the development stage of the startup. Important people are e.g. angel investors, advisors or other entrepreneurs, who are all linked to each other through various events, locations and activities.

The dynamics of an ecosystem can change instantly through external factors like market disruptions or a shift in the financial climate. Since these factors are a result of the startup's location and environment, entrepreneurs have little control over them (Geibel/Manickam 2015: 64).

Internal factors are interdependent with its ecosystem, e.g. social attributes which determine worker talent and social networks, or material attributes such as certain government policies and physical infrastructure (Spigel 2017: 67). The startup founders have, contrary to the external factors, a high extent of control over internal factors (Geibel/Manickam 2015: 64).

5.3 Innovation

When an idea or invention is transformed into a good or service, which creates a new value for customers, it can be called innovation. The idea has to be replicable and satisfy a customer need. Businesses that implement innovations or produce revolutionary products take a greater risk than their competitors because they create new markets. Imitators stand in contrast to innovators and take small risk (BusinessDictionary.com).

Billionaire entrepreneur Vinod Khosla believes the acceptance of risk and failure are inevitable for innovation. Because big companies try to avoid both, great innovations like the internet or *Google* came from outsiders, he argues (The Economist 2007).

There is a critical difference between an innovation and an invention. An invention for itself is not necessarily marketable or useful, whereas an innovation combines the invention with a customer need. For instance, the invention of a solar panel doesn't bring any value in itself, although by applying it on the roof of a house it fulfills a market need (Furr/Ahlstrom 2011: 24 f.).

The term ‘innovation’ is mostly used referring to new technology. However, innovations do not necessarily need to involve technology at all. *McDonald’s* fast self-service concept led to a revolution in the fast-food industry just by running a restaurant in an entirely different way. A lot of innovation happens rather in services and processes than in technology (The Economist 2007).

A third kind of innovation can be illustrated by the example of *Levi’s* and how the company changed the public’s perception towards wearing jeans. Originally being used as pants only for workers due to its extraordinary durability, through innovative product positioning in the market, the jeans evolved into a fashionable item for the masses (Kaudela-Baum et al. 2014: 25).

6 Valuation of a Business Idea

The valuation of a business is usually a mere financial calculation. Investors use one of the many mathematical models and, based on the company’s annual revenue, profits, future projections etc., they conclude an overall valuation.

Most importantly however is customer validation and feedback. Founders who develop a product without ever leaving their office and conducting field trips might be able to build something that is perfect in their own eyes; but whether or not the product would appeal to customers is completely unknown, so it often turns out to be a huge waste of time and resources (Blank/Dorf 2012: 8 f.).

An increasing number of entrepreneurs in modern times started to focus more on customers and the company’s mission instead of purely going after profit (Reichheld/Markey 2011: 21). While the involvement of potential customers is an advantageous approach for long-term success (van de Ven et al. 1984: 104), it is not easy to measure in numbers.

Unequivocally, to value a venture prior to its launch is rather difficult because of numerous unknown risks and an unproven business model. In fact, venture capitalists admit that valuing a startup company has a lot to do with emotion and is “often a guess” (Simmons/May 2001: 129). So why is valuation so important after all?

First, knowing the value of a startup company is a helpful measurement not only for shareholders, but also for every stakeholder that has a long-term interest. Second, companies focused on value are typically more competitive and employ their resources more efficiently (Koller et al. 2010: 3).

The value of a business idea can mainly be measured by three criteria:

- The level of innovativeness and originality of the product or service that the startup will offer,
- to what extent the business model is scalable (locally, regionally or globally),
- and how financially feasible the concept is (e.g. how high the profit margins are).

The following chapter will describe these criteria in detail and give a non-mathematical toolset for a business idea valuation.

6.1 Innovativeness and Originality

For a new business venture to be successful, it is important to create something new and proprietary. Surely, a business can survive and make profit by being a 1:1 copy of another business and it might even have reason to think that doing anything other than exactly that is risky or foolish (Aldrich/Fiol 1994: 645). If someone plans to open another bakery in town, he might be able to make a living for himself and maybe even support his family with it, too. However, he will most likely have a hard time finding investors or landing a big hit that makes him a millionaire.

The kind of business that is investable should be disruptive, better revolutionary. This way, the company has the chance to grow big, become more and more valuable, and in the end make stockholders richer.

“Innovation distinguishes between a leader and a follower.”

This famous quote by Steve Jobs applies more than ever to the highly competitive market of technology (Woo 2013), where innovation is an important driver of new value and in the long run provides a sustainable advantage for any company (Furr/Ahlstrom 2011: 22). In the end, specific innovations are the reason for extraordinary success of fast-growing startups. As soon as more competition enters the market, the fast-growing startups will also most likely become the market leaders (Rok 2011: 19).

The pure definition as well as the goal of innovation is to commercialize an idea (Binder 2014: 9). However, it is not enough to just have a better product than competitors. Customers are likely to remain within their old patterns of behavior and routines unless they are shaken out of it by something that not only offers a few minor changes, but shows dramatic and revolutionary improvements (Gourville 2006). The company's innovation has to offer its customers unique advantages (Groenewegen/Langen 2012: 166).

If executed right, a startup has the ability to alter an entire market. After some time of flying below the radar, a startup company can be unstoppable once it reaches a critical mass. Famous examples are *SpaceX* (creating a new ecosystem for space travel) or *Uber* (disrupting the taxi industry) (Böhme 2017: 715 f.).

Furthermore, not only existing market rules are being bent by startup ventures and their innovative ideas. The fulfillment of latent customer needs often even leads to creating new markets. New technology plays a decisive role creating the requirements for innovative business models, products and services (Böhme 2017: 716).

According to Schumpeter (1950: 83), creative destruction is part of a natural development process within the economy and essential for the capitalist structure. Innovations have to be put into practice, otherwise they are "economically irrelevant" (Schumpeter et al. 1983: 88). Thus, the burden of economic progress lies upon the shoulders of entrepreneurs.

One example of creative destruction is rule breaking. During the times when customers took excellent service and delivery of large and heavy goods, such as furniture, for granted, *IKEA* implemented their cold concept of self-service and self-assembly. Many years later, this very same procedure of taking bulky items home and assembling them, has become an almost enjoyable part of shopping for furniture (Zimmermann 2013: 76 f.). Eventually, the concept not only broke the rules of the industry at the time, but scientists also discovered later on, in a series of experiments, that someone who builds a product himself perceives it as more valuable than somebody else would (Norton et al. 2012: 10 f.). This ramification became known as the 'IKEA effect' (Norton et al. 2012: 2).

Whereas big companies only react to market changes, try to adapt and to improve, the innovator is the one who really makes these changes. Once an innovation promises success and establishes on the market, most of the big firms will either copy the innovator or buy his business. The difficulty here lies within the right timing, because acting too early means risk for the established company, acting too late is a disadvantage towards competitors (Weis 2013: 12 f.). The importance of the right timing will be discussed further in chapter 7.1.2.

6.2 Scalability

Despite being innovative, which characteristic is important for a new business venture to become a multi-million dollar company like *Facebook*, *Groupon* or *Uber*? The most crucial factor for growth potential, along with the ability to increase revenue quickly, is scalability. Startups that grow fast and respond well to change will most likely outperform big companies, which is why investors are very keen on infinitely scalable businesses (Stampfl et al. 2013: 228 f.).

One of many famous examples for fast-scaling startup companies is *Airbnb*. Founded in 2008 with its headquarters in San Francisco, California, it created an online platform for people to rent or rent out real estate. *Airbnb* works as a community and a marketplace, bringing tenants and property owners together while handling the booking process (this is where *Airbnb* earns a 10% commission of the booking price). Among other factors, scalability was probably the most decisive asset for the company's growth. More transactions cost the business nothing but additional server capacity, which ultimately allowed *Airbnb* to expand their listings into 170 countries worldwide, while reaching growth rates along the way of up to 800% in 2010 (Stampfl et al. 2013: 229).

The analysis of expert interviews conducted by Stampfl et al. (2013: 229 f.) suggests that the right use of technology determines a company's scalability to a high extent. One of the interviewees believes the scalability of a business model to be one of the key criteria for investment decisions. Technology is often considered a good investment because it has the ability to enable scalability.

However, if a business wants to scale quickly, it can easily fall into the trap of 'premature scaling', which Nathan Furr[1] believes to be the most common cause for a startup to fail.

'Premature scaling' is a phenomenon among startup businesses that, at first glance, do everything right. They have a promising idea, hire talented people, constantly optimize their product, do marketing campaigns, etc. Even though this is exactly what big established

[1] Nathan Furr is an assistant professor of strategy at the Insead Business School in France and co-author of the book "Nail It Then Scale It: The Entrepreneur's Guide to Creating and Managing Breakthrough Innovation".

companies would do, these startups fail because unlike their big competitors, they are moving in unknown territory. They are expanding their business long before they know what the customers want and how they can be reached (Furr 2011).

Working on assumptions and purely with the aim of growing fast, these small ventures do not have the resources to keep up and inevitably run out of capital. After spending vast amounts of money on a certain market approach, the organizational and often mental attachment of founders towards their project, creates another problem. It becomes harder to change big parts of the business model and to ignore increasing sunk costs, which in the end eliminates the startup company (Furr 2011).

6.3 Feasibility

With the goal of a fast scalable business in mind, it is important to reach a high profit margin.[2] Due to the high competitiveness among big established brands for existing products and everyday items, it is necessary for a startup company to be innovative. Supplying a new product secures higher margins and increases the attention of customers (Fisher 1997: 110).

Nevertheless, market size and industry have a huge impact on required resources. Entering a market filled with global enterprises requires an enormous amount of capital. Due to economies of scale, it is in most cases impossible to produce cheaper or even to secure shelf space in any of the retail stores.

In addition, established companies already have a wide base of customers loyal to their products, whereas a new startup is entirely unknown (Kotsch 2015: 24).

As it is evident now, this chapter’s three criteria for a high valuation of a business idea are to some extent interdependent: innovative and unique products lead to higher margins, which are critical for feasibility and decisive for the ability to scale.

[2] According to Zwilling (2013), the margin should be at least 50%.

7 Typical Factors of Failure and Success

The following chapter will provide an overview of the most typical factors leading to a startup's failure or success, according to literature review. Each factor will be outlined along with its impact on startup companies.

7.1 Internal Factors

Contrary to external factors (chapter 7.2), entrepreneurs have almost complete control over the internal factors for startup success (Geibel/Manickam 2015: 64). It is on them to shape their knowledge, put together the right team and choose the best possible time to realize their business idea.

7.1.1 Personality of the Founders

The character of a founder is important in many ways. On one hand it is decisive how he is as a person, how he handles his employees, how he negotiates with other companies; and on the other hand, because of the founder's influential position, his interpretations of subjective elements lead the way. He is the one who, in the end, makes a strategic decision based on his sense of reality (Kisfalvi 2002: 514).[3]

"Nearly every mistake I've made has been in picking the wrong people, not the wrong idea."
(Arthur Rock, venture capitalist and founder of *Intel*; source: Sahlman 1999: 351)

The founder's traits, attitudes, his professional experience as well as his practical skillset all play a part in the company's growth potential. Being proactive (Cui et al. 2016: 175), motivated (Barba-Sánchez/Atienza-Sahuquillo 2017: 16), open to innovation and taking risks (Bortoluzzi et al. 2014: 134) are considered to be key assets of an entrepreneur's personality.

Among 4,000 successful entrepreneurs, the study of Butler (2017) detected "the ability to thrive in uncertainty, a passionate desire to author and own projects, and unique skill at

[3] It is therefore a useful exercise for entrepreneurs to test their own judgement occasionally by comparing their practices with other business owners (Kisfalvi 2002: 514).

persuasion" as the most distinct character traits. Although these particular characteristics might fit to a 20-year old, the ideal age of a startup founder (for otherwise lacking experience) is between 30 and 50 (Kon et al. 2014: 22). Challenging working conditions and the pressure of critical decision-making are both part of the rather stressful job of an entrepreneur (Semerci 2016: 41 f.), which may one day affect his mental or physical health. Therefore, founders with a high tolerance for stress have a valuable asset.

In contrast to common belief, after closely watching over 100 startup companies in the past two decades, Furr/Ahlstrom (2011: 5) discovered that attributes such as passion, vision and determination more often lead to failure than to success. When entrepreneurs invest countless work hours, money and reputation into their project, passion and determination can easily become dogmatism. Falling in love with one's product and ignoring honest customer feedback is the reason why most startups fail (Furr/Ahlstrom 2011: 5). Essentially, there should be a beneficial balance between being confident about what you know while at the same time distrusting your knowledge enough to stay eager to learn more (Kelley 2008).

Ge et al. (2005: 19) state that it would be beneficial, especially for complex technology-driven startups, to have a team of founders rather than one single founder. It allows the company to move faster, be more agile to enter a market and more responsive to a change in market conditions. A team also enables opportunities for accelerated and specialized decision making (Eisenhardt/Schoonhoven 1990: 510), as well as a faster pace for innovations (Eisenhardt/Tabrizi 1995: 104).

An important aspect of a successful team of founders is the relationship among them. Beyond their functional role in the company, entrepreneurs often do not realize how the interplay of personalities affects their performances and the overall success of the venture (May 2016: 112). Therefore, choosing co-founders or hiring employees for a small team should ideally focus on both work skills and personal traits.

The ideal team of co-founders consists of members with experience in the industry and in leadership, although these attributes do not need to apply to everyone. In terms of education, a heterogeneous team with different backgrounds would be preferred over a team of members with the same education (Franke et al. 2008: 477 f.). Education itself is regarded as prerequisite for being a successful entrepreneur (Ferrante 2005: 170); industry experience has a positive impact as well (Walter et al. 2013: 121).