INDICATORS OF STARTUP FAILURE

Ing. Richard Bednár, PhD., Ing. Natália Tarišková, PhD.
richard.bednar@euba.sk, natalia.tariskova@euba.sk

Abstract:. *Startup is a newly established enterprise, or an enterprise at the foundation stage, which is focused on monetizing an idea. According to the European Association of Business Angels there are launched about 50 million new projects every year (137,000 per day), but 90% of them fail. In the paper we analysed 51 startups, which had a minimum viable product and also some investment, but failed. The main aim of the research was to identify the factors leading to the failure of startups. The result has been to create an overview of the mistakes that young entrepreneurs commit at the early beginning.*[1]

Keywords: STARTUP, FAILURE, INVESTMENT, TEAM, FINANCING

1. Introduction

The global development of new technologies has created a trend of small, exponentially growing companies – startups. Steve Blank[2], Silicon Valley serial-entrepreneur and academician, defines startup as a temporary enterprise form designed for a repeatable and scalable business model. According to investor and writer Paul Graham[3], the startup is a fast growth business. However, only a fast growth does not define the complexity of a startup. Matej Jariabka, one of the leaders of the StartupCamp community, defines startup as an innovative form of high-risk enterprise with the potential for huge growth. The word startup can therefore be labeled as essence of unconventional thinking, creativity and originality[4]. It can be any start-up enterprise that is preparing some minimum viable product or already exists on a market and meets the following criteria: creates a blue ocean in a industry, has a higher entrepreneurial risk in establishing itself on a market, and after a successful start it is likely a fast grow.

According to the European Association of Business Angels[5] (EBAN), around 300 million founders currently have 150 million businesses worldwide. There are launched about 50 million new projects every year (137,000 per day). CB Insight's research, which analyzed the causes of 101 startup failures, has shown that 9 out of 10 startups fail to 1-3 years, what is a 40% riskier than in standard business models. According to Bloomberg's analysis[6], 8 out of 10 startups fail over 18 months, mainly due to lack of understanding of customer needs and inadequate revenue generation what also confirms KPMG Startup Survey 2016[7] which define, that only 37% of startups generate revenue (69% up to 50 thousand euros, 23% more than 50 thousand and 8% more than half a million euros) and others do not receive any money yet. Because the primary goal of doing business is to generate finance for covering company costs as well as for shareholders. So every startup should create an ideal revenue model, which describes[8] how a company generates profit and sufficient capital for further investment.

2. Aim of the paper

The main aim of the research was to identify the factors leading to the failure of startups. The result has been to create an overview of the mistakes that young entrepreneurs commit at the early beginning. We divided the main goal into testing three hypotheses in which we analyzed possible failure indicators:

1. Most startups have an inadequately defined product / problem and its solution.
2. Startups do now know how to correctly estimate customer, target group and market potential in the industry.
3. Startup failure is mostly caused by incorrect setting of the revenue model.

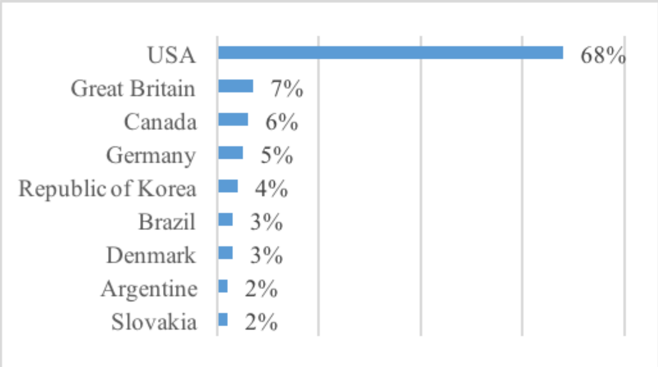
3. Methodology

In the first phase we compared current knowledge in scientific literature, using resources in the ScienceDirect, Springer and RePEc databases and Google Scholar Search. Subsequently, based on comparisons of literature and scientific research, we created a structured questionnaire that helped us to structure and analyze 51 statements of the startup founders. We received these testimonials from the Autopsy.io database, which was founded by Maryam Mazraei and Matthew Davies in September 2014, and which creates list of blogs, testimonials and analyzes of the startup founders, who evaluate the reasons of their failure. The analyzed startups included: Lumos, RateMySpeech, RewardMe, Udesign, Fastr, GuGo, Wattage, Allmyapps, BitShuva Radio, KOLOS, Bluebird, Secret, Bawte, Patterbuzz, Kiniku, ComboCats, College Inside View, DeviceFidelity, Kinly, Cusoy, Starthead, Poliana, Zagreb Cohousing, Springpad, Keep Fit Stay Sane, Showroom, Amiloom, Wishareit, Emjoyment, Dinnr, Moped, Imercive, 99dresses, Popin, OpTier, Bloom.fm, Manilla, Pumodo, HowDo, Awgyle, orat.io, Stipple, Samba Mobile, Zumbox, Needium, Critica, LayerVault, World Burrow, Mochi Media, Salorix a Exec.

4. Results

The gender analysis showed that 96% of the founders were men. This is mainly due to the fact that most of the startups are created in the technology sector, which is still the main domain of men. From the place of company establishment point of view, nearly 70% come from the US, most of them from San Francisco, California, which not far known as Silicon Valley. A more accurate overview is provided in Chart 1.

***Chart 1**: Location of analyzed startups*



Analyzed startups were established in 2009-2014 (Chart 2 and Chart 3). The average period of startup existence was 28 months. The fastest failure was reached in 4 months and the longest business time was 55 months. Modus, the most common startup existence period, was 12 months and the median was 24 months.

***Chart 2**: Year of establishment*

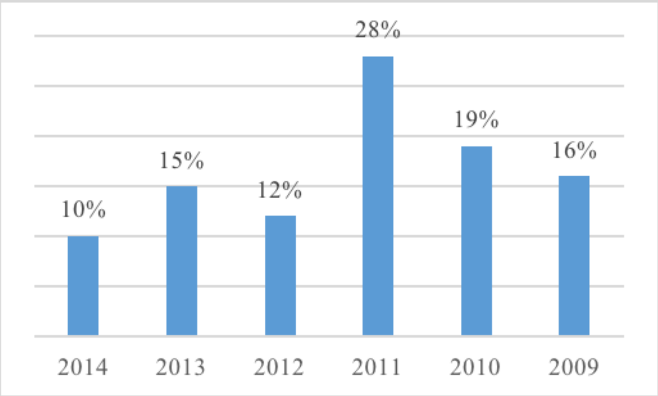
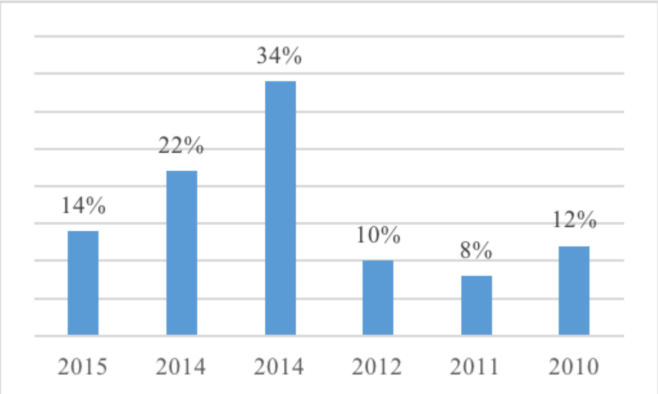
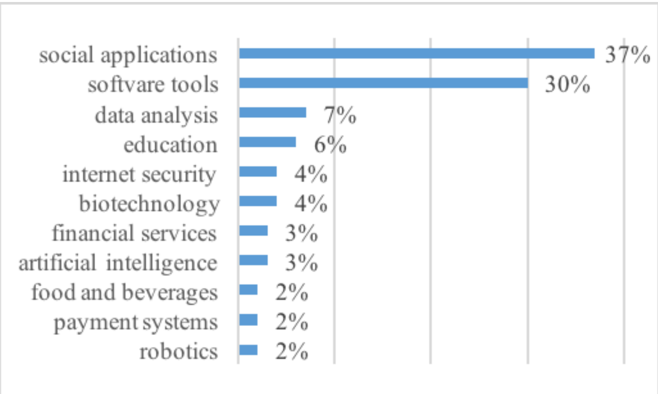


***Chart 3**: Year of failure*



Startups have created their business models most often in the area of social applications (42%) and in softwares aimed to simplify people's lives (28%). The least represented startup sectors included robotics, payment systems, gastronomy and artificial intelligence (Chart 4)

***Chart 4**: Sectors of analyzed startups*



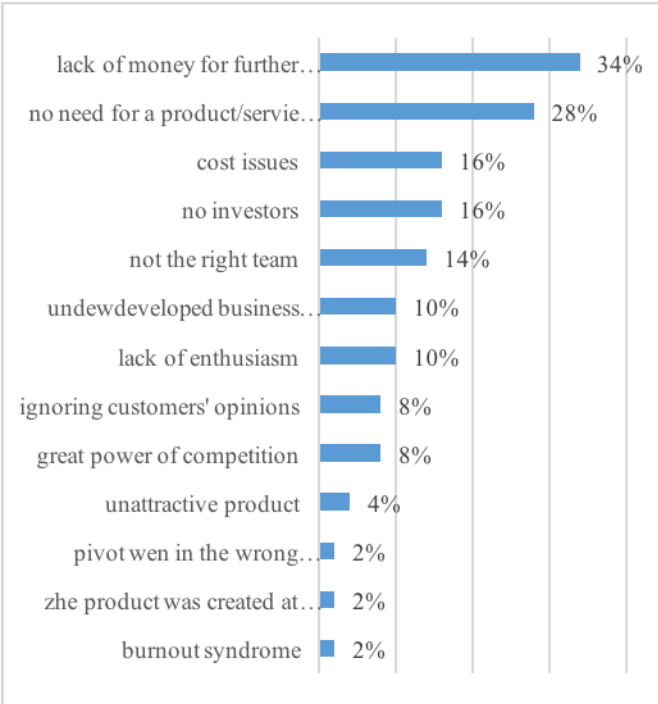
An important indicator of a startup business failure was the amount and type of investment (Table 1). The number 84% of the analyzed startups received an investment, mostly in the amount of 10-100 k Euros and 1-10 mil. €. Only 16% of them did not receive any investment. It follows that the specimen was under the control of investors and other third parties and startup had to have some MVP. Revenues and profits of 80% startups were not published, so we did not analyze them further.

Investor types	up to 10k €	10 - 100 k €	100k - 1 mil. €	1 - 10 mil. €	more than 10 mil. €	Σ
3F (family, fools, friends)	*2%*	*2%*	*2%*	-	-	*6%*
business angels	*6%*	*2%*	*6%*	*4%*	-	*18%*
investors	-	*24%*	*2%*	*22%*	*6%*	*54%*
banks	*4%*	*6%*	-	-	*2%*	*12%*
other	*8%*	-	-	-	-	*8%*
no investment	-	-	-	-	-	*16%*

***Table 1**: Amount and type of investments*

Startup statistics in the literature show that approximately 90% of startups are convicted to an absolute failure and their further fate is extinction. More about 5% are in a situation when all the activities are not enough to meet the need of the market. In our research, we have analyzed startups from around the world. Based on the analysis, we identified 13 different factors, which, according to the founders themselves, caused the failure of their startup. A detailed overview is provided in Chart 5.

***Chart 5**: Reasons of startup failure*



The 5 most serious problems include the following:

I. Lack of money for further development (34%)

One of the key factors behind the startup success is finding enough financial resources to develop an idea, especially in phase when the startup does not generate revenue. Because of this reason, startups must look for financial resources from the external environment - family, friends, banks, venture capital, development capital, state support, or crowdfunding. Branislav Zagorsek identified also the positive impact of the higher cost strategy on the pay-as-you-go acquisition[9]. In more than 1/3 of analyzed startups, it was shown that the companies had not defined sufficiently the amount of funds needed for the launch and for the investment time schedule. At the same time, they were unable to reach the sales stage and thus obtain additional financial resources from customers. The lack of money led to nect problem: reimbursement of capital expenditures, financing of expansion, covering operating costs for staff, offices, infrastructure, etc. and covering other costs.

II. No need for a product / service in the market (28%)

The second biggest problem was the lack of customer interested for the startup solution. The founders defined this problem as a lack of real market testing. Many of them met with customers and asked about their problems, analyzed possible solutions. Preliminary analyzes seemed promising. However, when they came out with the product on the market they found out that people, despite the fact that they had previously said they were interested, did not really want to buy it. The founders called these product "Vitamins" (it's nice to have t) even though they thought they are going to sell Aspirin (must have it). The founders said that also the timing of product launch was probably not right - either customers or the market was not ready yet, or they came out with the product too late. In both cases, the result was the same.

III. No investors (16%)

It seems, that finance is the biggest problem, because it take first and third place in our results. In this case, it is more about problems with investors. Founders defined the main issues:

- the startup has hurt its investors several times and failed to fulfill the required goals in the basic series, thereby losing confidence,
- the startup did not produce any evidence to increase its potential to convince the investor of its exponential growth potential (pre-contract with buyers, a large number of applications downloads, sales, success in the crowdfunding campaign, etc.),
- lack of logic of the business model from the investor perspective,
- insufficient investor awareness of all issues,
- time has shown that there is no understanding between the startup team and the investor.

IV. Cost Issues (16%)

One of the main problems was the cost calculations. In these cases, founders did not make accurate finance planning that included both direct and overhead expenses. Incorrectly defined costs have resulted in incorrect price formation and therefore the market price could not cover costs at all. There were more reasons, why founders failed their budgeting:

- acted under the pressure of their investor and defined only preliminary costs,
- did not know which material they will finally use,
- could not define all cost items (material costs, labor costs, investments to technology, etc.),

V. Not the right team (14%)

Most investors evaluate a quality of the team, experience, creativity and cooperation as one of the key factors of success. In most cases, startups need to change their business model several times, and it can only be done by a high-quality team. The most common issues that the startup analyzes were:

- not the right mix of people: in many cases incompatible people and too strong personalities created many conflicts / wrong people , who appeared at first as professionals and then turned out to be incompetent,
- bad team leadership: incorrect team manager caused a feeling of unfair distribution of work and not fair financial reward / in other cases the founders themselves reflect that they were not able to lead their team.

5. Conclusion

The main goal of founding a startup is to discover new marketplaces and create high added value products. At the beginning, startups are low-cost projects mostly created by programmers and designers who want to create something unique and earn a lot. However, in more than 90% of cases, they fail. Three of five main problem deal with finance - either incorrect product pricing, poor cost estimates or lack of capital for further development. The second key issue is the lack of market need – result of inadequate product testing on the real market. The fifth biggest problem is the poor team that cannot solve the problems and cannot develop theright MVP or business model.

[1] The paper is a result of research in scientist project VEGA 1/0609/16
[2] Čo je a čo nie je startup? Nekonečný boj o konečnú definíciu. [online]. [cit. 2013-09-13]. http://blog.helios.eu/sk/2013/04/08/co-je-a-co-nie-je-startup-nekonecny-boj-o-konecnu-definiciu
[3] Čo je a čo nie je startup? Nekonečný boj o konečnú definíciu. [online]. [cit. 2013-09-13]. http://blog.helios.eu/sk/2013/04/08/co-je-a-co-nie-je-startup-nekonecny-boj-o-konecnu-definiciu/
[4] LJUDVIGOVÁ, I.: Výskum vertikálneho a tímového vodcovstva v slovenských startupoch. In Manažment podnikania a vecí verejných : vedecko-odborný časopis [elektronický zdroj]. - Bratislava : Slovenská akadémia manažmentu, 2017. ISSN 2453-8167, 2017, p. 1-10 online.
[5] Early stage investing explained. [online]. [cit. 2016-09-13]. http://www.eban.org/about-angel-investment/early-stage-investing-explained/
[6] WAGNER, T. W.: Five Reasons 8 Out Of 10 Business Fail. [online]. [cit. 2016-11-03]. http://www.forbes.com/sites/ericwagner/2013/09/12/five-reasons-8-out-of-10-businesses-fail/#5e1536415e3c
[7] Prieskum Startup Ecosystem Survey 2016. [online]. [cit. 2016-11-03]. https://home.kpmg.com/sk/sk/home/insights/2016/06/startup-ecosystem-survey-slovakia-2016.html
[8] Revenue model. [online]. [cit. 2016-11-03]. https://en.wikipedia.org/wiki/Revenue_model
[9] ZAGORŠEK, B.: Využitie stratégie na dosiahnutie väčšieho úspechu startupov. In Podnikateľské modely a podnikateľské stratégie startupov II. Bratislava : Vydavateľstvo EKONÓM, 2016. ISBN 978-80-225-4328-6. S. 162-169.