

# THE OBSTACLES FOR START-UPS AND THE CRITICAL FACTORS FOR THEIR SUCCESSFUL DEVELOPMENT

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## Abstract

*Start-ups are described as having huge potential to grow and usually are associated with high risk and uncertainty in the product market. However, many of starting ventures covers the same categories like high risk uncertainty as they are meeting huge financial constraints. Thus, depending on the many internal and external factors, one can survive and reach the maturity phase in a few years while another can fail in the very beginning.*

*Therefore the problem arises: what factors spur on establishing ventures, what the critical success factors for the development are and which of obstacles are mostly hindering the start-ups in their early stage of development. The aim of this paper is to disclose critical development factors of new technological start-ups and to clarify what obstacles are mostly hindering their development.*

*The pilot research findings suggest that the internal motivation and great resolve, is the starting point of successful start-ups' development track. While the utmost obstacles for the start-ups embed the bureaucracy and financial issues, like ("Lack of working capital", "Overcharging business at the beginning", and "The lack of initial capital to start a business". The research results have indicated the importance of effective human resources management in successful start-up development.*

**The type of the article:** Research paper.

**Keywords:** Start-up, success factors, barriers to growth, high risk, and market uncertainty

**JEL Classification:** L26.

## 1. Introduction

**Introduce the problem.** To start up a business is a complex process resulting from the market's dynamics and uncertainty context and therefore is associated with a high risk. The term start-up usually is associated with huge growth potential, high risk and market uncertainty.

**Develop the background.** Start-up financing aspects are widely discussed in the scientific discourse, especially in the context of risk capital financing (Hellmann & Puri, 2002; Ahmed & Cozzarin, 2009; Colombo & Grilli, 2010; Grilli & Murtinu, 2012). However, this process is even more complicated when the start-up business is grounded on technologies due to larger technology acquisition / development costs. In addition to financial problems, there are many other relevant issues like market knowledge, governance competence, leadership, effective human resource management and other, not forgetting entrepreneur's charisma.

A number of researches have dealt with the exploration of factors for start-up success, focusing on the entrepreneur side. Factors used in the study include leadership, charisma, good customer service, training, education etc. The success factors for entrepreneurial business have been analysed in the context of emerging countries. To illustrate, Chowdhury, Alam and Arif (2013) have analysed the success factors of entrepreneurs in perspective of Bangladesh, Bchini (2012) provides evidences in Tunisia, Zimmerman and Chu (2013) in the context of Venezuela, Benzing, Chu and Kara (2009) reveals Turkey context, Serbia's case was presented by Stefanovic, Prokic and Rankovic (2013) and Stefanovic (2010). In this paper the instrument from these studies is taken as the background and extended by adding some new important dimensions. And the pilot research is conducted in Lithuania.

**The purpose of a study.** Therefore the problem arises: what factors enforces to establish venture, what the critical success factors for the development are and which of barriers mostly hindering the start-ups in their early stage of development. The aim of this paper is to disclose critical development factors of new technological start-ups.

**Methodology.** The Pilot study is aiming at instrument validation and finding out main tendencies of analysing the start-ups' success phenomena. Such a survey is intended to bring out the weaknesses (if any) of the questionnaire and also of the survey methods and afterwards the improvement will be made in order to conduct a sample (quantitative) research in the future.

**Results.** The pilot research findings suggest that the internal motivation and great resolve, is the starting point of successful track. While the utmost obstacles for the start-ups remain the bureaucracy and financial issues, like ("Lack of working capital", "Overcharging business at the beginning" and "The lack of initial capital to start a business". The research results have indicated the importance of effective human resources management in successful start-up development.

**Literature review.** Recent research indicates that micro level factors like personal and psychological skills, Management, skills and trainings and external factors are indicated as critical factors for success (Naqvi, 2011).

Individuals, environment, organization and processes are core elements in Gartner's conceptual framework (Gartner, 1985). Gelderen, Thurik and Bosma (2003) research was based on the Gartner's conceptual framework on the success and risk factors in the pre-start-up phase. Eight critical success factors and fourteen performance indicators have been identified in the report of SEED Initiative Research Programme (Boyer, Creech & Paas, 2008) including ability to lead and coordinate the enterprise (Leadership); ability to negotiate and maintain an important tights of relationships (Partnerships); ability to commercialise new idea (Proof and clarity of innovative concept); leaders possess business and marketing skills (Business planning and marketing); "The conscious and deliberate alignment of economic benefits with social and environmental benefits is an important element of achieving sustainable development" (Triple bottom line planning); Short and long term benefits management; Community engagement and adequate risk management (Boyer, Creech & Paas, 2008). While in this paper the focus is more on the individual – entrepreneurial side, focusing more on the internal motivation factors to create a business and critical factors for success development track. Very similar research has been revealed in several studies analysing the case of developing countries Chowdhury, Alam and Arif (2013), Zimmerman and Chu (2013), Benzing, Chu and Kara (2009), Stefanovic, Prokic and Rankovic (2013) and Stefanovic (2010). In the mentioned research the same instrument was applied covering the motivation factors, problems for entrepreneurs and the success factors. While in this research some extensions are suggested and tested in the pilot research.

## 2. Method research

Mainly the instrument for the pilot research was prepared with reference to recent research in the field focusing on start-ups' micro level factors. Referring to the previous study Stefanovic (2010), which employed the instrument created by Hung M. Chu (Chu & Katsiolouides, 2001). The same instrument was used in other studies (Benzing, Chu & Callanan, 2005; Benzing, Chu & Kara, 2009; Zimmerman & Chu, 2013). In this paper the instrument is extended by adding the statements to each questions block. The pilot research strategy was chosen in order to check for instruments quality, as recommended by methodologists, for instance Kothari (2004), it is useful to conduct 'pilot study' or „pilot survey“ with intention to test the prepared instruments (questionnaire). The Pilot study is aiming at instrument validation and finding out main tendencies of analysing the start-ups success phenomena. Such a survey is intended to bring out the weaknesses (if any) of the questionnaires and also of the survey methods and afterwards the improvement will be made in order to conduct a quantitative research with the huge sample in the near future.

The instrument covers 3 main statements blocks: the 1<sup>st</sup> one includes statements referring to the motivational factors for initiating business or starting business, the 2<sup>nd</sup> block reveals barriers for

business development, and the 3<sup>rd</sup> block of statements reveals the critical success factors for business development.

The questionnaire was structured much alike in Stefanovic (2010) and Zimmerman and Chu (2013) studies. But some corrections and supplement statements were included (see Table 1, highlighted statements in bold). The statements were rated by respondents in 5 point *Likert* scale (1 meaning “not important”, 5 “very important”).

Research so far has employed various of data analysis techniques, to start with Stefanovic (2010) and Benzing, Chu and Kara (2009) presented results from factor analysis, for instance, Zimmerman and Chu, (2013) presents descriptive statistics parameters (*mean and St. Deviation*). Thus in this study the nonparametric tests are applied. It worth to notice that gathered data are ordinal type, the *mean* according the methodologists literature is not adequate parameter for central tendency in Likert based research, *mode* and the *median* are preferable.

**Table 1.** Construction of questionnaire

1 <sup>st</sup> questions block. Motivation factors	2 <sup>nd</sup> questions block. Barriers for development	3 <sup>rd</sup> questions block. Success factors
1. Acquired education (application of specific knowledge and experience)	1. Huge bureaucracy	1. Good leadership skills
2. To prove to myself that I can create and elaborate business	2. Lack of working capital	2. <b>The ability to work with people and effectively managed human resources</b>
3. To earn more money	3. <b>Overcharging business at the beginning</b>	3. <b>Product meeting the consumers' needs</b>
4. To ensure future (workplace)	4. The lack of initial capital to start a business	4. Manager's charisma
5. Internal motivation (wanted to be a chief for myself)	5. <b>Complicated recruitment process of qualified specialists</b>	5. <b>Proper business leadership / development competence</b>
6. Work independently	6. <b>Complexity of business registration procedures</b>	6. The favourable business support conditions
7. <b>Finding the business niche /got a clear idea of business</b>	7. Sophisticated business credit conditions	7. <b>Contact network</b>
8. <b>Encountered a problem and its solution has evolved into a business</b>	8. <b>Problems in creating business infrastructure</b>	8. Put a lot of efforts (hard work)
9. <b>Self-fulfilment in a business</b>	9. <b>Lack of technological knowledge</b>	9. Market specifics knowledge
10. Pursuit for entrepreneur's status in the society	10. Lack of market knowledge	10. <b>Social skills (communication ability)</b>
11. Family, friends' encouragement	11. Uncertainty for product demand	11. <b>Good marketing / sales strategy</b>
12. <b>Successful experience of relatives or friends</b>	12. Business consultation institutions providing fragmented services	12. competitive price
13. Recognition worldwide	13. <b>The lack of corporate governance knowledge</b>	13. <b>Entrepreneur popularity (well known in society)</b>
14. <b>Creation of workplaces for family members / friends</b>	14. <b>The lack of business plan preparation knowledge</b>	
	15. Lack of information on the business creation	
	16. <b>Lack of networking</b>	

Source: adapted by the author with reference to Stefanovic (2010) and Zimmerman and Chu (2013)

Following the recommendations for quantitative research (Field, 2009) it has been decided to follow the procedure described below. The 2<sup>nd</sup> step will be the next research in the near future.

1<sup>st</sup> Step - Pilot research objectives:

1. To test reliability - Cronbach alfa
2. To count mean ranks - Kendall's Coefficient of Concordance
3. To look for association – Spearman rank order correlation
4. To reveal results of pilot

Reliability in this pilot study is computed employing the common technique in social sciences

- Cronbach's alpha, which indicates internal consistency. Cronbach's alpha ranges from 0 to 1. The critical value of 0.7 for Cronbach's alpha is the most frequent threshold in social sciences (George & Mallery, 2003; Pallant, 2011). Though there are some shortcomings about the Cronbach alpha due its sensitiveness to number of items, according to Pallant (2011) "With short scales (e.g. scales with fewer than ten items), it is common to find quite low Cronbach values (e.g. 0.5)" (Pallant, 2011). Estimations were made with the help of MS SPSS 17.0.

The agreement among the respondents ratings is measured using Kendall's Coefficient of Concordance (hereinafter  $W$ ), which is non parametric test. "Kendall's  $W$  measures the extent to which the  $N$  judges agree on their rankings of the  $K$  applicants". If the corresponding p-value is less than 0.05 the null hypothesis ("that Kendall's coefficient of concordance is 0") can be rejected (Mehta, Patel 2011).  $W$  coefficient ranges from 0 to 1, where parameter to 1 indicates higher agreement among respondents, and null indicates that there is no agreement among experts (Mehta, Patel 2011).

The critical values for Kendall's coefficient of concordance based on Schmidt (1997) are presented in Table 2 and it will be used for following interpretation of measuring agreement among respondents.

**Table 1.** Interpretation of Kendall's  $W$

<b>W</b>	<b>Interpretation</b>	<b>Confidence in Ranks</b>
0.1	<i>Very weak agreement</i>	<i>None</i>
0.3	<i>Weak agreement</i>	<i>Low</i>
0.5	<i>Moderate agreement</i>	<i>Fair</i>
0.7	<i>Strong agreement</i>	<i>High</i>
0.9	<i>Unusually strong agreement</i>	<i>Very high</i>

Source: Schmidt, 1997, Table 2: interpretation of Kendall's  $W$

To sum up in this paper the results of pilot study are presented. The questionnaire was sent to 50 SMEs in Lithuania, and only 30 of them were sent back. The sample of 30 is quite small for quantitative research, but in this paper the primer target was to check for instrument's validity and reliability, though the next step will be improving the instrument and processing the quantitative research and generalising the results.

### ***Results of pilot research***

The respondents represent top team members, including directors (CEO), owners and shareholders of the start-ups. The 44.5 percent of respondents (13 out of 30) have indicated that they were representatives from very small companies with less than 10 employees. Approximately 70 percent of respondents indicated the range of a company's performance covering "1 to 3 years" and "3 to 5 years".

According to the methodology presented above the reliability tests for the each questions block were computed: 1<sup>st</sup> questions block – 0.840; 2<sup>nd</sup> questions block – 0.933 and 3<sup>rd</sup> questions block – 0.948, the **average of Cronbach's alphas 0.907**. The computed Cronbach's Alphas for each set of questions represent high internal consistent among items, because they are higher than the threshold 0.7.

When analysing the factors for establishing business the mean ranks for each item were computed (see Table 2). For respondents' judgement 14 statements were presented. As it was expected the statement "To earn more money" for respondents seemed very important the computed mean rank of 9.45.

And in contrast the added new statement "Creation of workplaces for family members/friends" for respondents seemed the least important motivation factor (mean rank of 4.98). While *Spearman rank order coefficient* (Spearman's rho = 0.709; p<0.01) indicates strong monotonic relationship between statements "Finding the business niche" and "Creation of

workplaces for family members / friends”.

**Table 2.** Motivation Factors for initiating business or starting business

Motivation factors	Mean Rank
Acquired education ( application of specific knowledge and experience)	9.84
To prove to myself that I can create and elaborate business	9.81
To earn more money	9.45
To ensure future (workplace)	9.29
Internal motivation ( wanted to be a chief for myself )	8.88
Work independently	8.57
<b>Finding the business niche /got a clear idea of business *</b>	7.59
<b>Encountered a problem and its solution has evolved into a business</b>	7.55
Self-fulfilment in a business	7.14
Pursuit for entrepreneur's status in the society	5.69
Family, friends' encouragement	5.60
Successful experience of relatives or friends	5.57
Recognition worldwide	5.03
<b>Creation of workplaces for family members / friends</b>	4.98

\*statements in bold the added new statements.

According to respondents' ratings the crucial motivation factors for business establishment cover educational background (application of specific knowledge and experience) (mean rank of 9.84), and internal motivation, i.e. “to prove to myself that I can create a business” (mean rank of 9.81), and of course the financial motivational aspects (“To earn more money” mean rank of 9.45; “To ensure future (workplace)” mean rank of 9.29). These results contribute to previous study by Zimmerman and Chu (2013) as the motivation to increase income was important one.

According to respondents' ratings “Creation of workplaces for family members / friends” (mean rank of 4.98) was the least important motivation factors for initiating business or starting a business.

Considering Kendall's test statistics (Kendall's W equals 0.244, p value 0.000) for the agreement among the experts represents quite low confidence in ranks, although the p value of 0,000 indicates high statistical significance, meaning that the difference among extracted mean ranks for each statement are statistical significant at 99 percent probability.

Spearman rank order coefficient (Spearman's rho = 0.689;  $p < 0.01$ ) indicates strong monotonic relationship between "Self-fulfilment in a business" and "to be independent", meaning that increasing rank in one statement also increase in another statement. Spearman rank order coefficient o 0.655 ( $p < 0.01$ ) indicates strong monotonic relationship between "Self-fulfilment in a business" and "Pursuit for entrepreneur's status in the society".

The literature analysis has revealed many hindering factors or so called barriers for business creation. In respondents' judgement 16 statements were presented. According to results that are presented in Table 3 the four main barriers were extracted, i.e. “Huge bureaucracy” (mean rank of 12.14), “Lack of working capital” (mean rank of 11.93), “Overcharging business at the beginning” (mean rank of 11.60), and ”The lack of initial capital to start a business” (mean rank of 11.14).

Considering Kendall's test statistics (Kendall's W equals 0.268) for the agreement among the respondents represents quite low confidence in the ranks, although the p value of 0.000 like in the case above, indicates high statistical significance, meaning that the difference among extracted mean ranks for each statement are statistical significant at 99 percent probability.

**Table 3.** Barriers for business creation

Barriers	Mean Rank
Huge bureaucracy	12.14
<b>Lack of working capital</b>	11.93
<b>Overcharging business at the beginning</b>	11.60
The lack of initial capital to start a business	11.14
<b>Complicated recruitment process of qualified specialists</b>	9.91
<b>Complexity of business registration procedures</b>	8.67
Sophisticated business credit conditions	8.24
Problems in creating business infrastructure	7.93
Lack of technological knowledge	7.78
Lack of market knowledge	7.38
Uncertainty for product demand	7.21
Business consultation institutions providing fragmented services	6.76
The lack of corporate governance knowledge	6.72
The lack of business plan preparation knowledge	6.52
Lack of information on the business creation	6.22
Lack of networking	5.84

In order to reveal the critical success factors for business development for respondents' judgement 13 statements were presented. Concerning the respondents' ratings regarding the business success factors, mainly "Good leadership skills", "The ability to work with people and effectively managed human resources" and "Product meeting the needs of consumers" are the factors that most influencing business success (see Table 4). The least important factor for respondents seemed the statement "Entrepreneur popularity (well known in society)" (mean rank of 5.02).

**Table 4.** The critical success factors for business development

Business success factors	Mean Rank
Good leadership skills	9.60
<b>The ability to work with people and effectively managed human resources</b>	8.50
<b>Product meeting the needs of consumers</b>	8.29
Manager's charisma	8.12
<b>Proper business leadership / development competence</b>	7.50
The favourable business support conditions	7.31
Contact network	6.93
Put a lot of efforts (hard work)	6.90
Market specifics knowledge	5.97
Social skills	5.72
Good marketing / sales strategy	5.69
competitive price	5.45
<b>Entrepreneur popularity (well known in society)</b>	5.02

Considering Kendall's test statistics (Kendall's W equals 0.198) for the agreement among the respondents represents quite low confidence in the ranks, although the p value of 0.000 like in the case above, indicates high statistical significance, meaning that the difference among extracted

mean ranks for each statement are statistical significant at 99 percent probability.

### 3. Discussion

Successful start-up development track is influenced by many factors, including both macro and micro level. It can be concluded that start-ups must respond and react to changes in the market to pursue technological development to be on the edge of the external environment, as these factors directly influence their activities.

An entrepreneur with his expertise and experience, sometimes only the internal motivation and great resolve, is the starting point of successful business development track. Moreover, in the beginning of business start-ups encounter many obstacles, the results of pilot study revealed that "Huge bureaucracy" (mean rank of 12.14) are the most hindering issue for start-ups in the initial phase, the other important barriers are found to be related to financial restrictions like "Lack of working capital" (mean rank of 11.93), "Overcharging business at the beginning" (mean rank of 11.60), and "The lack of initial capital to start a business" (mean rank of 11.14).

The important issue arises, how it is become that some of start-ups succeed and some of them fails. Pilot study results have revealed the most important business success factors, including "Good leadership skills" and "The ability to work with people and well-managed human resources".

In the future research (2<sup>nd</sup> step) the instrument could be improved by focusing on the human resource management issues as pilot research results have shown it is becoming a core element in successful start-up's development.

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