

# Early-Stage vs. Growth-Stage Startups: Examining the Differences in the Perception of Factors Instrumental to Success

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**Abstract:** A stream of research available in the literature focuses on startup success factors, although there is a lack of consensus in determining what these factors are. In general, there are two critical groups of success factors, organizational and entrepreneurial, both considered to be integral parts of internal startup environment. Since the perception of early-stage (incubation stage) and growth stage (post incubation stage) startup entrepreneurs differ significantly they tend to perceive important success factors distinctively. As a result, attributes of success differ considerably. This paper aims at capturing internal startup environment as it is considered to be crucial in shaping startup's success in contrast to external environment that is more remote and (usually) not manageable. Primary data were collected using an online survey questionnaire and quantitative approach was used; data were analysed using descriptive statistics and Mann-Whitney U test. The final research sample consisted of 70 startups and the findings indicate that the perception of internal environment and its contribution to overall success differs significantly from the perspective of early-stage and growth stage startup entrepreneurs. Out of analysed internal factors, statistically significant differences were identified for prior experience in starting the company and self-confidence (individual's/entrepreneur's category factors) and internal startup organization and team-level competencies (organizational category factors). The contribution of this research is evident in identifying important internal factors that determine startup's success (that aspiring startup founders can benefit from) and providing an insight into the startup community in Croatia, thus contributing to a scarce empirical literature on the topic available. Limitations of the research include sample size and subjective assessment of the success factors, so recommendations for future research include repeating the research on a larger sample, covering the international level and widening a set of key-performance indicators that can be assessed at a higher level of rigour with objective metrics.

**Keywords:** early-stage startup, growth stage startup, internal startup environment, startup, success

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## 1. Introduction

Startups are raising much interest and discussions in both academic and business circles since they become creators of new business model of the 21st century (Szarek, and Piecuch, 2018). Globalization and advancements of internet-based technologies have increased the interest in starting own business and developing startup projects, as a modern form of entrepreneurship is gaining attention. In a new, globalized economy, startup companies are considered to be generators of economic development since they provide new jobs and contribute to employment and economic growth on regional, national and industrial level (Tripathi et al., 2019). A large proportion of new ventures cease to exist within five-year period (Eurostat, 2021) so the question arises on how to identify critical success factors, and how these factors differ from the startup life-cycle perspective.

## 2. Literature overview

Like in the entrepreneurship domain, there is no clear and universal startup definition. Startup is a term that proliferates across mainstream and popular culture, as well academic discourse and literature (Cockayne, 2019). The most popular startup definition was formulated by Blank and Dorf (2012) outlining startup as a temporary organization in search of a scalable, repeatable and profitable business model. Interestingly, the definition does not include the words "new", "innovative", or "technological", but rather focuses on the dynamics of business development (Skala, 2019). Ries (2011) states that every organization aiming at delivering new goods and services under extreme uncertainty is a startup while Damodaran (2009) points to the specific feature of startups, a high potential for growth in the company's value in the future.

It is possible to identify different approaches in the literature regarding startup development stages. Wing-Ki, Hong-Man, and Venuvinod (2005) recognize six relevant phases: (1) preparation for startup, (2) incubation process, (3) performance measure of incubate, (4) exit policies, (5) parental care, and (6) disconnect incubator. Ng, Macbeth, and Southern (2014) identify three stages: (1) early stage, (2) growth and development stage, and (3) expansion stage. Bocken (2015) recognizes four relevant stages: (1) seed stage, (2) young stage, (3) growing stage, and (4) mature stage. Sebastian and Mauricio (2017) wrap up different approaches and identify four distinctive success stages: (1) seed, (2) early, (3) growth, and (4) expansion, whereas success have different

meaning depending on the development stage of the start-up. Early stages of startup development are very delicate; startups are at a high risk of failure in comparison with existing firms because of the limited availability of resources and lack of established channels with suppliers and customers (Kim, Kim, and Jeon, 2018; Tomy, and Pardede, 2018). Many startups fail in very early stages of their life-cycle and failure occurs due to typical “startup problems” such as lack of finance, team management problems, lack of adequate business knowledge, technology lag, etc. (Salamzadeh, and Kawamorita Kesim, 2015). The two main reasons for startup failure are the absent or the wrong business model and the lack of business development (Cantamessa, et al., 2018). Behind these reasons, a simple truth is hidden; entrepreneurs are usually in love with their product/service and they usually lack in business development expertise. However, startups that survive delicate stages have potential to generate positive change, economic growth and new jobs (Berger, and Kuckertz, 2016) since surviving young firms tend to grow faster than the average (Haltiwanger, Jarmin, and Miranda, 2013). Consequently, the role of startups has never been more important in ever globalizing economy (Marmer et al., 2011).

Based on systematic review of the literature Sebastian and Muricio (2017) point out that educational level doesn't necessarily have a positive impact on performance (startup founders are, on general, highly educated in comparison to other entrepreneurial forms) unless education is supplemented by skills acquired through experience. Business/management experience as well as industry experience could have significant impact on success. They also suggest that initial capital does not have to play a critical role, but rather innovative idea, market and team work make a difference. They further propose three-level classification of the factors that influence success: (1) organizational factors, (2) individual factors, and (3) external factors, of which, for the purposes of this paper, the selection was made among the most commonly investigated ones (on the level of individual and the organization since their influence is much stronger and straightforward).

### 3. Research methodology and research results

The main goal of this research is to identify key factors that contribute startup success and to examine the differences in the perception of success factors between early-stage and growth-stage startup founders (entrepreneurs). Startup success factors were classified as entrepreneurial (individual level) and organizational (startup level) and were described by 11 items representing level of education, work experience, entrepreneurial experience, personal investment, team composition, innovativeness and important entrepreneurial personality traits. Startup success factors were formulated drawing from previous research (Radzi, Mohd Nor, and Ali, 2017) and were modified according to research scope. Startup success included eight items representing overall satisfaction with startup performance, overall satisfaction with startup management, growth rate, market share, growth potential, innovation potential, profit, impact on society.

The sample of this research was a result of convenience sampling method and consisted of 70 startups from Croatia. The questionnaire was organized into three parts. The first part focused on general information about startup founders and startups, the second part consisted of questions about success factors while the third part captured success attributes. A five-point Likert scale was applied. In total, 70 startup founders fulfilled the online questionnaire from June to August 2021. Statistical analysis of the obtained data was conducted by SPSS software package through descriptive analysis and Mann-Whitney U test due to non-normal distribution (Gravetter and Wallnau, 2004).

**Table 1:** General characteristics of startup founders

	N	%
Gender		
Male	49	70,0
Female	21	30,0
TOTAL	70	100,0
Age		
18-24	4	5,7
25-30	18	25,7
31-40	32	45,7
41-50	13	18,6
51 and more	3	4,3
TOTAL	70	100,0
	N	%

	N	%
Education		
Secondary	13	18,6
Tertiary	47	67,1
Postgraduate	10	14,3
TOTAL	70	100,0
Previous managerial experience		
Not at all	8	11,4
To little extent	15	21,4
To some extent	9	12,9
To a large extent	28	40,0
To a very large extent	10	14,3
TOTAL	70	100,0
Previous industry experience		
Not at all	11	15,7
To little extent	11	15,7
To some extent	14	20,0
To a large extent	21	30,0
To a very large extent	13	18,6
TOTAL	70	100,0

Source: Research results

As it can be seen from Table 1, the majority of respondents are male (70,0%) which is in line with similar investigations (women are still generally underrepresented in entrepreneurship). There is a significant proportion of young entrepreneurs (less than 30 years) in the sample (31,4%) while the largest proportion of the sample with respect to the respondents' age, accounts for startup owners 31-40 years old. The majority of the respondents hold tertiary degree (67,1%), mostly from STEM and social sciences. Regarding previous managerial experience (e.g. team leader, project manager, head of the department, board member), the majority of the respondents have substantial experience (54,3% reported having significant managerial experience), while just under one third of the respondents (32,8%) reported having none or little previous managerial experience. With respect to previous industry related experience, 48,6% of the respondents reported having substantial industry related experience and 31,4% of the respondents have none or insignificant industry related experience.

As for the sample structure regarding life-cycle, 61 startups are in the growth stage, while nine startups are in the early-stage (albeit in different phases: preseed, seed, and early phase). Results regarding the age of growth-stage startups and developmental phases of early-stage startups are given in Tables 2 and 3.

**Table 2:** Growth-stage startups – company's age

When have you started a company to deliver your startup idea?	Frequency	Percent	Valid Percent	Cumulative Percent
1 year ago	12	19,7	19,7	19,7
2 years ago	11	18,0	18,0	37,7
3 years ago	10	16,4	16,4	54,1
4 years ago	8	13,1	13,1	67,2
5 years ago	20	32,8	32,8	100,0
TOTAL	61	100,0	100,0	

Source: Research results

As it can be seen from Table 2, almost half of the respondents (45,9%) have started a company four and/or five years ago. However, there is 19,7% of the startup companies in the growth-stage subsample that are still very young. As for the early-stage subsample, there is 55,6% of the startups in the seed stage while there is an equal proportion of pre-seed and early-stage (22,2%) startups (Table 3).

**Table 3:** Startup phase for early-stage startups

	Frequency	Percent	Valid Percent	Cumulative Percent
Pre-seed	2	2,9	22,2	22,2
Seed	5	7,1	55,6	77,8
Early-stage	2	2,9	22,2	100,0
TOTAL	9	12,9	100,0	

Source: Research results

With respect to business orientation, results are given in Table 4. As for the startup operations' orientation, majority of startups are service development and sales oriented (40%), just under one third are product development and sales oriented, and 28,6% of the startups in the sample support both product and service orientation.

**Table 4:** Business orientation

	Frequency	Percent	Valid Percent	Cumulative Percent
Product	22	31,4	31,4	31,4
Service	28	40,0	40,0	71,4
Both	20	28,6	28,6	100,0
TOTAL	70	100,0	100,0	

Source: Research results

Analysing composition of the sample regarding industry, the results have revealed that IoT, e-commerce, and cleantech are the most represented industries, but there is a fair proportion of startups fitting into other industries like fintech, tourism and hospitality, etc.

**Table 5:** Industry

	Frequency	Percent
Automotive	4	5,7
Cleantech	7	10,0
E-commerce	10	14,3
Energy	3	4,3
Fintech	5	7,1
IoT	12	17,1
Circular economy	2	2,9
Transportation and logistics	2	2,9
Agritech	2	2,9
Retail	4	5,7
Tourism and hospitality	6	8,6
Other	13	18,6
TOTAL	70	100,0

Source: Research results

As it can be seen from Table 6, mean value for internal environment is relatively high (mean=4,14), representing respondents' perception of internal environment contribution to overall startup success. As the most important factor, hard work is identified (mean=4,8), followed by personal responsibility – accountability (mean=4,6) and goals/objectives setting (mean=4,5). Factors like self-confidence (mean=4,4), innovativeness (mean=4,3), reasonable risk-taking (mean=4,2) and team composition and internal start-up organization (mean=4,2) are also considered to contribute startup success to a fair extent while factors like, level of education (mean=3,6) and previous entrepreneurial experience (mean=3,2) are considered to be less important. Since internal startup environment is composed of 11 items, a new variable was computed and Chronbach's Alpha coefficient was calculated ( $\alpha=,705$ ;  $N=11$ ).

**Table 6:** Descriptive statistic – Internal start-up environment (factors instrumental to startup success)

	N	Mean	Std. Deviation
Level of education	70	3,6	1,231
Work experience	70	4,0	,807
Previous experience in starting a company	70	3,2	1,261
Personal investment	70	3,8	1,016
Team composition (adequate competences)	70	4,2	,849
Level of innovativeness	70	4,3	,778
Reasonable risk-taking	70	4,2	,679
Self-confidence	70	4,4	,604
Hard work	70	4,8	,447
Setting objectives	70	4,5	,717
Accountability	70	4,6	,512
<i>Internal startup environment</i>	70	4,14	,457

Source: Research results

Since variables are non-normally distributed, Mann-Whitney U test was performed. The results showed that there is a statistically significant difference in the perception of internal environment with respect to the fact whether respondents have actually started a company or still are in incubation stage (Mann-Whitney test; sig.=,000). Regarding respective elements of internal environment, three items were found to be significant - previous experience in starting a company (Mann-Whitney test; sig.=,023), team composition (Mann-Whitney test; sig.=,021), and self-confidence (Mann-Whitney test; sig.=,044).

**Table 7:** Startup success – growth-stage startups

	N	Mean	Std. Deviation
Overall satisfaction with managerial competencies	61	3,9	,826
Startup growth rates	61	4,2	,771
Market share	61	4,1	,899
Growth potential	61	4,4	,642
Overall startup success	61	4,1	,854
Profit	61	3,5	1,148
Innovation potential	61	4,3	,719
Impact on community/society	61	4,0	,983
<i>Overall success</i>	<i>61</i>	<i>4,1</i>	<i>,609</i>

Source: Research results

According to research results, respondents consider their startup to be successful (mean=4,1) as demonstrated in Table 7. Higher mean values (above average) are identified for items representing growth rates, growth potential and innovation potential while mean values for satisfaction with managerial competencies are below average (=3,9) as well as for startup’s profit-generating capacity (=3,5).

**Table 8:** Startup success – early-stage startups

	Frequency	Percent	Valid Percent	Cumulative Percent
Growth of market share	5	7,1	55,6	55,6
Profit	2	2,9	22,2	77,8
Customer satisfaction	2	2,9	22,2	100,0
TOTAL	9	12,9	100,0	

Source: Research results

For startup success attributes 9 items were offered to early-stage startup founders: (1) profit, (2) market share growth, (3) growth in number of employees, (4) business expansion potential, (5) customer satisfaction, (6) innovation potential, (7) positive impact on society, (8) top quality of product/service, and (9) other. The respondents were asked to choose the most important aspect of success from their perspective. Majority of respondents have chosen growth of market share a single most important success attribute (55,6%) while there is an equal proportion of respondents stating profit (22,2%) and customer satisfaction (22,2%) as the most significant attributes of success as presented in Table 8.

#### 4. Discussion and conclusion

The aim of this paper was to determine whether startup owners/founders have different perceptions of factors that shape startup’s success depending on the life-cycle stage of their startup. Theoretical developments in the entrepreneurship domain suggest that early-stage and growth stage startups face different obstacles and challenges resulting in different perceptions of success and factors that determine success. Factors that shape startup’s success are described in the literature as individual, organizational, and external factors. This research focuses on individual and organizational level factors (defined as internal startup environment) since their influence is direct and (to some extent) manageable.

On the sample of 70 Croatian startup companies an online survey questionnaire was carried out and data were analysed using descriptive statistics and Mann-Whitney U test (due to non-normal distribution of data). In the research sample, 61 startups (87,1%) were well beyond early-stage; almost 50% of startup founders have started their company four and/or five years ago. Nine startups (12,9%) were in the different phases of early stage (pre-sees, sees and early stage). Startup founders in the sample are predominately male (70%), well educated (67,1% hold tertiary degree) and relatively young (77,1% are younger than 40) and have significant prior managerial and industry experience. From the perspective of startup founders in the sample the most important contributors to startup’s success are hard work, personal responsibility/accountability and self-confidence, which is in line

with similar research in entrepreneurship domain where important entrepreneurial characteristic and personality traits are described. Further analysis showed that there is a statistically significant difference in the perception of important success contributors with respect to the fact whether respondents have actually started a company or still are in incubation stage. Regarding respective elements of internal startup environment, three items were found to be significant (mix of individual and organizational level factors) - previous experience in starting a company (Mann-Whitney test; sig.=,023), team composition (Mann-Whitney test; sig.=,021), and self-confidence (Mann-Whitney test; sig.=,044). As for the success attributes, growth-stage startups perceive success mainly through the growth prism where innovation potential is recognized as important growth leverage which is in line with theoretical propositions; startups do more than just seize opportunities, because they also create opportunities themselves (Stevenson, Roberts, and Grousbeck, 1994) using innovation as value-generating mechanism. Satisfaction with managerial competencies and startup's profit-generating capacity are inferior success attributes from the perspective of growth-stage startups. These findings are also in line with theoretical propositions; startup owners are usually deficient in managerial and other important business development related competencies, and high growth rates are critical in early stages of startup so profitability is often sacrificed in order to ensure survival. The very fact that 45,9% of the startup owners in the sample have started a company four and/or five years ago suggest that these companies are successful since survival rate of startups in the first five years is only about 45-55% in U.S. and Europe (Laitinen, 2017).

Early-stage startup founders also value growth above other important aspects of success suggesting that growth is seen as vital guarantor of survival in the most delicate stages of startup's life.

Due to limitations of presented research, primarily regarding sample size and measures applied (subjective perceptive measures), future research on the topic should include larger sample, covering the international level and widening the set of key-performance indicators that can be assessed at a higher level of rigour with objective metrics. Regardless the limitations, this research has empirical value in contributing empirical research on startup community – group of entrepreneurs that have potential to change the future.

## References

- Berger, E. S. C. and Kuckertz, A. (2016) "Female entrepreneurship in startup ecosystems worldwide," *Journal of Business Research*, 69(11), pp. 5163-5168
- Blank, S. and Dorf, B. (2012) *The startup owner's manual: The step-by-step guide for building a great company*. Pescadero: K&S Ranch Publishing Division
- Bocken, N. (2015) „Sustainable venture capital catalyst for sustainable start-up success?“, *Journal of Cleaner Production*, 108, pp. 647-658
- Cantamessa, M., Gatteschi, V., Perboli, G. and Rosano, M. (2018) "Startups' Roads to Failure", *Sustainability*, 10(7), pp. 1-19
- Cockayne, D. (2019) "What is a startup firm? A methodological and epistemological investigation into research objects in economic geography", *Geoforum*, 107, pp. 77-87
- Damodaran, A. (2009) *Valuing young, start-up and growth companies: Estimation issues and valuation challenges*. New York: Stern School of Business, New York University
- Eurostat (2021) "Key figures on European business - Statistics illustrated", [online], <https://ec.europa.eu/eurostat/documents/3217494/12601271/KS-01-20-363-EN-N.pdf/57086a1d-ba26-a397-85b6-f28d08f28426?t=1616747084138>
- Gravetter, F. J. and Wallnau, L. B. (2004) *Statistics for the behavioral sciences* (6<sup>th</sup> edition), Thompson Wadsworth, Belmont
- Haltiwanger, J., Jarmin, R. and Miranda, J. (2013) „Who Creates Jobs? Small vs. Large vs. Young“, *The Review of Economics and Statistics*, 45(2), pp. 347-361
- Kim, B., Kim, H. and Jeon, Y. (2018) "Critical Success Factors of a Design Startup Business", *Sustainability*, 10(9), pp. 1-15
- Laitinen, E. K. (2017) "Profitability ratios in the early stages of a startup", *The Journal of Entrepreneurial Finance*, 19(2), pp. 1-28
- Marmer, M., Herrmann, B. L., Dogrultan, E., Berman, R., Eesley, C. and Blank, S. (2011) "Startup Genome Report Extra on Premature scaling", *Startup Genome*, [online], <https://innovationfootprints.com/wp-content/uploads/2015/07/startup-genome-report-extra-on-premature-scaling.pdf>
- Ng, A., Macbeth, D. and Southern, G. (2014) "Entrepreneurial performance of early-stage ventures: Dynamic resource management for development and growth", *International Entrepreneurship Management Journal*, 10(3), pp.503-521
- Radzi, M. K., Mohd Nor, M. and Ali, S. M. (2017) "The impact of internal factors on small business success: A case of small enterprises under the FELDA SCHEME", *Asian Academy of Management Journal*, 22(1), pp. 27-55
- Ries, E. (2011) *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*, New York: Crown Publishing Group
- Salamzadeh, A. and Kawamorita K. H. (2015) "Startup Companies: Life Cycle and Challenges", 4th International Conference on Employment, Education and Entrepreneurship (EEE), Belgrade, Serbia, [online], <https://ssrn.com/abstract=2628861>

- Sebastian, J. and Mauricio, D. (2017) "Systematic literature review of critical success factors of Information Technology startups", *Academy of Entrepreneurship Journal*, 23(2), pp. 1-23
- Skala, A. (2019) "The Startup as a Result of Innovative Entrepreneurship" in: *Digital Startups in Transition Economies*. Palgrave Pivot, Cham, pp. 1-40
- Stevenson, H., Roberts, J. and Grousbeck, I. (1994) *New Business Ventures and the Entrepreneur*, Irwin, Boston
- Szarek, J. and Piecuch, J. (2018) "The importance of startups for construction of innovative economies", *International Entrepreneurship Review*, 4(2), pp. 69-78
- Tomy, S. and Pardede, E. (2018) "From uncertainties to successful startups, a data analytic approach to predict success in technological entrepreneurship", *Sustainability*, 10(3), pp. 1-24
- Tripathi, N., Seppänen, P., Boominathan, G., Oivo, M. and Liukkunen, K. (2019) "Insights into Startup Ecosystems through Exploration of Multi-vocal Literature", *Information and Software Technology*, 105, pp. 56-77
- Wing-Ki, W., Hong-Man, C. and Venuviod, P. (2005) "Assessing the growth potential of high-technology startups: An exploratory study from Hong Kong", *Journal of Small Business and Entrepreneurship*, 18(4), pp. 453-470