

# Life Cycle Analysis of Startups

By

Dr Debasis Patnaik, Professor, Department of Economics and Finance, BITS Pilani, K K Birla Goa Campus

And

Swapnil Saurav, UG Student, Department of Economics and Finance, K K Birla Goa Campus

Sushmita Bhattacharjee-PhD Scholar, Department of Economics and Finance, K K Birla Goa Campus

## Abstract

India is an economy with one-fifth of world's working population. With such large population percentage of job opportunities become very less. Startups are oftentimes seen as the solution to the much needed job growth. More importantly, it is successful startups that matter most. But, how do entrepreneurs value the most important factors for success? This study determines what factors are important in each stage in the startup life cycle and how to determine the life cycle of a start-up. First, success and failure factors are identified through a literature review. Second, a conceptual startup framework is constructed in which the factors are divided in the founding team, the startup capability, and the external environment. Next data is collected about 5 startups from different field of operation like Internet, Renewable Energy and E-commerce. Also, online interviews were done of 50 entrepreneurs to collect data. And last, a test is conducted in order to test the propositions and determine what factors are most important in each stage of the startup life cycle. The results showed us that different factors are responsible for growth or downfall of a startup at different stages of development. This report clearly points down different factors at different stages responsible for growth or downfall of a start-up.

Keywords: Start up cycles, entrepreneurs, stages, Internet, Renewable energy, e commerce.

## INTRODUCTION

An understanding of why new technology based firms fail is important to economic growth and vitalization of Industrializing countries (like India), as they play a vital role technological innovation and new product development. As the business failure includes complex phenomena, contingent effects of theoretically meaningful context with failure factors need to be considered. Particularly, as a new venture grows, it might face different issues and difficulties to overcome for the survival. Kazanjian (1988) suggested a four stage model to explain the growth pattern of

new ventures. The study propose that new ventures face different problems and progress according to the four stages: conception and development, commercialization, growth and stability. They found that dominant problems and success factors differed according to the stages of growth.

The life cycle of a startup is unbelievably fast. Life cycle models exists of predetermined sequence of stages, and viewed as a linear progression, while each stage exists of different factors that effect performance. Factors can be strategy, structure, decision-making, but also organizational, administrative, marketing issue arise through the stages. The main purpose of this study is to identify common characteristics of failed ventures according to the stage of growth and predict life cycle of a startup. We used a large sample base which includes startups from different field of working and did a research on the factors which were mainly responsible for their failure.

## **2. LITERATURE REVIEW**

**1. Nikolaus Franke, Marc Gruber, Dietmar Harhoff, Joachim Henkel (2006), What you are is what you like – similarity biases in venture capitalists 'evaluations of start-up teams Journal of Business Venturing**-This paper extends recent research studying biases in venture capitalist's decision-making by analysing biases arising due to similarity between a venture capitalist and members of a venture team. The paper summarize the psychological foundations of such similarity effects and derive a set of hypotheses regarding the impact of similarity on the assessment of team quality. Using data from a conjoint experiment with 51 respondents, the paper find that venture capitalists tend to favour teams that are similar to themselves w.r.t. the type of training and professional experience.

The results of this paper confirm the existence of distortion in VCs decision making due to the interaction of characteristics of VC and start-up team. The more closely the team members' profiles resemble that of the VC with respect to two important dimensions, the better – on average – the team will be rated. The paper find a rather strong similarity bias for the type of education: VCs who had received training both in engineering and in business gave a significantly higher rating than other VCs to teams whose members have an education partly in engineering, partly in business. Similarly, VCs who had received training in business administration only rated teams whose members also have an education only in business higher than other VCs. A strong bias also exists with respect to the type of firm where VC and members of the venture team have gathered prior professional experience. A rater who had been working exclusively in start-ups before joining the VC industry has a highly significant preference for teams whose members have prior experience mostly from start-ups. The same effect can be observed for VCs with prior

experience obtained in large firms only; these individuals tend to prefer teams whose members have largely come from a large-firm background.

**2. Ling, Zhao and Baron (2007) Influence of Founder– CEOs' Personal Values on Firm Performance: Moderating Effects of Firm Age and Size? [Journal of Management](#)**

The effects of two values held by founder-CEOs (collectivism and novelty) on companies' post-start-up performance are investigated. By integrating congruence and organizational lifecycle literatures, the authors hypothesized that the effects of both values are moderated by company age and size, such that collectivism exerts stronger beneficial effects in older and larger firms, whereas novelty exerts stronger beneficial effects in younger and smaller firms. Results based on 92 small- to-medium-sized enterprises offer support for most predictions, thus demonstrating the influence of founders' values on new venture performance and highlighting the importance of considering organizational lifecycle for the understanding of this influence.

**3. [A Davila](#), [G Foster](#), [M Gupta](#) (2003), Venture capital financing and the growth of start-up firms [Journal of Business Venturing](#)**

This study examines the association between the presence of venture capital (VC) and the employee growth of startups. Grounded in signaling theory, it investigates the impact, if any, of VC financing events upon the growth of these companies and whether the amount of funding affects the intensity of the signal. It further explores whether VC leads to growth or, alternatively, whether growth signals the need for VC. Finally, it documents the relationship between growth in startup financial valuation and changes in the number of employees over successive rounds of financing.

**4. [Jurga Duobiene](#) (2013 ) CORPORATE ENTREPRENEURSHIP IN ORGANISATIONAL LIFE-CYCLE**

The paper deals with the development of corporate entrepreneurship in different stages of organizational life-cycle. The research presents a model for the evaluation of corporate entrepreneurship and systemizes relevant theoretical and empirical research in the field of entrepreneurship and corporate entrepreneurship. Moreover, it describes the development of corporate entrepreneurship in the entire organizational life-cycle since most of researchers who discuss the topics of corporate entrepreneurship and organizational life-cycle, focus on the establishment and growth of organizations. Thus, there are only some research works that analyses corporate entrepreneurship in further stages of organizational life-cycle.

The research results disclose differences of the development of corporate entrepreneurship during organizational life-cycle and might draw the attention of practitioners to the value of innovations for successful organizational development stages, i.e. from maturity to renewal rather than that of decline. Moreover, the findings of the research demonstrate that the strategic

objectives for the renewal stage are less entrepreneurial than the potential for growth. This, in turn, as a possibility could be further explored by organizations

### 3- Stages of Startup Life Cycle

Every firm started somewhere and went through different stages, which is called the startup life cycle (SLC). Each stage in the SLC is different and comes with different learnings. Drori et al. (2009) states that a startup life cycle of an internet firm is rapid. Theory shows that life cycle models exists of predetermined sequence of stages, and viewed as a linear progression, while each stage exists of different factors that influence performance. Factors can be strategy, structure, decision-making, but also organizational, administrative, marketing issues arise through the stages. Drori et al. (2009) argued that we know little about the rapid SLC of the internet firm.

Below Table shows previous research of identified life cycle stages of technology-based firms. It has been researched in the 80's, 90's, 00's, and still is begin researched. The first two columns show scientific articles of Kazanjian and Kim and Ha, the identified stages in third column comes from Blank, a Silicon Valley-based retired serial entrepreneur that founded 8 startup firms.

Stage	Kazanjian(1988)	Kim & Ha (1999)	Blank (2007)	Berman (2011)
1.	Conception and Development	Start-up	Customer Discovery	Discovery
2.	Commercialization	Early Growth	Customer Validation	Validation
3.	Growth	High Growth	Customer Creation	Efficiency
4.	Stability	Mature	Company Building	Scale

The last column shows the stages of a very recently published technical report of Berman et al. whom are specializing in internet start-ups. Every startup can benchmark itself against 17,000 start-ups in the world. With their data they can analyze the most important factors that lead to success or failure. In their report they adapt the four steps of Blank and argue that the key difference is that Blank's stages are company centric than product centric. Kazanjian (1988) investigated growth patterns and identified four stages. In the first stage, conception and development, it's about resources acquisition and technology development, problems at this

stage include contraction of a product prototype and selling the business idea to financial backers. The second stage, given financial backing, it's about production related startup, so the focus is on developing the product or technology for commercialization. At the third stage, if the product is feasible and achieves market acceptance, a period of high growth will typically result, building efficient task system is necessary to deal with problems. And finally, stability is reached when the growth rate slows to a level consistent with market growth, the challenge is to maintain growth and the market position. Kim and Ha (1999) modified the described model of Kazanjian (1988) and adapted it to Korean ventures and categorized progression into four stages. At startup, firms start their business and develop a prototype of a product or service. At the second stage, early growth, those firms sell and distribute the product or service in the market. Then, in the third stage, firms have multiple lines of product and high growth rates of sales volume. And finally, firms become mature in the fourth stage and succeed to IPO and stand on a leading position in an industry.

Blank (2007) defined the four steps to the epiphany in his customer development model. The customer plays a centric role and therefore separates its activities to the early stage of a firm, and designed four easy-to-understand steps. At the beginning, with custom discovery is meant to find out who the customers are and whether the problem is important to them. In the second stage, after customer validation, the goal is to build a repeatable sales road map for the sales and marketing teams to follow later. Then, after customer creation, the firm builds success on the initial sales and the goal is to create end-user demand and drive that demand into the company's sales channel. And finally, in company building, all learnings would be made formal into different departments in order to exploit the firm's early market success. As been said, the stages according to Berman et al. (2011) are adapted from Blank and shifted from company to product centric. In their report they covered these four stages by defining each stages' purpose, typical events, and duration. They also defined two more steps, not covered in their report, but called profit maximization and renewal or decline.

With the precursors of Kazanjian and Kim (1988) and Ha on Blank and Berman et al (2011). there's a solid mix between the stages that are identified by different influential people. In general the first stage for is common; it's about building your first version of your product or service and try to validate your customer's need. Then, after the need is verified, it's important to see whether the constructed business model would work and therefore tested in the second stage. The third stage is about growth and efficiency, because need reflects sales accomplishments; it's time to be as efficient as possible in order to service the customer. When this stage is over, the startup becomes formal and matures, and can therefore scale and grow with the market and guard its position.

### **3.3 Determinants among startup lifecycle.**

The following related significant factors for the factors groups identified by the literature review:

- a) Founding team: Working experience, commitment, learning \*, pivot / adaptability \*
- b) Startup capability: Business model / plan, network, business partners, stang \*
- c) External environment: Financial capital, market / competitors, customers \*, incubator / advisors\*

The \* resembles the fact that no significant effect on success have been found in literature. Still, these factors may be more, less, or equally important in each of the stages of the SLC.

The factors with a star were proven significantly influential on the startup performance.

## **4-Methodology**

### **Objective**

1. Classification of startups based on their field.
2. Summarize the relevant up-to-date academic literature.
3. To identify the stages and determinants of startup life-cycle
4. Collect data about start-ups via interview from different field to run a sample test to find out factors related to growth or downfall.
5. Concluding factors responsible at different stages for development of a start-up.

The project is divided into 2 parts. Each part deals with different aspect of life cycle analysis of a startup firm.

Part 1 deals with the startup profile of various startups chosen from different field of operation. Startups are chosen from agriculture, internet, production, e-commerce and energy production fields. Next, Online survey is done of entrepreneurs for getting data related to identifying various factors. A portfolio of these startups has been prepared in the next section after which a life cycle analysis is performed using data obtained about the above mentioned startups.

Part 2 deals with identifying the most important factor in the development of a startup during each stage of its development. This analysis helps explain the most important factor on which the sustainability of a startup is dependent.

Combining both Part 1 and Part 2 the main factors which are responsible for the development or downfall of a start-up irrespective of their field of operation is outlined below.

## **4-RESULTS**

### **4.1 Startup Profile – Flipkart**

#### **Overview:**

Founded: October, 2007

Founders: Sachin Bansal, Binny Bansal

Headquarters: Bangalore City

Funding: \$540M

Categories: E-Commerce, Online Shopping

Flipkart is an online shopping destination for electronics, books, music and movies.

#### **Funding Rounds:**

Series B - \$10M - Investors Unknown

Series C - \$20M - Investors (1) - Tiger Global Management

Series D - \$150M - Investors (3) - Tiger Global Management, Naspers, Accel Partners

Series E - \$200M - Investors (3) - Naspers, Iconiq Capital, Tiger Global Management

Series E - \$160M - Investors (3) - Tiger Global Management, Vulcan Capital, Dragoneer Investment Group

#### **Products:**

PayZippy

#### **Acquisitions:**

1) Myntra - April 9, 2014 for \$330 M

2) LetsBuy.com – Feb 9, 2012

3) weRead – Dec 22, 2010

### Most Important Factors per stage for Flipkart

Discovery	Validation	Efficiency	Scale
1. Customer need	1. Pivot/adaptability	1. Capital	1. Capital
2. Network	2. Satisfaction	2. Network	2. Vision
3. Pivot/adaptability	3. Media attention	3. Market Knowledge	3. Network of cost

## 4.2 Startup Profile – Redbus

### Overview:

Founded: 2006

Founders: Sachin Bansal, Binny Bansal

Headquarters: Mumbai

Funding: \$8.30M

Categories: Curated Web

redBus is a bus ticketing company in India, that sells tickets through online and offline outlets.

### Funding Rounds:

Series B - \$1.70M- Investors(3) - Inventus Capital Partners, Helion Venture Partners, SeedFund

Series C - \$6.40M - Investors (1) - SeedFund, Helion Venture Partners, Inventus Capital Partners

Secondary Market - \$210k- Investors (1) - Inventus Capital Partners

### Most Important Factors per stage for Redbus

Discovery	Validation	Efficiency	Scale
1. Customer need	1. Capital	1. Monetization	1. Capital
2. Business model	2. Complementary team	2. Partnership	2. Work experience

3. Experience	3. User satisfaction	3. Competitors	3. Media attention.
---------------	----------------------	----------------	---------------------

### 4.3 Startup Profile – Azure Power

#### **Overview:**

Founded: 2008

Founders: Inderpreet Wadhwa

Headquarters: New Delhi

Funding: \$13.60M

Categories: Clean Technology

Azure Power produces and distributes solar power to commercial, government and utility customers in India.

#### **Funding Rounds:**

Series A - Investors (2) - Helion Venture Partners, Foundation Capital

Series B - - Investors (2) - Helion Venture Partners, Foundation Capital

Secondary Market - \$13.60M

#### **Most Important Factors per stage for Azure Power**

<b>Discovery</b>	<b>Validation</b>	<b>Efficiency</b>	<b>Scale</b>
1. Customer need	1. Pivot/adaptability	1. Capital	1. Capital
2. Network	2. Satisfaction	2. Network	2. Vision

3. Pivot/adaptability	3. Media attention	3. Market Knowledge	3. Network of cost
-----------------------	--------------------	---------------------	--------------------

#### 4.4 Startup Profile – Micromax

##### **Overview:**

Founded: 1991

Headquarters: Gurgaon

Funding: \$88M

Categories: Mobile

Micromax Informatics offers mobile phone solutions and wireless technologies for mobile users.

##### **Funding Rounds:**

Series A - \$45M - Investors (1) - TA Associates

Series B - \$43M - Investors (3) - Sandstone Capital, Madison India Capital, Sequoia

##### **Most Important Factors per stage for Micromax**

<b>Discovery</b>	<b>Validation</b>	<b>Efficiency</b>	<b>Scale</b>
1. Customer need	1. Pivot/adaptability	1. Capital	1. Capital
2. Network	2. Satisfaction	2. Network	2. Vision
3. Pivot/adaptability	3. Media attention	3. Market Knowledge	3. Network of cost

## 4.5 Startup Profile – SunBorne Energy

### Overview:

Founded: 2008

Headquarters: Gurgaon

Funding: \$43.60M

Categories: Clean Technology

SunBorne Energy is a solar power company developing utility scale power plants in India.

### Funding Rounds:

Series A - \$5M

Series A - \$3.10M - Investors (1) General Catalyst Partners

Debt Financing - \$30.50M

Series B - \$5M

### **Most Important Factors per stage for SunBorne Energy**

<b>Discovery</b>	<b>Validation</b>	<b>Efficiency</b>	<b>Scale</b>
1. Customer need	1. Pivot/ adaptability	1. Capital	1. Capital
2. Network	2.Satisfaction	2. Network	2. Vision
3. Pivot/ adaptability	3. Media attention	3. Market Knowledge	3. Network of Cost

## 4.6 Startup Profiles - Qualitative Analysis

In order to determine the most important factors in the startup life cycle, qualitative data has been gathered from above mentioned startups via email interview. The interviewees were asked to prioritize the most important factors (independent variables) in each of the startup life cycle stages from which we can derive propositions that can be tested with a larger population. So, in order to derive the propositions, we need to map the factors in order to derive propositions with the most important factors per stage.

**Total scores of all factors in all stages (n=5)**

	<b>Discovery</b>	<b>Validation</b>	<b>Efficiency</b>	<b>Scale</b>
<b>Working experience</b>	1	0	3	0
<b>Commitment</b>	3	5	0	1
<b>Learning</b>	0	1	0	3
<b>Pivot/adaptability</b>	0	6*	0	0
<b>Business model</b>	8	2	5	2
<b>Network</b>	1	2	2	0
<b>Business Partners</b>	0	1	2	0
<b>Staffing</b>	0	3	0	0
<b>Market</b>	0	5	1	0
<b>Financial capital</b>	1	2	7*	11*
<b>Customer</b>	8*	1	2	3
<b>Incubator</b>	2	3	4	2

\* - highest score

The table tells us that in the discovery stage the factor customers is most important, in the validation stage the factor pivot / adaptability is most important, in the efficiency stage the factor financial capital is most important, and in the scale stage also the factor financial capital is important.

Now, we introduce the following propositions:

**Proposition 1: The factor customers is most important in the discovery stage**

This relates to the need of the customers which was mentioned often by the interviewees. When you're solving a problem, it's important to connect the need of the customer to the solution. We've to say that this factor was closely followed by the factor business model / plan which includes the vision, strategy, and more. Because, it was often said that you need a clear vision, an outlined strategy, and a solid business model in order to start your business.

**Proposition 2: The factor pivot / adaptability is most important in the validation stage**

Whereas the factor pivot / adaptability has the highest score, it is closely followed by the factor commitment. One of the interviewees was following the Lean Startup methodology at this stage, where it's common to pivot in order to find a working business model. Commitment comes second and is also mentioned often in the interviews.

**Proposition 3: The factor financial capital is most important in the efficiency stage**

In the stage of optimizing your product and processes it's about all about money. The interviewees told us that capital is needed when you want to grow, because in most cases they had a proven concept with a working business model, the only way to accelerate is to get a large investment round.

**Proposition 4: The factor financial capital is most important in the scale stage**

With scaling the entrepreneurs want to grow and establish a real company. It doesn't surprise us that the factor financial capital is prioritized as the most important one. You need capital to hire the best people, start large marketing campaigns, and so on.

## **4.7 Online Survey**

With the validation of the conceptual startup framework we derived four propositions to test and in order to answer our research question we conducted an online survey to test the propositions of the previous section. The survey was conducted via email. The overall questionnaire included both open and multiple choice questions and existed of six parts, namely:

1. Discovery - finding the customer
2. Validation - validation the business model
3. Efficiency - optimizing product and processes
4. Scale - conquering the market
5. Startup profile
6. Profile of the entrepreneur

In the first four parts of the survey a rating scale was used to determine what the most important factors in each of the stages. On a scale from 1-5 entrepreneurs had to value each factor as 1) unimportant to 5) very important in the relation to the stage. This scale was chosen in order to create a survey that was a) understandable, b) easy to fill out and c) that could be done within a reasonable time. We'll perform a quantitative analysis in order to test what the most important factors are in each stage.

The fifth part was constructed in order to create several startup profiles based on different characteristics. Entrepreneurs were asked a) if they could define their startup as a success, failure, or still undecided; b) at what stage of the startup life cycle they were in; c) how large the founding team was; d) if the founding team more business centric or more technical centric was; e) how many employees the startup has; f) if the product was targeting a consumer or an enterprise market; g) if the product is targeting a local, regional, national, or international market; h) where the startup is located; and finally i) when the startup was founded. Later on, we'll analyze the survey and identify differences in between the factors and the characteristics of the startup.

And, the last part of the survey consisted of the profile of the entrepreneur where a) the gender of the entrepreneur was asked, b) the age of the entrepreneur was asked, and c) what the highest level of education was achieved. We'll analyze the results and try to identify differences in between the factors and the characteristics of the entrepreneur.

## **4.7 Most Important Factors Per Stage - Quantitative Analysis**

**Independent variables:**

Working experience, Commitment, Learning, Pivot / adaptability, Business model / plan, Network, Business partners, Staffing, Financial capital, Market / competitors, Customers, Incubator / advisors

The interviews gave us insight of the factors that were most important in the stages of the startup life cycle. With the results, we derived four propositions that we want to test with the results of our survey. First, we translate these formulated propositions into the following hypotheses:

**H1: The factor customers is among the most important factors in the discovery stage**

**H2: The factor pivot / adaptability is among most important factors in the validation stage**

**H3: The factor financial capital is among most important factors in the efficiency stage**

**H4: The factor financial capital is among most important factors in the scale stage**

In the first four parts of the survey we asked respondents to estimate each factor in terms of importance in each stage of the internet startup life cycle. Below Table show the descriptive statistics of the factors in each stage. The mean and the standard deviation are shown.

**Descriptive statistics (n=50)**

	<b>Discovery Mean (S.D)</b>	<b>Validation Mean (S.D)</b>	<b>Efficiency Mean (S.D)</b>	<b>Scale Mean (S.D)</b>
<b>Working experience</b>	3.12 (.85)	3.52(.75)	3.76(.69)	4.18(.72)
<b>Commitment</b>	4.57(.53)*	4.46(.68)*	4.43(.68)	4.48(.65)
<b>Learning</b>	4.39(.81)	4.25(.74)	4.25(.75)	3.92(.81)
<b>Pivot/adaptability</b>	4.32(.61)	4.07(.89)	3.71(.96)	3.25(1.03)
<b>Business model</b>	3.11(.96)	3.65(1.07)	3.45(.95)	3.82(.94)
<b>Network</b>	3.84(.79)	3.85(.81)	3.61(.93)	4.44(.90)
<b>Business Partners</b>	3.12(1.01)	3.55(1.06)	3.74(.92)	4.33(.88)
<b>Staffing</b>	2.74(1.20)	3.37(1.00)	3.78(.89)	4.43(.62)
<b>Market</b>	2.70(1.25)	3.15(.95)	3.43(.91)	4.56(.92)
<b>Financial capital</b>	2.89(1.03)	3.50(.91)	3.91(.92)	3.56(.72)*
<b>Customer</b>	3.75(1.09)	4.15(.96)	4.52(.62)*	4.19(.82)
<b>Incubator</b>	2.75(.91)	3.19(.92)	3.06(.89)	2.85(1.07)

\* - highest mean

Commitment seems to be the most important factor in the discovery and the validation stage. In the efficiency stage, the factor customers seems to be the most important one. And in the last stage, the factor financial capital seems to be the most important one.

## **5-Conclusion**

To determine the most important factors among the stages of the startup life cycle, five interviews were held and an online survey was conducted that has been filled out by 50 entrepreneurs. Through statistical analysis it was found out that in discovery and efficiency stage six significant factors were most important. In the first stage pivot / adaptability showed to be important, and in the third stage customers showed to be important and in both stages commitment and learning showed to be important. The factor customers is related to the external environment and the other three factors are related to the founding team. Hence, the report concludes that the founding team is most important throughout the startup life cycle where customers play an important role as well. Additionally, commitment was mentioned in the interviews a couple of times to be important, but also as a reason for failure. Being committed is half work. Therefore, this report concludes that the factor commitment is the most important factor overall for the development of startup.

## Appendix – II (Interview Questions)

### Personal

1. What's your name?
2. What's your age?
3. What's your background?
4. Did you always planned to be an Entrepreneur?
5. What company or companies did you found or founded?

### Company profile

6. What the name of the company?
7. What year was it founded?
8. By how many founders?
9. What's the background of the founders?
10. What's your role?
11. What is your product?
12. Is it B2C or B2B?
13. How many customers do you have?
14. Focus locally or internationally?
15. Is it available on multiple platforms (e.g. Website, iOS, Android)?

### Startup Life Cycle

16. Are you familiar with the four steps (Steve Blank's - The four steps to the Epiphany)?
17. At what stage are you know?
18. Do you recognize the steps?  
Factors related to the Investor(s)
19. If you had to prioritize a top 3, what would be the most important factor? Do miss a factor?  
Factors related to the Founder(s)
20. If you had to prioritize a top 3, what would be the most important factor? Do miss a factor?  
Factors related to the Startup
21. If you had to prioritize a top 3, what would be the most important factor? Do miss a factor?  
Factors related to Facilitator(s)
22. If you had to prioritize a top 3, what would be the most important factors? Do miss a factor?  
Factors related to External environment
23. If you had to prioritize a top 3, what would be the most important factors? Do miss a factor?

## REFERENCES

1. Berman, R., B. Herrmann, and M. Marmer (2011). Startup genome report 01. a new framework for understanding why startups succeed. Technical report, Startup Compass Inc.
2. Matt Bruno, A. V., E. F. McQuarrie, and C. G. Torgrimson (1992). The evolution of new technology ventures over 20 years: Patterns of failure, merger, and survival. *Journal of Business Venturing* 7, 291–302.
3. D Cardon, M. S., C. E. Stevens, and D. R. Potter (2011). Misfortunes or mistakes? cultural sense making of entrepreneurial failure. *Journal of Business Venturing* 26, 79–92.
4. Cope, J. (2010). Entrepreneurial learning from failure: An interpretative phenomenological analysis. *Journal of Business Venturing* in press, 20. 72
5. Lee, J. and S. Lee (2006). Failure factors of new technology-based ventures according to the Growth stages. In Babson Kauman Entrepreneurship Research Conference (BKERC) 2002-2006, Babson College. IEEE Computer Society.
6. Kazanjian, R. K. (1988). Relation of dominant problems to stages of growth in technology-based new venture. *Academy of Management Journal* 31(2), 257–279
7. Kim, Y. and S. Ha (1999). An empirical study on growth stages of korean high-tech ventures. *The Korean Society for Technology Management & Economics* 8(1), 125–153.
8. Blank, S. G. (2007). *The Four Steps to the Epiphany*. Quad /Graphics.
9. Viren Naidu(2009), *Economics Times, Promoting entrepreneurship in India*
10. [Phil Morle](#) (2013), *Dynamic Business Journal, The start-up lifecycle: From idea to success*
11. Steve Blank(2013), *Harvard Business Review, Why the Lean Start-Up Changes Everything*