Startup Companies: Life Cycle and Challenges

Aidin Salamzadeh (Corresponding author)

Faculty of Entrepreneurship, University of Tehran, 16th Street, North Kargar Avenue, Tehran, 1439813141, Iran <u>Salamzadeh@ut.ac.ir</u>

Hiroko Kawamorita Kesim

Faculty of Engineering, Ondokuz Mayıs University, 55200 Atakum -Samsun, Turkey <u>hiroko.kawamorita@omu.edu.tr</u>

Abstract

Startup companies are newly born companies which struggle for existence. These entities are mostly formed based on brilliant ideas and grow to succeed. These phenomena are mentioned in the literature of management, organization, and entrepreneurship theories. However, a clear picture of these entities is not available. This paper tries to conceptualize the phenomenon, i.e. "startup", and recognize the challenges they might face. After reviewing the life cycle and the challenges, the paper concludes with some concluding remarks.

Keywords: Startup, Life cycle, Challenges, conceptualization

Reference to this paper should be made as follows: Salamzadeh, Aidin and Kawamorita Kesim, Hiroko, (2015). Startup Companies: Life Cycle and Challenges. Proceedings of the 4th International Conference on Employment, Education and Entrepreneurship (EEE), Belgrade, Serbia.

Aidin Salamzadeh is a PhD researcher at the Faculty of Entrepreneurship, University of Tehran. He has several publications in international journals and participated in several conferences in some countries. His main areas of interest are: social entrepreneurship, entrepreneurial universities, and entrepreneurship policy making. He serves as the Editor-in-Chief of the *Journal of Entrepreneurship, Business and Economics* (Canada), and as a member of the editorial board in some journals such as *JWE*, and *IE* (Serbia), *JEIM* (Turkey), *IJMP* (Brazil), etc. He is also a member of the European SPES Forum, and the Asian Academy of Management.

Hiroko Kawamorita Kesim is a Lecturer at Faculty of Engineering, Ondokuz Mayis University (Turkey) in the field of Innovation and Entrepreneurship. Her research interests include Internationalisation of Entrepreneurial University and Social Entrepreneurship. She is also an institutional coordinator at the international relations office, responsible for bilateral agreements and international collaboration activities at OMU including establishment of dual degree programmes. In addition, she is working on national and international projects in the field of entrepreneurship in collaboration with worldwide network

Introduction

It is natural and reasonable to think of the history of organizations and small businesses in evolutionary terms (Simon, 1993). This history is full of experiences and evidence supporting the evolution of organizations, however, the existing history lacks enough focus on the very early stages of a company, i.e. startup phase (Salamzadeh, 2015a). Although this early phase is less studied in the existing literature, there are many studies which examined controversial issues in this domain (Salamzadeh, 2015b). Amidst this chaos, a challenge arose: what are these entities, i.e. startups, and how they turn into companies?

The work of scholars of management, organization, and entrepreneurship, and others who might pursue this challenge, will affect the heavily lifting of applying theories to make a clear picture of these entities (Salamzadeh, 2015 a, b). Due to several reasons, these studies are of paramount importance. First, many startups fail in the very early stages and less than one third of them turn into companies-*"high rate of failure"* (e.g. see, Vesper, 1990). Second, failure occurs due to several reasons, such as lack of finance, team management problems, lack of enough business knowledge, technology lag, etc.- *"startup problems"* (e.g. see, Núñez, 2007). Third, most of startups that survive might turn into successful companies which play a significant role in economies- *"success stories"* (e.g. see, Martinsons, 2002). Fifth, there is a black box called "valley of death" which is more of a metaphor than a well-defined stage (Hudson & Khazragui, 2013). Even if this black box is well studied, the startup itself is ignored as the level of analysis-*"startup stage"* (e.g. see, Van de Ven et. al., 1984).

Therefore, this paper attempts to explain and conceptualize startups, and recognize the challenges they might face in *the valley*. Thus, the paper deals with explanation and not all the mentioned reasons why confirm that startup research is important. To do so, three main issues are discussed: (i) determining the main theories of management, organization, and entrepreneurship in this domain, (ii) explaining the lifecycle of startups, and last but not least (iii) the startup problems. Finally, the paper concludes with some concluding remarks.

Startups theories

As mentioned earlier, startups are rarely considered as the main focus of theories in different domains. However, there are some theories which could be implicitly considered as "startup theories" in the existing literature. This paper categorizes

these theories in three main areas: (i) organization, (ii) management, and (iii) entrepreneurship.

Organization theories focusing on startups

Van de Ven et al. (1984) were among the first scholars who considered three main approaches toward studying startup creation. They considered entrepreneurial, organizational and ecological approaches; and argued that prior research had only examined one of these three approaches without considering the others. As they pointed out:

"The organizational approach argues the conditions under which an organization is planned and the processes followed in its initial development [phase, which] have important consequences on its structure and performance in later life".

Yet, organization theories are silent on the issue of organizational evolution, or more specifically on startup evolution (Salamzadeh, 2015a). However, there is limited research which investigates the startup phase (e.g. see Boekerb & Wiltbank, 2005). Moreover, most of the existing theories and perspectives in organization science are defined to answer organizational questions. Among these theories, the following are more relevant in studying startups: organizational ecology theory (e.g. see, Scholz & Reydon, 2009), organizational configurations (e.g. see, Miller, 1990), contingency theory (e.g. see, Tosi& Slocum, 1984), resource dependence theory (e.g. see, Davis& Cobb, 2010), uncertainty theory (Kamps & Pólos, 1999), etc. Among the existing theories, Gartner (1985) and Katz and Gartner (1988) are more specifically related to this category.

Management theories focusing on startups

According to its general definition (getting things done through the other people, or coordinating the efforts of people toward common goals), management is about people (Hofstede, 1999). On the other hand, management theories are either "perspectives" or "descriptions of the relationships among organizational characteristics" (Dean & Bowen, 1994). Thus, according to this view, while management theories have less to do with startups in an organizational sense; they have more to do with those entities as individuals/teams that coordinate their efforts toward some common goals.

Moreover, management theorists and scholars are becoming more interested in studying startups (Davila et al., 2003). Some of the main management theories which used in startup research are as follows: strategic management (e.g. see, Pettigrew et al., 2001), small business governance (e.g. see, Ritchie& Richardson, 2000), human resource management (e.g. see, Miles & Rosenberg, 1983), team management (e.g. see, Kaiser& Müller, 2013), complexity theory (e.g. see &Lan, 2006), etc. However these theories are loosely connected to startup research and are mostly considering startups as their samples or cases.

Entrepreneurship theories focusing on startups

In Van de Ven et al.'s (1984) view, "the entrepreneurial approach argues the characteristics of the founder and promoter of a new organization". Although this view holds a basic presumption regarding the existing theories, it lacks enough entrepreneurial focus on the phenomenon in question, i.e. startups. Although the founder is important, there are several issues to be discussed, described, and explained by entrepreneurship theories on startups. As Salamzadeh (2015b) argues, entrepreneurship theories on startups fall into two categories: (i) macro level theories (e.g. see, Schumpeter's theory (Schumpeter, 1934), population ecology (Hannan and Freeman, 1977)), and (ii) micro and meso level theories (see e.g. Vesper, 1990; Lim et al., 2008; Bhaves, 1994; Veciana, 1988; Deakins and Whittam, 2000; Núñez, 2007; Serarols, 2008; Samuelsson and Davidsson, 2009).

This category of theories is more focused on startups. This might be due to several reasons. First, entrepreneurship deals with idea, creativity, innovation, new product or service development, opportunity, and the like. Thus, entrepreneurship theories are more prone to be considered in the early stages of any business or organization. These concepts are integral parts of a startup (Radovic-Markovic&Salamzadeh, 2012). Second, going beyond entrepreneurship theories, theories of organization and management will emerge, which deal with managing people and organizations (Van de Ven et al., 1984). Third, startups are about turning ideas into businesses which is a critical point in entrepreneurship studies such as new venture creation, value creation, and opportunity recognition, evaluation and exploitation.

The lifecycle of startups

However, startups are diversified and complex in nature, these entities have their lifecycle. Hopefully, research on startups' lifecycle is well-developed in last few

years (see Salamzadeh, 2015a,b). Since the sequence of activities and stages might vary among different startups, a holistic perspective is presented in this paper to offer a better understanding of the lifecycle of startups. The stages are as follows (Figure 1):

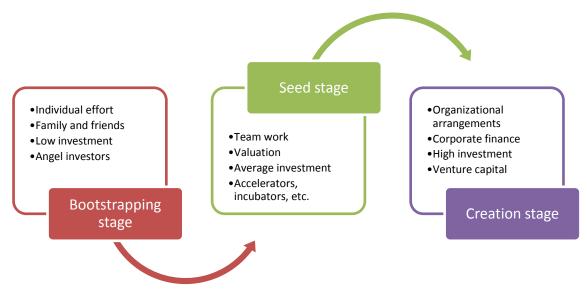


Figure 1. Lifecycle of startups (source: self-elaborated)

(i) Bootstrapping stage:

In this very early stage, the entrepreneur himself/herself initiates a set of activities to turn his/her idea into a profitable business. However, he/she considers a higher risk or even uncertainty level, continues working on the new venture idea, makes a team, uses personal funds, and asks family members and friends for their investment in the idea. Bootstrapping, which is sometimes defined as highly creative ways of acquiring the use of resources without borrowing (Freear et al., 2002), is considered to be one of the areas of entrepreneurship research that most need to be addressed (Ebben& Johnson, 2006). The purposeof this stage is to position the venture for growth by demonstrating product feasibility, cashmanagement capability, team building and management, and customer acceptance (Brush et. al., 2006). Moreover, angel investors are more likely to invest in this stage. In sum, as Harrison et al. (2004) argue: "bootstrapping is a way of life in entrepreneurial companies". This argument reveals the reason why most of the theories of startups are borrowed from entrepreneurship theories (see, Entrepreneurship theories focusing on startups).

(*ii*) Seed stage:

After the bootstrapping stage, the founder enters into a new stage, which is the seed stage¹. This stage is characterized by team work, prototype development, entry into market, valuation of the venture, seeking for support mechanisms such as accelerators and incubators, and average investments to grow the startup. Frankly speaking, for most startups the seed stage is a mess and is construed as highly uncertain (Salamzadeh, 2015 a). The seed stage is characterized by the initial capital that is used to do product and/or service (Manchanda & Muralidharan, 2014). Thus, founder seeks for support mechanisms such as accelerators, incubators, small business development centers, and hatcheries to accelerate the process. A great number of startups fail in this stage. Since they could not find support mechanisms and in best case they would turn to a low profit company with a low rate of success. On the other hand, those who succeed in receiving support would have a higher chance of becoming profitable companies. It goes without saying that valuation is normally done at the end of this stage.

(iii) Creation stage:

Creation stage occurs when the company sells its products, enters into market, and hires first employees (Salamzadeh, 2015). Some scholars believe that entrepreneurshipstops when the creation stage is ended (Ogorelc, 1999). This supports the argument that most of the theories which cover startups are borrowed from entrepreneurship theories and not management and organization theories (see Entrepreneurship theories focusing on startups). At the end of this stage, organization/firm is formed and corporate finance is considered as the main choice for financing the firm. Venture capitals could facilitate the creation stage, by funding the venture.

Challenges of startups

Prior research on challenges of startups addresses a number of common challenges among different startups (Shepherd et al., 2000). However, there are some common challenges, most of the challenges are unique, and the extent to which they affect startups differs. Some of the main common challenges are as follows:

¹ Some scholars consider pre-seed stage between bootstrapping and seed stage. Moreover, to some scholars bootstrapping is the pre-seed stage. Also, some scholars consider bootstrapping as startup stage. Some other scholars believe that the creation stage is identified as the period between the nascence of a business idea until the moment of sustainable profits. Here by startups the author means the early stage of any business, venture, or entrepreneurial activity until it turns into a firm.

(i) Financial challenges:

As mentioned earlier, finance is an integral part of the startup process. Any startup would face financial issues and problems for several reasons and in different stages (Colombo & Piva, 2008; Tanha et al., 2011; Salamzadeh, 2015 a, b; Salamzadeh et al., 2015). For instance, while bootstrapping the founder negotiates with family members and friends to convince them to invest in his/her idea. He/she invests in the business, and since the idea is in its early stages, he/she might need more money to expand it. Afterwards, in the seed stage, founder should look for angel investors and convince him/her with reasonable valuation plans. Next, in the creation stage, the founder should prepare a plan along with support documents to take advantage of venture capital.

(ii) Human resources:

Startups normally start with one founder and/or some cofounders. As time goes by, founder needs more experts to develop the prototype, MVP, etc. Then, he/she has to negotiate with people, make team and finally hire employees. This process is so critical to succeed and if the founder lacks enough knowledge of the field, the startup might fail due to human resource management issues (Salamzadeh, 2015 a, b; Salamzadeh, 2014).

(iii) Support mechanisms:

There are a number of support mechanisms that play a significant role in the lifecycle of startups. These support mechanisms include, angel investors, hatcheries, incubators, science and technology parks, accelerators, small business development centers, venture capitals, etc. Lack of access to such support mechanisms increases the risk of failure (Salamzadeh, 2015 a, b).

(iv) Environmental elements:

Last but not least is the effect of environmental elements. Many startups fail due to lack of attention to environmental elements, such as the existing trends, limitations in the markets, legal issues, etc. While a supportive environment facilitates the success of startups, a maleficent one could result is failure (Boeker, 1988). The environment for a startup is even more difficult and critical than for an established firm (Bruton & Rubanik, 2002; Van Gelderen et. al., 2005).

Conclusion

This paper explained and conceptualized startups by elaborating their lifecycle. The lifecycle includes three main stages, which are bootstrapping stage, seed stage, and creation stage. Moreover, the paper concluded that among the three main streams of research on startups, entrepreneurship theories are the most dominant theories. Finally, the paper considered four main challenges that startups might face. Researchers might elaborate each of the mentioned stages, and study the challenges in different areas. Also, scholars might compare the existing theories of management, organization, and entrepreneurship in order to develop a comprehensive theory of startups.

References

- Bhave, M. P. (1994). A process model of entrepreneurial venture creation. *Journal* of business venturing, 9(3), 223-242.
- Boeker, W. (1988). Organizational origins: Entrepreneurial and environmental imprinting of the time of founding. *Ecological models of organizations*, 33-51.
- Boeker, W., & Wiltbank, R. (2005). New venture evolution and managerial capabilities. *Organization Science*, *16*(2), 123-133.
- Brush, C. G., Carter, N. M., Gatewood, E. J., Greene, P. G., & Hart, M. M. (2006). The use of bootstrapping by women entrepreneurs in positioning for growth.*Venture Capital*, 8(1), 15-31.
- Bruton, G. D., & Rubanik, Y. (2002).Resources of the firm, Russian high-technology startups, and firm growth.*Journal of Business Venturing*, 17(6), 553-576.
- Colombo, M. G., & Piva, E. (2008). Strengths and weaknesses of academic startups: a conceptual model. Engineering Management, IEEE Transactions on, 55(1), 37-49.
- Davila, A., Foster, G., & Gupta, M. (2003). Venture capital financing and the growth of startup firms. *Journal of business venturing*, *18*(6), 689-708.
- Davis, G. F., & Cobb, J. A. (2010). Resource dependence theory: Past and future. *Research in the Sociology of Organizations*, 28(1), 21-42.
- Deakins, D. & Whittam, G.(2000): Business Start-Up: theory, practice and policy. In Enterprise and Small Business Principles, Practice and Policy, eds. S. Carter & D. Jones-Evans, 115-131. UK: Prentice-Hall.

- Dean, J. W., & Bowen, D. E. (1994). Management theory and total quality: improving research and practice through theory development. *Academy of management review*, 19(3), 392-418.
- Ebben, J., & Johnson, A. (2006).Bootstrapping in small firms: An empirical analysis of change over time.*Journal of Business Venturing*, 21(6), 851-865.
- Freear, J., Sohl, J. E., & Wetzel, W. (2002). Angles on angels: financing technology-based ventures- a historical perspective. *Venture Capital: An International Journal of Entrepreneurial Finance*, 4(4), 275-287.
- Gartner, W.B. (1985). A conceptual framework for describing the phenomenon of new venture creation, Academy of Management Review 10(4): 694-706.
- Hannan, M. T., & Freeman, J. (1977). The population ecology of organizations. American journal of sociology, 929-964.
- Harrison, R. T., Mason, C. M., & Girling, P. (2004). Financial bootstrapping and venture development in the software industry. *Entrepreneurship & Regional Development*, 16(4), 307-333.
- Hofstede, G. (1999). Problems remain, but theories will change: The universal and the specific in 21st-century global management. *Organizational Dynamics*, 28(1), 34-44.
- Hudson, J., & Khazragui, H. F. (2013). Into the valley of death: research to innovation. *Drug discovery today*, *18*(13), 610-613.
- Kaiser, U., & Müller, B. (2013). Team heterogeneity in startups and its development over time. ZEW-Centre for European Economic Research Discussion Paper, (13-058).
- Kamps, J., & Pólos, L. (1999).Reducing Uncertainty: A Formal Theory of Organizations in Action 1.*American Journal of Sociology*, 104(6), 1776-1812.
- Katz, J., & Gartner, W.B.(1988): "Properties of Emerging Organisation", Academy of Management Review, 13, 429-441.
- Lim, S. S., Platts, K., & Minshall, T. (2008). An exploratory study on manufacturing strategy formulation in start-up companies.
- Manchanda, K., & Muralidharan, P. (2014, January). Crowdfunding: a new paradigm in start-up financing. In *Global Conference on Business & Finance Proceedings* (Vol. 9, No. 1, pp. 369-374) Institute for Business & Finance Research.
- Martinsons, M. G. (2002). Electronic commerce in China: emerging success stories. *Information & Management*, 39(7), 571-579.
- Miles, R. E., & Rosenberg, H. R. (1983). The human resources approach to management: Second-generation issues. *Organizational Dynamics*, *10*(3), 26-41.
- Miller, D. (1990). Organizational configurations: Cohesion, change, and prediction. *Human Relations*, 43(8), 771-789.

- Núñez, L. G. (2007). The process and problems of business Start-Ups.*Pensamiento* y gestión: revista de la División de CienciasAdministrativas de la Universidad del Norte, (22), 232-255.
- Ogorelc, A. (1999). Higher education in tourism: An entrepreneurial approach. *The Tourist Review*, *54*(1), 51-60.
- Pettigrew, A. M., Thomas, H., & Whittington, R. (Eds.).(2001). Handbook of strategy and management. Sage publication: USA.
- Radovic Markovic, M., & Salamzadeh, A. (2012). The Nature of Entrepreneurship: Entrepreneurs and Entrepreneurial Activities. LAMBERT Academic Publishing (LAP): Germany. ISBN: 978-3-659-14311-3.
- Ritchie, J., & Richardson, S. (2000). Smaller business governance: exploring accountability and enterprise from the margins. *Management Accounting Research*, 11(4), 451-474.
- Salamzadeh, A. (2014). Youth Entrepreneurship in Developing Countries: Do Young People Know Their Potentials?, Proceedings of the *International Conference on Youth and Our Cultural Heritage*, May 15-18, Samsun, Turkey.
- Salamzadeh, A., Farsi, J. Y., Motavaseli, M., Markovic, M. R., & Kesim, H. K. (2015). Institutional factors affecting the transformation of entrepreneurial universities. *International Journal of Business and Globalisation*, 14(3), 271-291.
- Salamzadeh, A. (2015 a). Innovation Accelerators: Emergence of Startup Companies in Iran. In 60th Annual ICSB World Conference June. UAE (pp. 6-9).
- Salamzadeh, A. (2015 b). New Venture Creation: Controversial Perspectives and Theories. Economic Analysis, 48(3/4).
- Samuelsson, M., & Davidsson, P. (2009). Does venture opportunity variation matter? Investigating systematic process differences between innovative and imitative new ventures. *Small Business Economics*, 33(2), 229-255.
- Scholz, M., & Reydon, T. A. (2009). Organizational ecology: No Darwinian evolution after all. A rejoinder to Lemos. *Philosophy of the Social Sciences*.
- Schumpeter, J. A. (1934). The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle (Vol. 55). Transaction publishers.
- Serarols C. (2008). The process ofbusiness start-ups in the internet: a multiple case study, International Journal of Technology Management, 43 (1-3), 142-159.
- Shepherd, D. A., Douglas, E. J., & Shanley, M. (2000). New venture survival: Ignorance, external shocks, and risk reduction strategies. *Journal of Business Venturing*, 15(5), 393-410.
- Simon, H. A. (1993). Strategy and organizational evolution. *Strategic Management Journal*, *14*(52), 131-142.

- Tanha, D., Salamzadeh, A., Allahian, Z., & Salamzadeh, Y. (2011). Commercialization of university research and innovations in Iran: obstacles and solutions. *Journal of Knowledge Management, Economics and Information Technology*, 1(7), 126-146.
- Tosi, H. L., & Slocum, J. W. (1984). Contingency theory: Some suggested directions. *Journal of Management*, 10(1), 9-26.
- Tsai, S. D., & Lan, T. T. (2006). Development of a Startup Business—A Complexity Theory Perspective.
- Van de Ven, A. H., Hudson, R., & Schroeder, D. M. (1984).Designing new business startups: Entrepreneurial, organizational, and ecological considerations.*Journal of management*, 10(1), 87-108.
- Van Gelderen, M., Thurik, R., &Bosma, N. (2005).Success and risk factors in the pre-startup phase.*Small Business Economics*, 24(4), 365-380.
- Veciana, J. M. (1988): "Empresari I process de creaciod" empreses", Revista Economica de Catalunya, num.8. May-August.
- Vesper, K. H. (1990): New Venture Strategies, 2nd ed. Englewood Cliffs, NJ: Prentice Hall.