Pathology of acceleration programs in corporate accelerators of Iran

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Abstract

Purpose – This study was designed to detect the failures in Iranian accelerators. This paper attempts to identify these effects from the perspective of accelerator managers and founders of startups. The main goals of this article are as follows: (1) What are the failures of Iran's acceleration programs from the perspective of accelerator managers? (2) What are the failures of Iran's acceleration programs from the perspective of startup teams? (3) What are some of failures of the acceleration programs that both groups agree on?

Design/methodology/approach – It has been attempted to conduct semi-structured interviews with managers of corporate accelerators on the one hand and startups accelerated in these accelerators on the other. The interviewees were selected using snowball method and consisted of 9 accelerator managers out of 7 accelerators and 15 startups based on 5 accelerators. The analysis of the information extracted from the interviews and coding of the failure identified in the accelerators was performed using the thematic analysis method. In order to assess the validity of this study, an entrepreneurial doctoral student was asked to codify the interviews individually to compare the extracted codes.

Findings – Finally, 34 problems have been identified that are divided into four main themes related to mentorship, acceleration program, acceleration structure and infrastructure and internal startup team problems. Overall, the greatest agreement among the failures identified as wrong orientation by untrained mentors, the lack of complementary in ability and skills of team members, the lack of knowledge of mentors, the lack of acceleration managers in entrepreneurship and the lack of a proper leader in startup teams.

Originality/value – This study aimed to investigate the failures of corporate accelerators in Iran as a developing country, which is the first survey in Iran. We have many researches about the pathology and identify failures of accelerators, but in corporate accelerators, little research has been done. The authors have a classification of failures in corporate accelerators by using thematic analysis. In this study, accelerators' managers and founders of startups were interviewed and 34 failures were identified.

Keywords Accelerator, Startup, Acceleration program, Corporate accelerator, Pathology

Paper type Research paper

1. Introduction

Over the past decade, the phenomenon of startup accelerators in the economic and scientific world has become increasingly important (Hochberg, 2016; Lall *et al.*, 2013). The purpose of accelerators is to support entrepreneurs' technologies, ideas or products through a program to facilitate their entry into the market and develop an appropriate business (Dempwolf *et al.*, 2014). In the past, multiple positive effects of startup accelerator programs on their regional startup ecosystem stakeholders (Frimodig and Torkkeli, 2017; Hochberg, 2016) and participating startups (Hathaway, 2016; Smith and Hannigan, 2015) have been identified. In fact, these programs not only provide tangible resources such as capital or the workspace, but also through knowledge and guidance, consulting and utilizing the experiences of experienced entrepreneurs, business angels, corporate mentors and managers, provide regular help and support (Hochberg, 2016).

On the other hand, accelerator programs can provide a potential innovation model to well-established companies. Corporate accelerators are specific organizational forms for creating an outside-in open innovation process (Weiblen and Chesbrough, 2015). The outside-in process is defined as the integration of external knowledge using external partners (e.g. startups, universities, customers) to enhance the quality and speed of the company's innovation process (Gassmann and Enkel, 2006; Miller and Bound, 2011). In addition,

corporate accelerators are defined as "a time-limited program that early-stage companies and startups can apply for it if their product/service is considered to be in a particular area of accelerator activity" (Weiblen and Chesbrough, 2015). In another definition of corporate accelerators, Hochberg (2016) argues that when a company uses an accelerator to achieve the desired business outcome, either by engaging with or managing the services of other organizations, this is specifically the "corporate accelerator" (Hochberg, 2016).

We are also seeing an increase in corporate accelerator programs worldwide. Especially since early 2010, many companies have used these accelerators to internalize the opportunities offered by foreign startups (Weiblen and Chesbrough, 2015). Various accelerators have been launched in Iran since 2012 and have been working with different models and structures. There are currently 33 official corporate accelerators (website, 2019) out of 63 available accelerators in Iran (website, 2019), but accelerators still face various challenges and issues. On the other hand, it seems that many startups that operate under these accelerators do not achieve the desired output or are not satisfied with the acceleration services. In this regard, neither practical nor academic studies will guide companies on how to set up a corporate accelerator. More importantly, given the variety of goals in different corporate accelerator programs, processes, models and design configurations, including accelerator organizational integration in the parent company or stakeholder engagement in startups, corporate accelerator may be necessary to achieve the specific goals of an organization (Kanbach and Stubner, 2016).

According to the above, this study was designed to detect the failures in Iranian accelerators. This paper attempts to identify these effects from the perspective of accelerator managers and founders of startups. The main goals of this article are as follows:

(1) What are the failures of Iran's acceleration programs from the perspective of accelerator managers?

(2) What are the failures of Iran's acceleration programs from the perspective of startup teams?

(3) What are some of failures of the acceleration programs that both groups agree on?

In the following, after the introduction, an overview of the literature in this field focusing on the accelerator, acceleration programs and their consequences are provided to develop an interview framework. Then the research method is described and in the fourth section the findings are analyzed. The concluding section summarizes the results of the research and presents the most important identified failures. Finally, based on the identified failures, suggestions for future research are presented.

2. Literature review
Accelerator is an organization that offers startup teams a variety of services, including training, mentorship, networking, introducing to the investor and paying seed money. These organizations have been operating since the establishment of Y-combinator in the United States in 2010 (Kim and Wagman, 2014; Radojevich-Kelley and Hoffman, 2012). This study also focuses on accelerators and tries to identify the problems in their acceleration programs in Iran as a case study.

Many studies have been carried out in this field so far and various aspects of this phenomenon have been mentioned as an influential element in the entrepreneurial ecosystem. In this section, we review these articles to provide an overview of corporate accelerators, their acceleration programs and ultimately the problems and failures with their acceleration programs. This section helps to formulate the interview structure and research framework appropriately to identify further acceleration related to corporate accelerators in Iran.

2.1 Corporate accelerator
There are two different models of accelerators that include generic accelerators and proprietary or corporate accelerators (Cohen and Hochberg, 2014). Unlike corporate accelerators, which focus on specific industries and technologies, generic accelerator programs target different types of startups. Well-known corporate accelerators include Bayer (health care), Alliance (insurance), Disney (entertainment) and Coca-Cola (packaged) (Kohler, 2016). But in the last few years, we are seeing more attention in the area of corporate accelerators. Companies typically use corporate accelerators to engage with external innovation and stimulate organizational innovation through engagement with entrepreneurial startups (Hochberg, 2016; Weiblen and Chesbrough, 2015) and express talent attraction as the goal of corporate accelerators (Kohler, 2016).

In the past, most studies have focused on non-organizational accelerators such as self-governing accelerator programs (e.g. the Y Combinator in the United States) (Kim and Wagman, 2014; Radojevich-Kelley and Hoffman, 2012) or generic accelerator programs (e.g. Mars accelerator in Canada) (Malek *et al.*, 2014); in recent years, however, this trend has shifted toward corporate accelerators. The business model of accelerators to generate revenue is to receive stocks from startups in exchange for services and initial capital. This percentage of stocks is generally between 5 and 7% worldwide (Clarysse and Yusubova, 2014; Fehder and Hochberg, 2014), while in Iran, this percentage varies between 5 and 35%.

Heinemann (2015) shows that corporate accelerators are mostly founded by data base companies that attract capital through venture capital. He believes that the main purpose of these accelerators is to help well-established companies innovate along the value chain and distribution channels (Heinemann, 2015). The emergence of corporate accelerator is driven by the desire of many companies to approach innovation and the emerging technology (Clarysse *et al.*, 2015). The ability to manage these corporate accelerators may be critical to the success of the organization. Corporate accelerators are recreational Interventions, which are used to "grow and manage stocks and values of startups to accelerate innovation and gain a competitive advantage" (Dempwolf *et al.*, 2014). Their key goals include accelerating innovation faster than what can happen in the company, finding future products (or beyond), investigating products or threats to existing products, creating a new market for products, and ultimately developing partners and service providers through partnerships in new companies. The focus here is on destructive innovation, which focuses on creating and exploiting new markets and meeting new customer needs (Christensen and Raynor, 2013). Researchers believe that companies should decide to build acceleration programs independently or outsource this activity to an external partner such as TechStars. On the other hand, companies can partner with other companies to build a joint accelerator or join an existing accelerator (Hochberg, 2016).

2.2 Acceleration program
Accelerators, like any other organization, have a distinct business model, and their formation requires a detailed understanding of the process. To this end, in 2012 L. Barrehag *et al.* documented the acceleration process in a paper. This process is presented as minimum viable accelerator (Petersson *et al.*, 2012) and is discussed in another article by Hadi Qureshi and Reza Asghar in 2019 (Ghorashi and Asghari, 2019). In this process, six main steps are taken to achieve the structure of minimum viable accelerator, which includes preparation, awareness, application, acceleration program, demo day and post-demo day. The first three steps are intended to shape the accelerator and introduce it to the ecosystem, and the final three steps are to assist the startups absorbed in the accelerator program. The process is presented in the following figure (see Figure 1).

Figure 1.
Minimum viable
accelerator structure
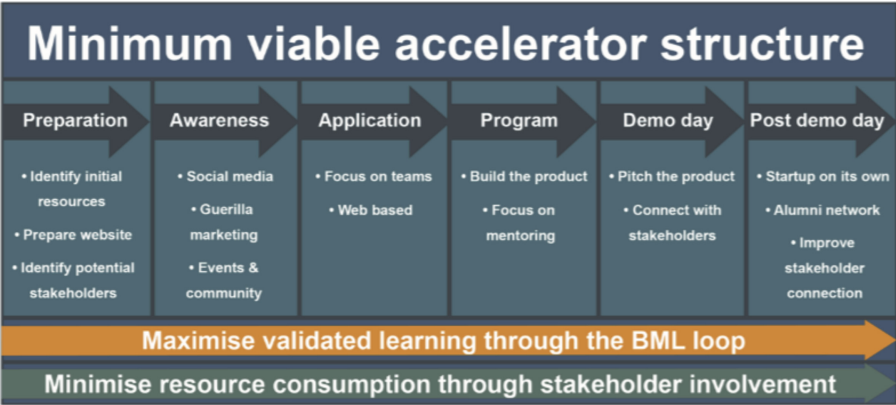
Source(s): Ghorashi and Asghari, 2019

After understanding the process of forming an accelerator and its functional system, it is also necessary to clearly identify its elements and activities. In general, there are various parts and factors involved in an accelerator, the main ones being the corporate accelerator, the parent company and the executive team. The core of the accelerator program in these accelerators is services such as mentoring, networking, coaching and investor-oriented events. In this program, the corporate accelerator acts as a bridge between the parent organization and the startups and extracts resources, credit, market and capital from the parent organization and injects them into identified startups (Bauer *et al.*, 2016). In recent years, the acceleration process has been presented in various models. In 2018, Richer and his colleagues have presented a model for the program that covers all accelerator activities comprehensively (Richter *et al.*, 2018) (see Figure 2).

These programs generally take between three and six months and can be injected as seed money into each startup up to US$100,000 depending on the needs of startups. Researchers have identified a variety of applications for these programs and corporate accelerators, which may include in-house accelerator, hybrid accelerator, powered by accelerator and consortium accelerator depending on the type of management and structure. The major difference between the consortium accelerator model and the other models is that several parent companies jointly launch an accelerator to meet their intra-organizational entrepreneurial

Figure 2.
Business accelerator
process model
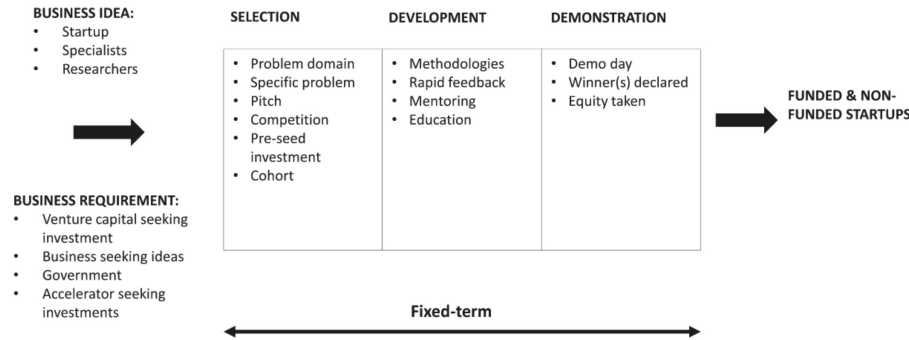
Source(s): Richter *et al.*, 2018

needs (Moschner *et al.*, 2019). There are two general models for corporate accelerators in Iran. The first model is called the cohort model, where the acceleration process is initiated through a recall and within a specified interval (between 3 and 6 months). The second model is a non-cyclic (ongoing) model where there is no time limit for entry of startup teams, but it also covers a specific timeframe (about 6 months). According to the latest statistics, there are 33 corporate accelerators operating in Iran, over 70% of which use a cyclic model for their acceleration program (website, 2019). The highlight of these accelerators is the lack of proper outputs and the many challenges and failures in their accelerator programs. To this end, these failures need to be analyzed in a structured way to prevent the loss of accelerator resources and the failure of startups. This study was also designed to identify and structure these failures to prevent inappropriate accelerator outputs.

3. Research method
The purpose of this study was to evaluate and identify the failures in corporate accelerators in Iran. To this end, it has been attempted to conduct semi-structured interviews with managers of corporate accelerators on the one hand and startups accelerated in these accelerators on the other. The interviewees were selected using snowball method and consisted of 9 accelerator managers out of 7 accelerators and 15 startups based on 5 accelerators. Each of these interviews generally takes between 30 and 90 min in person. The research continues until new information is added to the model. The analysis of the information extracted from the interviews and coding of the failure identified in the accelerators was performed using the thematic analysis method (Braun and Clarke, 2006). In order to assess the validity of this study, an entrepreneurial doctoral student was asked to codify the interviews individually to compare the extracted codes.

3.1 Data and sample community
In this section, the findings of the study are analyzed. Semi-structured interview tools were used in this study and 30–90 min interviews were conducted with the managers of accelerators and startups. Acceleration managers were selected randomly from a company based in Iran and the snowball method was used to select the accelerators managers. The selection of startups has also been done randomly from startups exited from the acceleration phase of corporate accelerators in Iran. The information about the interviewees is given in the table below (see Table 1).

Accelerator managers' information		Startups' information	
Gender		*The number of team members*	
Male	7	2 members	2
Female	2	3 members	4
Education		4 members	5
BA	1	5 members	3
MA	4	6 and above	1
PhD and higher	4	*The activity area of startups*	
Age		Information technology	5
Less than 25	2	Training	2
25–30	4	Artificial intelligence	3
30–35	2	Tourism	1
40 and above	1	Other areas	4

Table 1.
Interviewees'
information

4. Data analysis

In this section, we try to present information from the research process. To this end, the interview was initially conducted with two categories of interviewees, including accelerator managers and startup founders, which included a total of 9 accelerator managers and 15 startups exited from the accelerator program. Each of these interviews is then individually coded, with primary and secondary codes extracted for each. In order to prevent the article from prolonging, the following table provides some examples of identified and aggregated secondary code failure along with primary codes. In order to show the interviewees in this table, the code A is used for accelerators and S code is used for startups. For example, S12 means the 12 startup interviewed by the researcher (see Table 2).

Similarly, this process has been performed for all interviews and secondary codes and acceleration-related failures have been extracted. The following table shows all the secondary codes obtained from the interviews and the interviewee code for each. In sum, these secondary codes are referred to as sub-themes or acceleration program effects, and four main themes are categorized from the context of the interviews. These major themes include mentorship issues, acceleration program issues, accelerator structure and infrastructure issues and internal issues related to startup teams. The arrangement of these identified failures was presented by the interviewees based on the number of repetitions of each failure and the extent of agreement (see Table 3).

5. Conclusion

Given the high failure rate of startups and subsequent accelerators failure, this study aimed to investigate the failures to corporate accelerators in Iran as a developing country. For this purpose, two semi-structured interviews were designed to identify failures from the perspective of accelerator managers on the one hand and startup founders on the other. The interviews, which generally took between 30 and 90 min, analyzed the views of 9 accelerator executives and 15 startup founders who exited the accelerator program. These interviews were coded and analyzed using the theme analysis method. Finally, 34 problems have been

Interviewees' code	Primary code	Secondary code
A1	"One of our current dilemmas is that we do not have a specific process or a structured model to see if our mentors are performing well"	Lack of structure for evaluating mentors
S2	"The acceleration program was good, but the mentors, instead of the right guidance, led me to a path that ruined my one-year startup life"	Wrong orientation by untrained mentors
S5	"Unfortunately for the accelerators, the teams do not waste time and usually their schedules do not go as planned"	No regular acceleration program
A7	"I think one of our problems is that we've just benchmarked the acceleration process from overseas and implemented it without conforming to the conditions"	No native acceleration programs
A6	"Usually evaluating startup inputs is a taste rather than a set of criteria"	Incorrect evaluation of startups to enter acceleration period
A2	"The duties of each person in the acceleration team are not exactly clear"	Lack of a fixed job description for the accelerators executive team
S5	"The goals of each member are different"	Lack of unified purpose among members of startup teams

Table 2.
Sample primary and secondary codes extracted from interviews

Original theme	Sub-themes	Interviewees' code	The number of repetitions
Mentorship-related failures	Wrong orientation by untrained mentors	A1-A3-A8-A9-S3-S4-S7-S8-S12-S13-S14-S15	12
	Knowledge weakness of mentors	A2-A3-A6-A7-A9-S1-S2-S10-S11-S14-S15	11
	Not passing the mentorship principles by mentor	A3-A4-A5-A8-A9-S7	6
	Lack of structure for evaluating mentors	A1-A6-A8-A9-S5-S9	6
	No specialized mentor	A2-A5-S1-S6	4
	Unavailable powerful mentors during acceleration period	A2-A3-A6-A9	4
	Mentor selection based on relationships	A5-A8	2
	Lack of comprehensive mentor database	A1	1
Failures related to the acceleration process	Not all startup team members participate in the acceleration period	A1-A3-A4-A8-A9-S2	6
	No regular acceleration program	A5-S3-S5-S9	4
	Lack of comprehensive and optimal acceleration program	A2-A4-A5-A8	4
	Time pressure and increased stress for teams	S1-S5-S9	3
	The weakness of the executive team in implementing the acceleration process	A4-A6-S3	3
	Poor quality of training courses	S1-S8	2
	Lack of native acceleration programs	A6	1
Failures related to accelerator structures and infrastructures	Lack of accelerator managers' expertise in entrepreneurship	A2-A5-A6-A7-A9-S12-S13-S14-S15	9
	Acceleration away from the university	A1-A2-A4-A5-A6-A7-S3-S14	8
	High percentage of shares taken by the accelerator	S1-S2-S4-S5-S6-S8-S9-S14	8
	Incorrect evaluation of startups to enter acceleration period	A1-A5-A6-A7-A8-A9	6
	The lack of a hotline and postcode for startup teams by the accelerators	A1-A3-A6-S10-S11-S15	6
	Inadequate linkage of accelerators with public and private organizations	A5-A9-S2-S11-S13	5
	Lack of space dining, rest and play	A2-A8-S1-S5-S6	5
	Role conflict in the accelerator executive team	A5-A6-A8-A9	4
	Not specialized in the field of accelerators	A1-A3-S6	3
	Low Internet speed	S3-S7	2
	Lack of optimal organizational structure in accelerators	A5	1

Table 3.
Secondary codes and failures extracted from interviews

Original theme	Sub-themes	Interviewees' code	The number of repetitions
Internal failures related to startup teams	Incomplete ability of team members based in the acceleration period	A1-A4-A5-A8-A9-S1-S2-S4-S6-S8-S10-S11	12
	Not a good leader on the team startup	A1-A5-A7-A9-S6-S8-S9-S12-S14	9
	Failure to adhere to the acceleration schedule and failure to meet the goals at the time of acceleration	A1-A3-A4-A5-A6-A7-A8-A9	8
	Low level of knowledge and experience of startup teams	A1-A4-A6-A8-S5-S8-S12	7
	The lack of team cohesion in startups	A1-A3-A5-A6-A8-A9	6
	Conflict between startup team members	A1-A2-S5-S8-S9-S15	6
	Lack of unified purpose among members of startup teams	A3-S8-S12-S14	4
	Non-commitment team startup members	A2-A6-A9	3

identified that are divided into four main themes related to mentorship, acceleration program, acceleration structure and infrastructure and internal startup team problems. These 4 themes are presented in the following model in a comprehensive way: (see Figure 3).

Below is a brief description of each of the themes and their content:

5.1 Theme 1. failures related to mentorship

Mentorship, as one of the most important shaping elements of accelerators (Moschner et al., 2019), plays a key role in the success and failure of startups and the output of accelerator programs. The wrong choice of mentor by the accelerator executives and the presentation of mentor by people who do not have sufficient knowledge of mentoring has failed many startups in Iran. Mentors deliberately or inadvertently provide startup teams with information that leads them in the wrong direction, leading to the loss of accelerator resources and the failure of startups. Some of these mentors, who made these teams gone further than their path to success, enter the ecosystem through lobbying and communication and have no expertise or competence for mentorship. Accelerator executives also endorse this point, believing that one of the main pests of Iran's entrepreneurial ecosystem and the reason for the high percentage of startup failures is the presence of weak, unprofessional mentors. In this study, a total of 46 times during the interviews, cases of this category of failure were divided into 8 major failures.

5.2 Theme 2. acceleration program related issues

The acceleration program is the execution structure of the accelerator from the entry of a startup until they exit. This phase, which generally takes 3–6 months, requires commitments from both the accelerator and the startup. The accelerators need to be aware of what the program will look like on a daily basis and have planned for startup team moment by moment. In addition, due to the lack of commitment of the startup teams to be present effectively and in sync with the acceleration schedule, it does not result in a good exit from the acceleration period and no investment is willing to invest in them. In this study, a total of 23
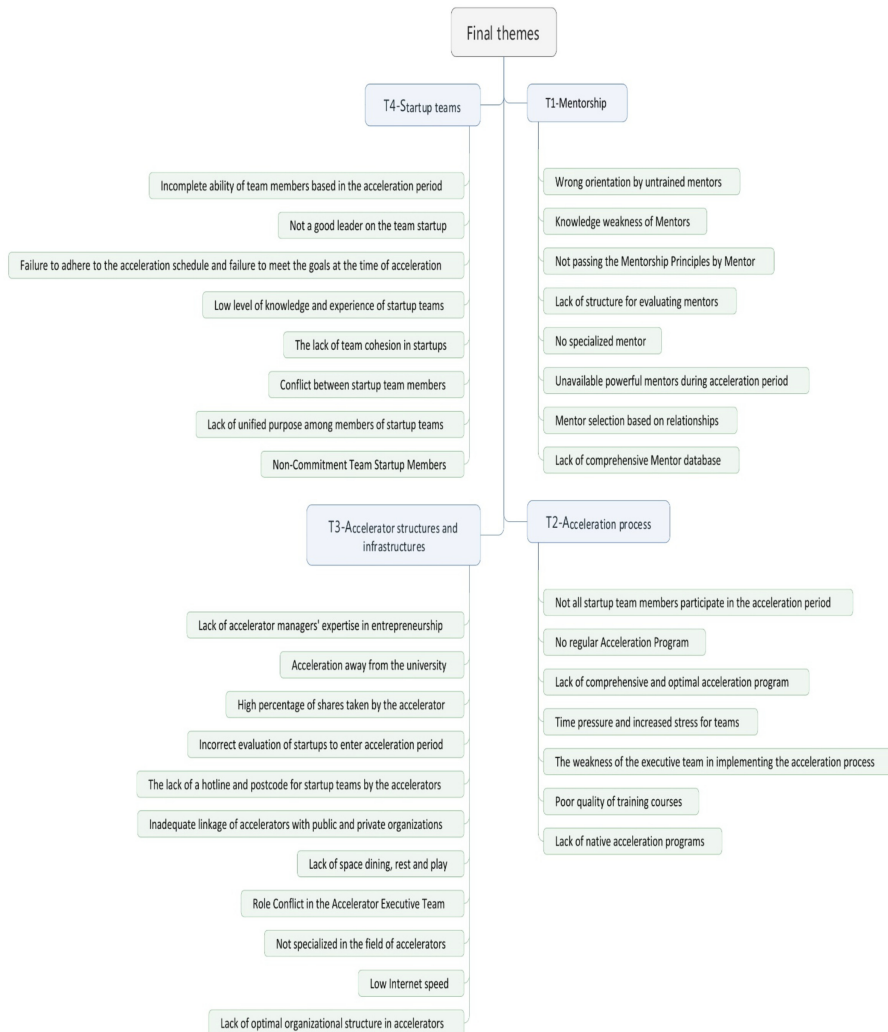
times during the interviews, cases related to this category of failure were separated into 7 major failures.

5.3 Theme 3. failures related to accelerator structures and infrastructures

In order to get a good output of your acceleration program, the accelerator, in addition to the resources and good execution team, needs some elements as the infrastructure and structures on which all the accelerator activities are implemented. Some of the failures identified in this theme are due to lack of meritocracy. Unfortunately, due to the weakness of the accelerator management and the choice of corporate accelerator manager from the parent organization that generally has no expertise in acceleration, all of the corporate accelerator activities in this program are a failure. The result of this type of management will be a lack of planning,

scheduling disruption and many other problems that will cause startups and subsequently accelerators to fail. Location near campus, high speed Internet, lack of proper network and communication with industry and university elements, and many more, are infrastructures that any accelerators need them and if they are weak or they do not have such infrastructures, will not accelerate to their desired output. In this study, in the context of interviews with accelerator managers and startups, a total of 54 such cases were categorized into 11 failures.

5.4 Theme 4. internal failures related to startup teams
Some failures are unrelated to the accelerator program and its infrastructure but only related to the startup teams. Some of the most important failures include inadequate ability of team members in the acceleration period, inadequate leadership in the startup team, failure to adhere to the acceleration schedule, failure to meet the goals in the acceleration time, etc. As the title of this theme reveals, these side effects all refer to the internal failures of startup teams and have been mentioned 57 times in the interviews. These failures are finally classified into eight major failures.

After analyzing the results of these four identified themes, it can be stated that the most important mentorship failures include mistaken orientation by untrained mentor, weak mentor knowledge, lack of passing the mentorship course and lack of structure for mentor assessment. In terms of the acceleration process, not all startup team members are involved in the acceleration period, the lack of a regular acceleration plan and the lack of a comprehensive and optimal acceleration plan are the most significant disadvantages. From the perspective of accelerator structures and infrastructures, the most significant failures include the lack of expertise of accelerator managers in entrepreneurship, the accelerators distance from universities, the high percentage of stocks which has been taken by the accelerator and the inaccurate evaluation of startups entering the acceleration period. Finally, the lack of complementary in ability and skills of team members, inadequate leadership, failure to reach goals at a time of acceleration, low knowledge and experience, are the most significant internal failure to startup teams.

Overall, the greatest agreement among the failures identified as wrong orientation by untrained mentors, the lack of complementary in ability and skills of team members, the lack of knowledge of mentors, the lack of acceleration managers in entrepreneurship and the lack of a proper leader in startup teams. In the meantime, wrong orientation by untrained mentors and lack of complementarity in ability and skills of team members has the most agreement among startup founders, and lack of appropriate leader in startup teams and the accelerators distant from campus has the most agreement among accelerator managers.

6. Suggestions for future research
In view of the failures identified in this study, the following are recommended for future research by researchers:

(1) Providing a framework for evaluating mentors with the aim of selecting mentors for acceleration courses;

(2) Designing a model for structured acceleration of startups and identify key success factors for these courses;

(3) Designing a framework for selecting startups to enter the acceleration period and

(4) Investigating the likelihood of the team success in the acceleration period based on data from previous acceleration courses.

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