Minimum Viable Accelerator: Planning, Starting and Improving Startup Accelerator Programs under a Lean Approach

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Startup accelerators positively influence their surrounding entrepreneurial ecosystem. This paper establishes a theoretical framework for a Minimum Viable Accelerator (MVA), a first-time accelerator program following lean principles. The MVA aims to improve the establishment and performance of accelerator programs. The resulting framework comprises six different stages, namely preparation, awareness, application, program, demo day and post demo day. The MVA framework focuses on improving validated learning through the implementation of Ries' (2011) BML loop and the principle of structural questions. Simultaneously, MVAs reduce the amount of resources expended for setting up new programs through the involvement of the accelerator's stakeholders.

INTRODUCTION

During the last decade, the phenomenon of startup accelerators has become increasingly important within the economic and scientific world (Hochberg, 2016; Lall, Bowles, & Baird, 2013). Accelerators aim to support entrepreneurs' technologies, ideas or products through a program to facilitate their market entry and the development of a viable business (Dempfwolf, Auer & D'Ippolito, 2014). In the past, multiple positive influences of startup accelerator programs on both their regional startup ecosystem stakeholders (Frimod & Torkkeli, 2017; Hochberg, 2016) and the participating startups (Hathaway, 2016; Winston-Smith & Hannigan, 2015) could be identified.

This paper aims to provide a framework for establishing startup accelerator programs to further support their global distribution. Therefore, within this paper the researchers develop a theoretical framework for a Minimum Viable Accelerator (MVA), a first-time accelerator program that combines lean principles with a common startup accelerator framework.

The paper starts by defining the term MVA through a comparison of distinct definitions for startup accelerators and the combination with the core characteristics of Eric Ries' (2011) Minimum Viable Product (MVP). Furthermore, the researchers identify the stakeholders of an accelerator's ecosystem and discuss how value can be created through their interaction with an accelerator's ecosystem. Based on the prior findings, the structure of the MVA and its crucial activities is established. The researchers conclude with the influences that the findings have on the theoretical and practical field, the limitation of this study and an overview of different topics for potential future research.

DEFINITION: MINIMUM VIABLE ACCELERATOR

Startup Accelerator

In order to establish a theoretical framework for an MVA, a clear definition of the term startup accelerator is crucial. Throughout the scientific literature, several definitions of the term accelerator are given. Fishback, Gulbranson, Litan, Mitchell and Porzig (2007) stated that accelerators are organizations that offer a suite of professional services, mentoring and office space in a competitive program format. Regarding the authors, the accelerator assists in both business and product development. Even though this definition represents an early attempt at finding a common definition for the terminology, it already identified important characteristics like mentoring and competitive application process. In the same way, Hathaway (2016) claimed that startup accelerators support early-stage, growth-driven companies through education, mentorship and financing in a fixed-period, cohort-based setting. Even though Hathaway used a different definition for his own research, his initial statement reflects Fishback et al.'s (2007) prior claims, and hence a startup accelerator's characteristic of being supportive to early-growth startups by providing intellectual and potential financial resources.

A third definition for startup accelerators that is widely used in the academic literature is given by Cohen and Hochberg (2014). The authors defined accelerators as "a fixed-term, cohort-based program, including mentorship and educational components, that culminates in a public pitch event or demo day" (p.4). Contrary to Hathaway's (2016) statement, Cohen and Hochberg (2014) do not include financial aspects in their definition, thus leaving the possibility open for non-profit and for-profit programs. However, the researchers include an interesting new component, the final demo day in which the overall accelerator program highlights. Furthermore, the definition includes most of the previously-named characteristics for accelerators that were given by other authors.

Unfortunately, the definition lacks an illustration of the context in which startup accelerators interact with their surrounding ecosystem. Dempwolf et al. (2014) claimed that corporate accelerators engage in the provision of seed capital and various combinations of mentoring, technical assistance, networking and facilities to entrepreneurs, inventors and startup teams to advance certain goals of the corporate institutional parent. The researchers cite CorpVenturing, a platform that assists 5,000 companies globally with investing in innovation strategies. The platform suggests that the corporate accelerators are – among other things – motivated by the creation of an ecosystem of users and customers for own key products, potential financial interests, high-potential startups and the access to new technologies (CorpVenturing, n.d.). The authors thus add an important aspect to the prior descriptions, namely the motivation to create additional value for the own company. This statement claims that corporate accelerator programs are not set up by altruistic motivations but rather focus on reaching certain organizational goals. Furthermore, Dempwolf et al. (2014) are the first researchers who explicitly name networking as a supportive function of corporate accelerators. This reveals that the establishment of a startup accelerator also aims to create network-induced value. However, in the case of startup accelerators, the value creation is unlikely to be only existent for the organizational host itself. Simultaneously, investors and the participating startups are also likely to be motivated through value creation for themselves. This paper will later on discuss further potential stakeholders that interact with an accelerator's ecosystem.

For now, we conclude that the different definitions for startup accelerators have shown many similarities as well as a few differences. Cohen and Hochberg's (2014) named characteristics for startup accelerators provide a good basis for this paper's definition, although they lack the aspects of the motivation for value creation by the accelerator's stakeholders. This paper thus adjusts the authors' definition with the value-specific networking found component to conclude a final definition:

Startup accelerators are fixed-term, cohort-based programs that provide mentorship, educational components and networking, culminating in a public pitch event or demo day and motivated by their entrepreneurial ecosystem's stakeholder value creation.

Minimum Viable Accelerator (MVA)

The term MVA is based upon Eric Ries' (2011) lean startup methodology and its coherent framework of an MVP. Ries stated that "the MVP is that version of the product that enables a full turn of the Build-Measure-Learn loop with a minimum amount of effort and the least amount of development time" (p. 77). The Build-Measure-Learn (BML) loop describes a process chain through which the growth process of a lean startup proceeds by building a product, measuring data and consequent learning to implement new ideas into the upcoming rotation. In Ries' (2011) opinion, the key to entrepreneurial success relates to the learning progress that an organization undertakes, in a process that he describes as validated learning. Batova, Card and Clark (2016) summarized validated learning as a process that seeks empirical proof that a startup has uncovered true information about its business model. The researchers claimed that validated learning allows the startups to understand what customers want.

It can be seen that the lean methodology is strongly correlated with the reflection power and the learning ability of founders. Therefore, validated learning can be seen as the first crucial component for the definition of an MVA. Ries (2011) indicated that the complexity of an MVP cannot be decided formally as it would differ in each case. Nevertheless, he stated that products should be launched early and tested to avoid developing products or services that are later on unwanted by the market. One of the main aims of launching an early MVP is thus the reduction of waste and hence the saving of resources and increasing efficiency. Conversely, he claimed that the development of an MVP can require additional time as the founders have to ensure the measurability of crucial metrics. In conclusion, the idea of resource saving is an important aspect for the lean methodology and thus it should be included as the second indispensable component of the MVA. However, as Ries (2011) indicated with the possible additional time for developing an MVP, the focus on waste reduction cannot be seen as a strict rule but must always be compared with the overall goal of validated learning. For the further purpose of this research, an MVA is defined as follows: "A Minimum Viable Accelerator is a first-time startup accelerator that maximizes the amount of validated learning with a minimum of resources expended."

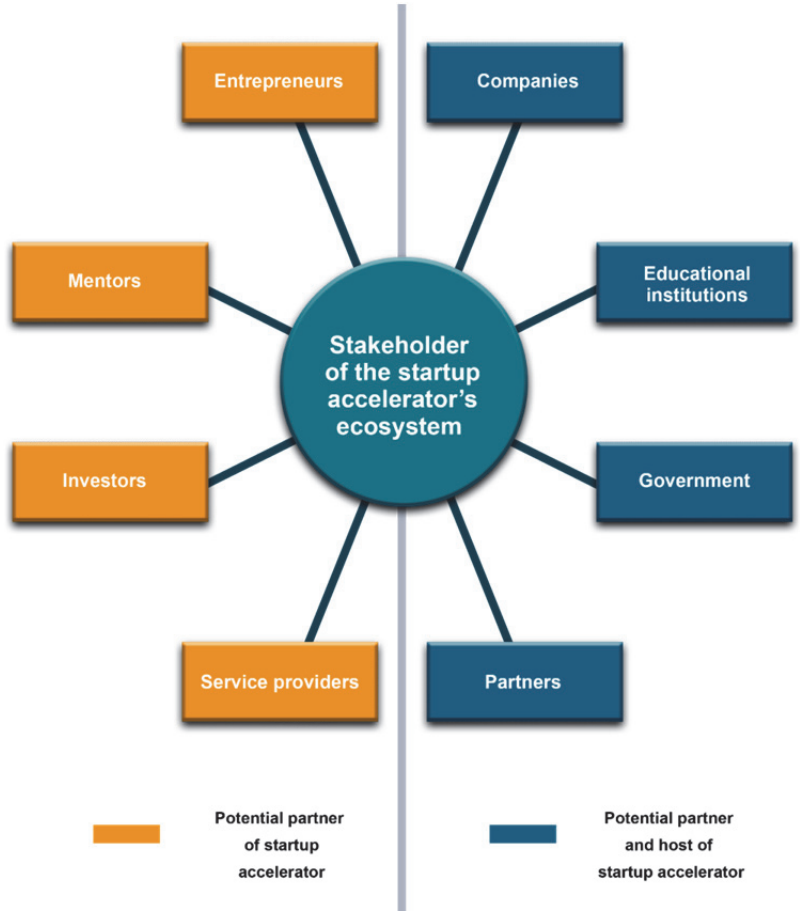
This definition stresses the importance of validated learning for first-time startup accelerator programs, while it describes the importance of resource limitation. Simultaneously, the definition includes the prior-given characteristics and structural contents of startup accelerators.

CONCEPTUAL FRAMEWORK: MINIMUM VIABLE ACCELERATOR

Stakeholders of the Accelerator's Ecosystem

By definition, startup accelerators are motivated by the value creation for their stakeholders. However, the work of startup accelerators can create value for a diverse number of possible stakeholders. Within this section, the eight stakeholder groups will be identified and the respective ways in which they can interact or create value will be analyzed. The ecosystem of an accelerator can include entrepreneurs, investors, mentors, partners, companies, service providers, educational institutions and government (Figure 1). It is noteworthy that the separate roles are not mutually exclusive, enabling organizations or individuals to embody several roles at once.

FIGURE 1
ILLUSTRATION OF THE STAKEHOLDERS OF A STARTUP ACCELERATOR'S ECOSYSTEM



Entrepreneurs

Even though entrepreneurs can participate in different ways within the accelerator ecosystem, e.g. as mentors, speakers or investors, this respective group of stakeholders solely focuses upon entrepreneurs who participate within a startup and thus as a potential participant of the accelerator's program.

Entrepreneurs and their respective startups often benefit from access to future capital and business networks, mentors and diverse contacts to other stakeholder groups (Barrehag et al., 2012). Additionally, entrepreneurs gain value through the knowledge transfer of appropriate business knowledge (Frimodig & Torkkeli, 2017), which can prevent crucial reasons for the failure of the business (Knight & Cavusgil, 2004; Gabrielsson and Kirpalani, 2012). Third, accelerator programs often provide entrepreneurs with different types of resources, such as office space, finance and services (Frimodig & Torkkeli, 2017; Cohen 2013), enabling experimentation with less risk for the individual entrepreneur (Hochberg, 2016). Finally, Winston-Smith and Hannigan (2015) identified that participants of top accelerator programs reached the stages of exit significantly faster, thus indicating that time-saving can represent another value aspect generated for entrepreneurs.

Investors

Barrehag et al. (2012) indicated that investors are the second stakeholder group for whom value is created through the interaction with startup accelerators. The accelerator functions as a pre-screening process for high-potential investment opportunities, which represents a resource and time-saving for

investors (Hochberg, 2016). The application process for the accelerator program selects high-potential teams from a larger population of candidates. In result, during pitch events or demo days, regional or abroad investors are enabled to screen a greater number of multiple high-potential startups within a single event. Often, non-local investors who travel the region for such specific events also choose to look at other regional opportunities in the area. This more efficient screening process attracts investors to regions in which the costs of searching for investment opportunities would not have been justified otherwise (Hochberg, 2016). It is noteworthy that the increased chance for seed investments thus not only applies to former participants of an accelerator program but it also improves the general equilibrium of an ecosystem and beneficially influences startups that did not participate in an accelerator program (Hochberg, 2016).

Mentors

Most mentors are not formally employed and do not receive mentionable financial incentives (Barrehag et al., 2012). Sometimes mentors are compensated through a symbolic compensation. While there are many mentors motivated by altruistic reasons who focus on the long-term development of an improved entrepreneurship ecosystem (Feld, 2012), there are different ways in which the interaction with a startup accelerator can create value for them. Several mentors have an interest in keeping up with the latest developments within the startup community, whereby they want to interact with the accelerator's founder teams (Hochberg, 2016). Additionally, in some cases the mentors started working for one of the accelerator startups after the final demo day (Barrehag et al., 2012). Feld (2012) further argued that the best mentor relationship eventually becomes a two-way relationship by nature, which implies that the value generated through the interaction with startup accelerators can also be knowledge.

Government

Barrehag et al. (2012) identified that several accelerator programs are funded through the government itself. For governmental institutions, interacting with a startup accelerator can support the election campaigns of politicians (Feld, 2012). Startup accelerators represent a trending new phenomenon that is targeted to support the long-term growth of an economic region (Hochberg, 2016). The focus on improving the entrepreneurial activity within a startup accelerator's ecosystem will eventually lead to new value in society, thus reflecting the ultimate outcome of an entrepreneurial ecosystem (Stam & Spigel, 2016). Especially regional or lower-level political institutions like municipalities might be interested in the growth of regional economics as their relationship and generated value is more closely connected to the accelerator's success compared with federal-level governmental institutions.

Educational Institutions

The broader terminology of educational institutions allows the inclusion of schools, universities of applied sciences and even adult education centers. However, most commonly cited as a stakeholder of a startup ecosystem are universities (Feld, 2012; Stam & Spigel, 2016).

Through the interaction with a startup accelerator, educational institutions can provide their students with a new offer. Especially non-business-related courses often do not focus on entrepreneurial knowledge and thus they can provide their students with new opportunities through an external partner (Feld, 2012). This offer is further supported by the potential supply through finances and office space by the respective accelerator program. The educational institution gains access to new resources through its interaction (Feld, 2012; D'Este & Perkmann, 2010). Second, the members of the educational institution receive new network connections to increase bonds above the organizational borders (Feld, 2012), which might additionally result in publicity for the institution itself. Furthermore, D'Este and Perkmann (2012) identified that the motivations for universities to interact with the industry were mostly research related, although to some degree educational institutions are also interested in the commercialization of their knowledge and scientific projects. This could be especially important if institutions like technology transfer offices are not existent (Feld, 2012). Put simply, the interaction with a startup accelerator can create value for educational institutions in terms of knowledge, network, opportunity and resources.

Service Providers

Feld (2012) described service providers as institutions or individuals that provide a service that can be helpful to the accelerator's startup teams. Lawyers, accountants, recruiters and consultants would thus be common examples of potential service providers. Through the interaction with startup accelerators, service providers can develop long-term business relations with potentially fast-growing companies and thus future customers (Feld, 2012).

Companies

While Feld (2012) distinctively identified only large companies as potential participants of a viral startup ecosystem, for the accelerator's ecosystem small and medium-sized enterprises (SMEs) can be just as relevant. This paper aims to provide a general framework through which the establishment of accelerator programs can be achieved with a limited amount of resources. Hence, establishing startup accelerators should be just as feasible for SMEs as it is for large companies, whereby they will be included in the definition.

There are five different ways in which companies can interact with an accelerator's ecosystem (Hochberg, 2016). First, a company can participate in an existing accelerator program, e.g. as a mentor, investor or sponsor. Then again, companies can contract others to power the startup accelerator in their name, whereby the contracted partner administrates and runs the respective program. Some of the best-known examples of such a cooperation include the Disney Accelerator powered by Techstars or the Barclays Accelerator powered by Techstars. Third, companies can partner with other corporations to jointly run a partnership accelerator. A fourth model is a completely internally-run accelerator that aims to accelerate innovations strictly within the organizational boundaries. Finally, companies can launch corporate accelerators with an open application process for outside teams and startups (Hochberg, 2016).

While the amount of value created depends on the kind of interaction method, there are several benefits that companies can gain through the cooperation. Therefore, large companies such as Microsoft or Accenture aim to create an ecosystem around their products or services through their accelerators by connecting lead users and promising startups (Pauwels, Clarysee, Wright, & Van Hove, 2016). Creating a specific ecosystem around a company's core technology can support the organization's research activities (Nesta, 2014) and enable establishing customer connections and new network access (Pauwels et al. 2016). In addition, corporations use the interaction with startups as a new source of innovation to keep up with current technological trends (Hochberg, 2016; Kohler, 2016). Kohler (2016) clarified that the interaction with startups can even support the creation of new product lines for the company. Moreover, the author states that startups can become both future business partners and potential investment opportunities.

Then again, the interaction with a startup accelerator's ecosystem can further create value in terms of human resources. First, corporate activities can provide access to a new pool of talent if the respective companies use corporate branding and PR efficiently. Second, the cooperation with accelerator programs enables the rejuvenation of one's own corporate culture (Kohler, 2016). Kohler (2016) states that "public commitment to supporting innovation sends strong signals to internal staff and external partners" (p. 11).

Partners

Partners represent the final stakeholder group for a startup accelerator's ecosystem. Partners relate to other institutions, groups or individuals that can support a startup accelerator's entrepreneurs along the process of nurturing their own startups directly or indirectly through the accelerator. Common examples include other accelerator programs, incubators, entrepreneurship-related institutions or foundations.

Sharing resources can be financially beneficial and ease the access to specific resources (Hamari, Sjöklint, & Ukkonen, 2015). Incubators could thus e.g. profit from the startup accelerator's mentor network by exchanging guest speaker contacts or creating common events at which both incubator startups and accelerator startups are present. Simultaneously, partners with distinct service offerings can increase their respective portfolio for their individual startups or entrepreneurs. Therefore, Feld (2012)

built upon the idea of collaborating between participants of a startup ecosystem and claims that the idea of including all involved parties is necessary to achieve long-term value for everyone.

In summary, this section has shown that for each stakeholder of the accelerator's ecosystem value can be generated through their respective interaction with the program. While all stakeholders are granted access to new network connections, especially regional participants profit from an improvement of the local entrepreneurial ecosystem. Nevertheless, the way in which the different stakeholder groups' interaction creates value for themselves is very diverse. From the perspective of a startup accelerator, understanding the different motivations is the first step towards forming long-term connections with the different stakeholder groups and thus it represents a crucial aspect for establishing a theoretical framework for MVAs.

The Structure of an MVA

The establishment of a theoretical framework for an MVP requires the combination of lean principles and analyzing common accelerator structures. According to Ries (2012), the building stage is a crucial. This prior launch time stage refers to the planning and establishment of the accelerator program. Simultaneously, during the course of the accelerator program, there will be some kind of measurement, irrespective of whether this kind of measurement is systematic or unsystematic, e.g. through the bare perception of the administrative team.

While every accelerator's measurement depends on its ownership, visions and primary goals, its performance should not be solely measured by the success of its treated participating startups. A startup's performance is difficult to measure in the early days of its existence and without several years of operation the success of an accelerator cannot be measured in an objective way (Frimodig & Torkkeli, 2017). This reveals that other performance indicators such as mentor quality, networks and the ability to transfer knowledge must be measured during the course of the accelerator to identify its performance and success in the short run (Frimodig & Torkkeli, 2017).

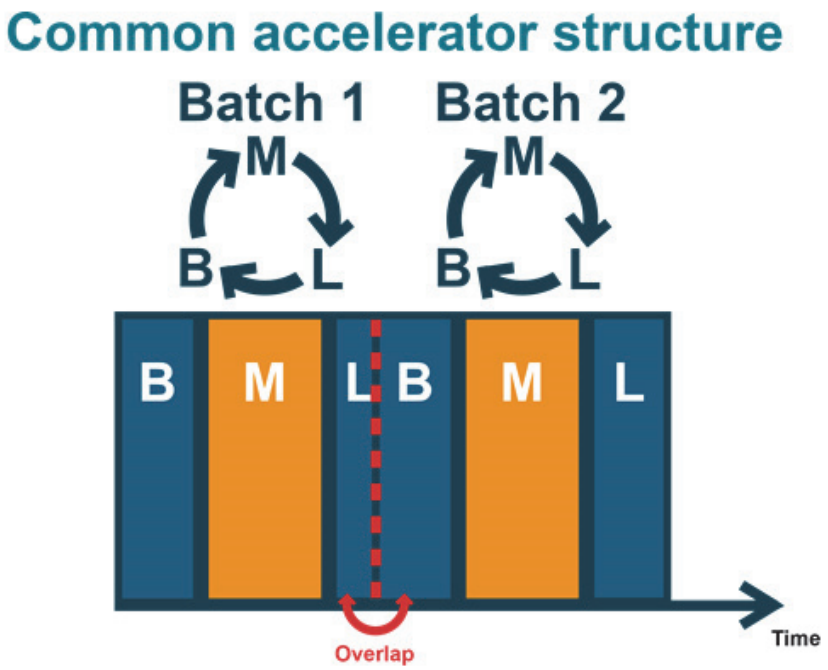
Therefore, it should be concluded that both the building and the measurement stage are potentially included within the accelerator's program. However, the question remains concerning at which point during the accelerator process the process of learning described by Ries (2011) takes place. Assuming that most accelerators are interested in the evaluation of aspects that were measured during the accelerator program, the process of learning can likely be positioned after the accelerator program is launched. If we connect the three steps of Ries' (2011) BML loop with the current structure of corporate accelerator programs, one receives a structure that allows a full rotation through the loop after approximately six months (Figure 2).

However, considering the idea of validated learning and the BML loop, this structure can be considered as somehow disadvantageous. With a rotation time of approximately six months, improvements for the accelerator program can either not be based on prior learnings or only adjust after half a year, a timespan in which the external environment might have changed the requirements for startup accelerators and its respective startups to a degree that former learnings no longer apply.

Furthermore, while many accelerator programs conduct two startup batches per year (Barrehag et al., 2012; TechFounders, n.d.; Y combinator, n.d.), there might be timely conflicts between the learning stage of prior results and the building stage of the next accelerator batch (Figure 2). Preferably, the learning stage of prior accelerator measurements and its results could be implemented within the second batch without a timely overlap between the respective loops.

For the creation of an MVA, we thus need to focus on two aspects to increase the validated learning process. First, the respective rotations through the BML need to become shorter and smaller to enable faster steering through the loop and more performance adjustments during the course of the accelerator. Second, the structure needs to ensure that the learning processes of the first accelerator batch does not overlap with up following batches' building and preparation stage.

FIGURE 2
THE PROCESS OF VALIDATED LEARNING – COMMON ACCELERATOR STRUCTURE



Barrehag et al. (2012) identified five stages through which accelerator programs run: awareness, application, program, demo day and post demo day. Awareness describes the stage in which a startup accelerator tries to attract entrepreneurs and startup teams as participants of the program. During the application stage, the identified startups are scouted and evaluated to filter the final participants of the accelerator's batch. The actual program stage describes the usually three-month timespan in which the participants focus on developing their products with the continuous support of their mentors. By definition, the startup accelerator ends with a demo day that gives the startups the opportunity to present their ideas to a larger auditorium of stakeholders. Finally, the last stage – the post demo day – describes the phase after the event and the respective interaction between the accelerator and its alumni (Barrehag et al., 2012). However, as MVAs are referring to first-time accelerator programs, this paper adjusts the respective stages with the phase of preparation. During the preparation phase, the basis for the adjustments during the course of the accelerator are established and prepared.

Figure 3 illustrates how the process of validated learning is enabled within an MVA. For the theoretical framework and to avoid misconceptions, the stages of building, measuring and learning were replaced by planning, starting and improving. While these three steps appear to be equivalent, it is crucial that they are differentiated from the initial steps as provided by Ries (2011). Both terminologies include the respective five stages of the accelerator structure (Barrehag et al., 2012), although – contrary to the BML loop – the idea of the Planning-Starting-Improving (PSI) represents a more adjusted version of validated learning for accelerator programs. During each stage of the PSI loop, several steers through the BML loop are executed. Therefore, the authors implement the idea of constant and rapid validated learning within the barriers of the MVA. While this paper will briefly elaborate which activities are necessary for such an adjustment, this new structure enables improving validated learning during the course of a first-time accelerator program while denying an overlap of the learning and building stage of the different accelerator batches (Figure 4.).

FIGURE 3
THE STRUCTURE OF A MINIMUM VIABLE ACCELERATOR

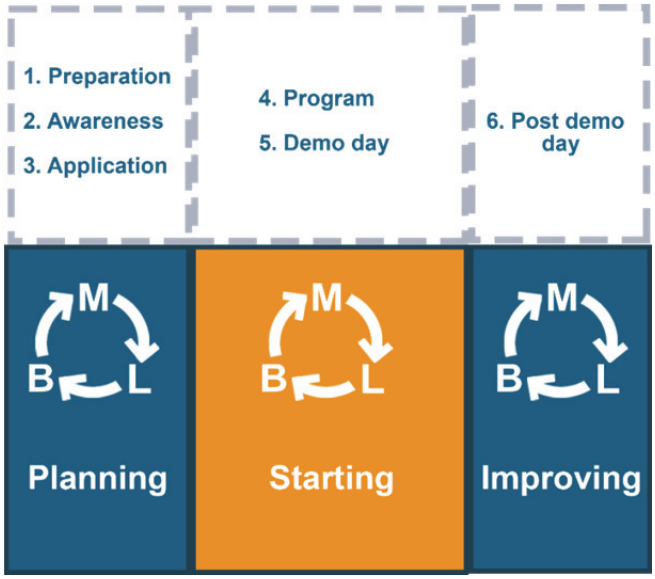
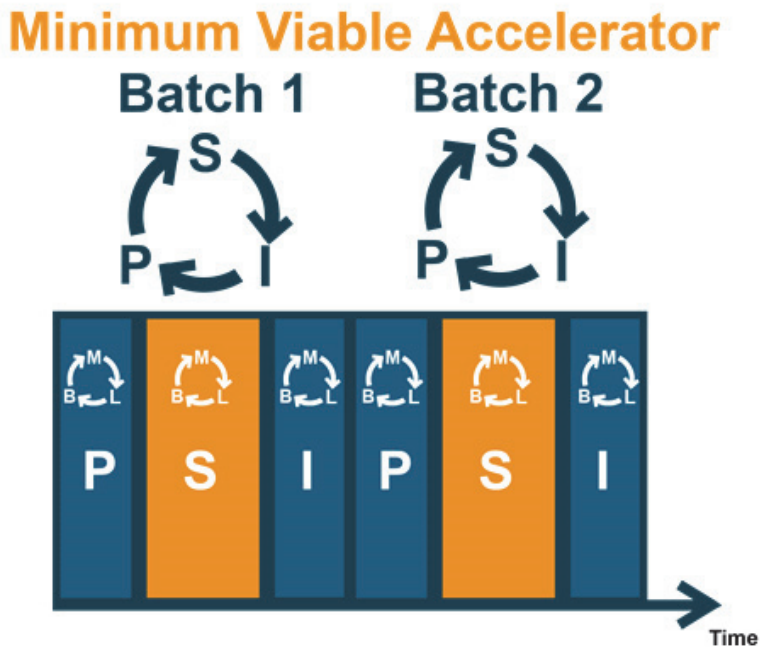


FIGURE 4
THE PROCESS OF VALIDATED LEARNING WITHIN THE MVA FRAMEWORK



Stages of the MVA

In the prior section, this paper identified the structure of an MVA program. The six phases of preparation, awareness, application, program, demo day and post demo day are combined within the structure of the PSI loop. Within this section, the authors break down the respective phases into concise activities during the MVA's program.

Figure 5 illustrates the corresponding actions that must be considered during the implementation of the framework. All activities should focus upon the idea of validated learning and the minimization of

resource consumption. This focus is enabled through the consideration of Ries' (2011) BML loop and the involvement of the startup accelerator's ecosystems' stakeholders.

Preparation

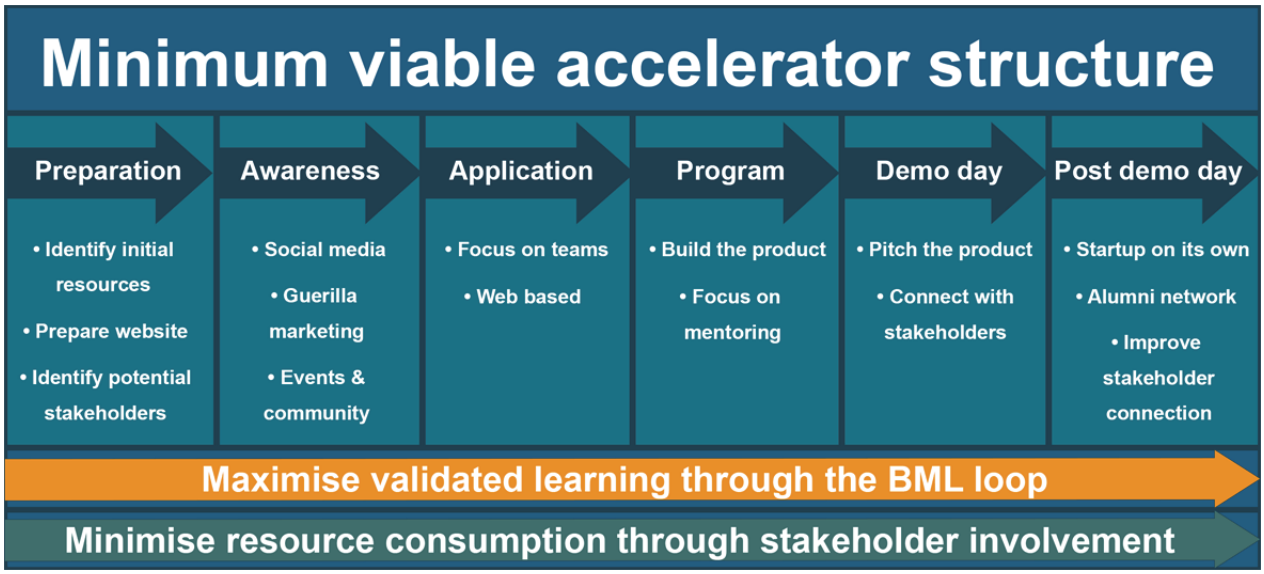
The preparation stage is the initial process in the planning phase and it integrates three different activities: the identification of initial resources, the identification of potential stakeholders and the preparation of the website. At the beginning of every MVA, the institutional host should become aware of its own resources. Resources not only relate to financial resources but also to knowledge, human resources and network connections. Becoming aware of the current resource situation will support the next steps within the preparation stage.

Subsequently, the launch of the initial website will focus upon the accelerator program that the MVA could establish under the analysis of its current resources. However, the launched website should not yet be publicly advertised towards potential startup teams to allow a precise evaluation of website traffic. Especially, corporate accelerators and educational institutions should thus ensure that the accelerator's website is not launched as a sub side of the parent organization. The established website can then be used to inform potential stakeholders about the program. Connecting the accelerator program with potential stakeholder groups is one of the most crucial aspects of the MVA framework. The MVA's team needs to consider which of the eight stakeholder groups could beneficially support the resource situation of the program and more importantly is also willing to do so. Considering the value created for the respective stakeholder groups and the potential resources provided becomes a key at this stage of preparation.

Awareness

During the awareness phase, potential participants should be attracted to the accelerator program. The MVA structure focuses its marketing activities on guerrilla marketing, social media, events and the community network to bring attention to the accelerator's program and website.

FIGURE 5
STEPS OF THE MINIMUM VIABLE ACCELERATOR AS ADAPTED BY BARREHAG ET AL.'S ACCELERATOR CYCLE (2012)



Guerrilla marketing describes marketing activities that invest time, energy, phantasy and knowledge rather than money to achieve results (Levinson, 2007). While guerrilla marketing should not be used as the only marketing strategy in the long run, its often-emotional message can be quite effective (Nufer &

Bender, 2008). As "many accelerators are in a startup phase themselves" (Barrehag et al., 2012, p. 52), resource-costly marketing activities cannot be used in many cases. One channel through which guerrilla marketing can be advertised is social media. Under the principle of resource saving, social media marketing represents an explicitly noteworthy marketing channel. In general, social media can not only be used for guerrilla marketing campaigns but in general it represents a cost-efficient channel for organizations (Kirtiş & Karahan, 2011).

Therefore, frequent social media activities and blog posts are a common tool to create traffic on the accelerator's homepage. However, using the network of involved stakeholders will most likely have the highest impact on the attraction of potential participants. Barrehag et al. (2012) claim that perhaps one of the most efficient ways to create greater awareness is the recruitment of well-known mentors who can attract entrepreneurs through their own network. The authors claim that several accelerator programs would even chose some of its mentors solely for marketing purposes. Nevertheless, not only mentors can be potential stakeholders for the communication of the new accelerator program. Entrepreneurs, investors, universities and companies – hence, all stakeholders and their respective networks that were successfully involved within the preparation stage – should be used for communication. This not only includes spreading messages through the respective channels, but it can also enable promoting the MVA at events hosted by the different stakeholders.

Simultaneously, in order to support the concept of validated learning, all marketing activities and its respective impact must be built, measured and learned from. In most cases, this can be achieved through performance marketing as long as the respective channels were used online. The accelerator team builds the initial campaign, measures its impact and learns from the results. This process can be replied several times during the promotion of the accelerator. While the measurement of offline marketing activities and stakeholder campaigns can become more complex, evaluating its impact should still be undertaken online. Measuring the impact of a physical stakeholder event on which the accelerator team promoted its program could e.g. be measured through trackable QR codes or individual website links that are handed out to interested people. Accordingly, the evaluation of data can still be conducted in a cost-efficient manner while enabling the possibility for additional learning progress and improvements during this phase.

The creation of awareness represents a crucial aspect for first-time accelerator programs as its program and offer is commonly unknown. The involvement of stakeholders and the constant learning from the channel's performance is important to secure an appropriate number of applicants for the upcoming selection process of the accelerator. Ideally, the MVA's application process becomes highly competitive (Miller & Bound, 2011).

Application

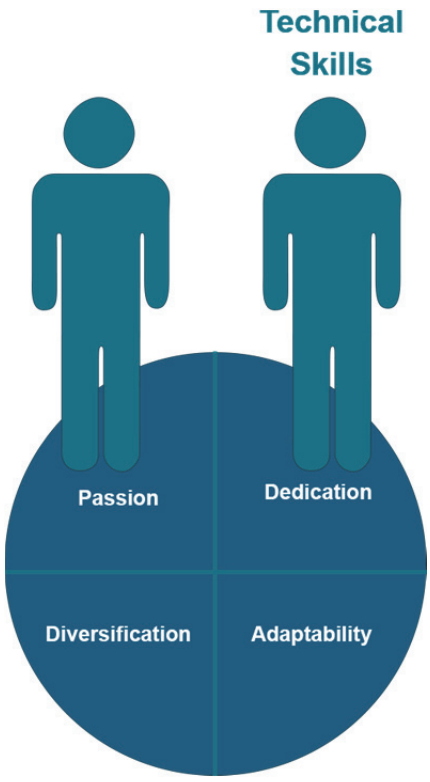
Regarding the previously-gained awareness for the MVA program, the application process describes the selection stage in which the participating startup teams are selected. Based on the established framework, the application process should be a web-based process that focuses on teams. Based on validated learning and resource savings, the application process over the accelerator's website represents an appropriate channel as the cohort's behavior can be once again analyzed and evaluated. Therefore, the MVA's team needs to ensure that their preferred key metrics are improving during the application process. Commonly, one crucial metric at this stage is the percentage of visitors who came to the website versus the number of applications that were received, ideally resulting in a 1:1 ratio.

Therefore, the MVAs need to modify their respective website features to optimize the channel's flow-through rate. A/B – or so-called split testing, in which the website is mirrored with only one feature changed in one of the sites – represents a good way to identify new features that are beneficial to the website (Ries, 2011). The resulting applications must then be filtered by the accelerator team to identify appropriate candidates for a personnel meeting. While the personal, physical scouting process requires additional time and resources for the MVA's team, it should be considered whether its ecosystem's stakeholders cannot support the physical scouting process through the provision of a location, jury members or other beneficial aspects.

Most top accelerator programs focus upon several aspects during the selection of final teams for the startup accelerator's program. Following the idea of resource saving, the principals of those accelerator programs should be used – if possible – for the evaluation of participants for the MVA. First, the MVA organization should focus upon the individual entrepreneurs rather than their respective ideas (Feld, 2012; Barrehag et al. 2012). Bradford (How to Web, 2011) listed four attributes that should be inherited in a good startup team: passion, dedication, diversification and adaptability. Promising founder teams should thus be passionate about their idea to overcome even the stressful stages of the startups' lifetime. Simultaneously, Bradford (How to Web, 2011) claims that good teams show a high amount of commitment towards their startup and simultaneously complement each other through their diverse skills, competences and ways of thinking. Finally, high-potential team members must be able to adapt to the different tasks and situation that they have to fulfill, which can be a wide spectrum of functions especially in the early stage of the startup's life (How to Web, 2011).

As indicated, teams are more preferable applicants compared with individual founders, as a single person is unlikely to achieve sufficient results in the relatively short program time (Barrehag et al., 2012). Simultaneously, one of the founders should possess technical skills to facilitate the creation of the initial product or prototype (Barrehag et al., 2012). Considering the different selection criteria as suggested by top accelerator programs will support the MVA's team to identify high-potential team members out of the number of applying candidates (Figure 6).

FIGURE 6
IMPORTANT CHARACTERISTICS FOR HIGH-POTENTIAL STARTUP ACCELERATOR APPLICANTS



Program

The starting stage begins with the actual program phase in which the selected participants focus upon the creation of their product and the MVA focuses its activities on the mentoring of the different teams. Especially the focus upon mentoring represents a crucial aspect at this stage. A mentor can interact with

the different startups in numerous ways. However, for the purpose of this paper, we will especially distinguish between mentors who are especially assigned to one of the startup teams for the overall duration or parts of accelerator program and speakers who communicate their knowledge to all participants of the accelerator.

Commonly, speakers communicate their respective knowledge in a single event. For the applicability of validated learning in case of multiple one-time events, the researchers suggest using structural questions. Structural questions represent questions that learn from the context in which a certain event took place or was executed. The resulting learning can be applied to mutual characteristics of the different one-time events. The MVA's team could thus identify the ideal time slot during which the highest average number of participants is present for a guest lecture or identify the most suitable location for lectures.

Mentors are especially assigned to one or multiple teams of the accelerator and thus they are likely to interact multiple times with the different teams. Similar to speakers, mentors can be acquired through the accelerator's stakeholder network, as the interaction with the MVA creates value for themselves. As mentioned, mentors represent arguably one of the crucial aspects for the success of an accelerator (Frimodig & Torkkeli, 2017; Cohen, 2013; Hochberg, 2016). The process of validated learning should thus improve the interaction between the startups and the mentor during the course of the accelerator's program rather than during the next batch. While it is unlikely that accelerators completely exchange mentors during the time of the program itself due to the limited amount of initial resources, structural questions can support the way in which startup teams and their respective mentors interact. Therefore, finding the optimal context in which startups and their respective mentors interact is one of the key tasks for the MVA's team at the program stage.

Demo Day

The demo day represents the final event of the accelerator's program, during which the startup teams pitch their product and the results developed during the course of the program. For the demo day, the connection with stakeholders is one of the key targets of the MVA framework.

A common structure for the demo day is that the different startups receive a certain time frame in which they can present their business to the public (Barrehag et al., 2012). Next to the attraction of investors and funding for the different accelerator participants, the demo day represents the key event during which the networking connections between the different stakeholder groups of the accelerator's ecosystem can be established and new stakeholders for the upcoming batches can be attracted. Therefore, while there is indisputably value created by bringing together investors and the different startup teams, other stakeholder groups should also be present on this day.

Like before, the idea of validated learning is difficult to implement into a one-time-only event. Hence, the MVA's team needs to establish the rotations through the BML loop prior to the actual demo day to enable the progress of learning before the actual event took place. Bringing the different stakeholder groups together is the main goal of the event. Therefore, the accelerator needs to ensure that the desired groups are present during the event itself. Online marketing and performance evaluation can once again represent a good method to evaluate the accelerators performance for the demo day. By focusing the application process for the demo day upon a digital medium or the accelerator's website, e.g. the number of registrations, the respective cohorts' relations to each other and the flow-through rate can be measured, evaluated and adjusted during the application process. Accordingly, the MVA does not adjust the demo day itself but the preconditions and thus the context in which the demo day takes place. Nevertheless, while the demo day should be an event that maximizes the attraction to external parties, the amount of resources expended must simultaneously be considered. Once again, involving the stakeholders in the process can reduce the overall efforts for the accelerator itself. Finding sponsors, external locations or volunteers for the organization of the demo day will minimize the amount of resources.

Post Demo Day

Finally, the improving stage is represented by the post demo day activities. During this stage, the participating startups are on their own and the MVA's team should focus on establishing an alumni network while improving the relationship with additional stakeholders. Feld (2012) described that maintaining a strong connection with former alumni can be beneficial in several ways. In the case of the MVA's stakeholder model, former participants might support the upcoming batches in multiple ways, including not only as potential mentors but in the long term also as companies, service providers, investors or partners. Second, Feld (2012) stated that highlighting the alumni of the prior programs can result in additional attention within the regional ecosystem and hence could possibly be used to win additional stakeholders for the program.

Next to alumni, the relationship with earlier and – during the demo day – newly-acquired potential stakeholder groups should be further improved. The fundamental idea of the post demo day is to improve established connections as the foundation for the upcoming accelerator batch. Therefore, keeping in contact with the different stakeholders is crucial. More importantly, the MVA's accelerator team should use the recent events and results to illustrate the respective value that was created or could be created for the different stakeholders. For the MVA framework, the post demo day can be compared with the theory of after-sales services in the field of customer satisfaction. A good after-sales service supports customer satisfaction and the establishment of long-term customer relationships and re-purchase decisions (Liao, 2007). Therefore, supporting the relationship with stakeholders beyond the boundaries of the accelerator's program is likely to support the long-term relationship building with those partners.

Facilitating the process of validated learning, the established alumni network and the bonding with other stakeholders should be digitalized to ease the process of measurement. The authors of this paper recommend making use of the established channels and tools for analysis to limit the amount of resources expended. A classic example that can be easily measured but remains the contact with the different stakeholder groups would be the classic newsletter, for which the amount of work included is relatively straightforward.

Limiting the amount of resources for establishing an alumni network and the connection with external stakeholders is again a crucial aspect for the performance of the MVA. Therefore, identifying partners within the accelerator's ecosystem that can be empowered and entrusted with the administration of a respective network is a viable option. In some situations, the entrepreneurs of the respective startup batches might even administrate the respective alumni network themselves. In such a case, the MVA needs to ensure that its process of validated learning is secured and that the responsible entrepreneurs keep on engaging their task. However, this structure is probably the most favorable one in terms of resource consumption.

CONCLUSION AND IMPLICATIONS

In conclusion, the MVA structure provides a guideline on the different steps necessary to successfully plan, start and improve an organization's first-time accelerator program. The framework contains six different stages: preparation, awareness, application, program, demo day and post demo day. During the implementation of the different steps, users must consider that all activities should focus upon the idea of validated learning and the minimization of resource consumption. This focus is enabled through the consideration of Ries' (2011) BML loop and the involvement of the startup accelerator's ecosystems stakeholders.

The theoretical framework of this paper should provide a guideline for companies, educational institutions, governmental organizations and other potential hosts of startup accelerator programs concerning how to successfully set up first-time accelerator programs. The potentially increased amount of knowledge gathered could thus not only improve the accelerator's performance but also benefit the participating startups in the course. Hence, the established framework and its six different steps should support leaders with an idea of how startup accelerator programs can be planned, started and improved. More importantly, the results of this paper can help organizations with limited resources to identify

crucial aspects for the foundation of their own startup accelerator programs and simultaneously provide steps that lead to a decrease in costs. Furthermore, the paper has showed which stakeholders could be involved within the process of a first-time accelerator program. If the results and insights of this paper are considered in practice, the creation of more regional accelerator programs might be facilitated.

Regarding theoretical implications, this research has shifted the scientific literature to the idea of limiting the barriers of implementation for additional accelerator programs. While the prior scientific literature successfully proved the effects of startup accelerators on the treated startups, investors and the ecosystem in general, little research can be found focusing on the support of the global distribution of accelerator programs.

LIMITATIONS AND FUTURE RESEARCH

This paper established a theoretical framework for MVAs. For the identification whether the MVA framework can be applied as a universally-valid framework on first-time accelerator programs, further research and practical application are necessary. For this reason, it would be interesting to not only interview further stakeholders of the accelerator's ecosystem but also run an actual first-time accelerator program based on the MVA framework to see the theoretical framework in practice.

Furthermore, while this study identified the different stakeholders for whom a startup accelerator could create value, it would in reverse be interesting to identify the ways in which the startup accelerator program could profit from the different stakeholders. More importantly, identifying the stakeholders who are most likely to interact with a startup accelerator's program and those who bring the highest amount of value to it could significantly reduce the future costs of collaboration in practice.

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