The Role of Public Policy in Supporting Business Accelerators

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Abstract

Over the last decade, business accelerators have begun to proliferate across the United States. These organizations aim to identify, mentor, and financially support startups through high-intensity, short-term programs offered in exchange for equity. Governments at all levels have begun to notice the growth in new accelerators throughout the country and are keenly interested in spurring economic development. Yet, traditionally there have been few public policy opportunities to target early stage, high-growth firms. The rise of accelerators, as catalysts for high value-added ideas, offers a potential pathway for governments to influence innovation by supporting programs that can bring in new firms to their regions and assist in developing a thriving entrepreneurial ecosystem. However, it is not yet clear how governments can best support accelerators to spur innovation.

To identify the most valuable role of public policy in supporting business accelerators, we interviewed managers and leaders of accelerators who have received awards through the U.S. Small Business Administration’s Growth Accelerator Fund Competition over the past three years. Our qualitative analysis explores the broad challenges experienced by these organizations as they have developed and refined their programs. These challenges ultimately focused on issues with effectively executing the standard accelerator model and issues due to government actions that were not directly targeting accelerators. We mapped these challenges to traditional public policy roles and ultimately identified a series of potential interventions that the Small Business Administration could undertake to enable accelerators to be more successful in spurring innovation. If the Federal Government continues to focus on these entrepreneurial support organizations, then additional educational initiatives, convening activities, and research activities could further assist accelerators.
Introduction & Motivation

Government experimentation at the state and local level has been one of the hallmarks of entrepreneurial policy in the United States (U.S.) for decades (Lerner, 2009). Incubators, angel investors, and technology transfer offices have been supported by policymakers to connect individuals with ideas to resources. Since their introduction into the market in 2005, accelerators—short-term, cohort-based mentorship and educational programs for startups—have become an alternative support mechanism that has influenced the formation of firms with a global reach such as Airbnb, Dropbox, and Reddit (S. G. Cohen & Hochberg, 2014). In an attempt to utilize new tools to spur private sector development, numerous local, state, and Federal programs have been developed to spur entrepreneurship through providing resources directly to accelerators. However, it is unclear if investment in these programs is an effective use of public funds. In addition, scant information is available on what types of accelerators take advantage of these programs and whether they address the critical problems that accelerators, and the startups they aim to serve, experience when trying to commercialize innovative products and services. If governments are going to continue to look towards accelerators as vehicles for innovation, it will be useful to understand how public policy can best address their needs.

This study attempts to explore this issue. Through interviewing entrepreneurs who run accelerators across the U.S., we sought to identify their primary barriers to success and map those issues to potential public policy interventions. The following paper outlines prior research related to accelerators, our data and methods, and the findings from our exploratory study. Ultimately, we hope this effort assists in defining valuable roles for Federal stakeholders as they continue to be interested in supporting accelerators. In the following, we seek to address these research questions:
1. What are the issues accelerators experience that constrain their ability to support startups?
2. What are the linkages between issues accelerators experience and potential public policy interventions?
3. How do accelerators decide whether to seek out resources from public sources?

**Literature Review**

There are relatively few academic studies that focus exclusively on accelerators. The availability of data on these organizations has been described as scarce, “conceptual, lacking empirics or relying on a few case studies.” Additionally, it is difficult to pinpoint their efficacy due to the heterogeneity in how accelerators operate and results of their efforts (S. G. Cohen & Hochberg, 2014; Hochberg, 2015; Smith & Hannigan, 2015). Nevertheless, as the amount of capital invested in accelerators has increased, so has interest from both policy and the academic research communities. This section will review the first wave of research that aims to define this new type of entrepreneurial support organization, to assess how they operate, and to understand what effect they have on the entrepreneurial and economic environment.

**Defining Accelerators**

The birth of the term accelerator can be pinpointed to the founding of Y Combinator in 2005. In the academic literature, they are defined as “fixed-term, cohort-based program[s], including mentorship and educational components, that culminate in a public pitch event or demo-day” (S. G. Cohen & Hochberg, 2014). They are differentiated from incubators in that they do not rely on the provision of office space for a fee as their main source of income (Hackett & Dilts, 2004; Lewis, Harper-Anderson, & Molnar, 2011). Angel investors on the other hand are likely to be independent individuals who directly invest in firms (Prowse, 1998; Wong, Bhatia, & Freeman, 2009). Table 1 highlights the primary differences between these entities.
Table 1. Entities that support emerging businesses

<table>
<thead>
<tr>
<th></th>
<th>Incubators</th>
<th>Angel Investors</th>
<th>Accelerators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>1-5 years</td>
<td>Ongoing</td>
<td>Weeks/months</td>
</tr>
<tr>
<td>Cohort</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Business model</td>
<td>Rent; non-profit</td>
<td>Investment</td>
<td>Investment, can also be non-profit</td>
</tr>
<tr>
<td>Selection</td>
<td>Non-competitive</td>
<td>Competitive and ongoing</td>
<td>Competitive, cyclical</td>
</tr>
<tr>
<td>Venture Stage</td>
<td>Early or late</td>
<td>Early</td>
<td>Early</td>
</tr>
<tr>
<td>Education</td>
<td>Human resources, legal, and administrative support generally for a fee</td>
<td>None</td>
<td>Intense seminars included in program</td>
</tr>
<tr>
<td>Mentorship</td>
<td>Minimal, tactical</td>
<td>As needed, by investor</td>
<td>Intense, by self and others</td>
</tr>
<tr>
<td>Venture location</td>
<td>On site</td>
<td>Off site</td>
<td>On site</td>
</tr>
</tbody>
</table>

Source: S. Cohen, 2013

The business model of an accelerator is a mixture between those of incubators and angel investors. Like an incubator, an accelerator gathers businesses into a common physical location. Similar to angel investors, accelerators offer resources in exchange for an equity share which they hope will garner a financial return on investment.

However, there are is also variation within the accelerator model. A recent article identified three distinct types of accelerators whose differing missions impact the types of startups they support and how they operate (Pauwels, Clarysse, Wright, & Hove, 2016). The article describes accelerator types as:

- **Deal-flow maker**: Funded by investors with the purpose of identifying firms that can generate the highest possible returns. Most well-known accelerators, such as Y Combinator and Techstars fall within this category.
- **Ecosystem builder**: Obtains funding from a corporate sponsor. Ultimately, its objective is to connect the customer base of the corporation with start-ups to create a network of businesses around it. One of the main benefits provided to firms that obtain funding from one of these organizations is access to a well-defined market and the economies of scale of the parent company. An example for this category would be the Disney Accelerator.
- **Welfare stimulator**: Organizations that attract firms with a business model that fits with the vision of welfare creation promoted by the funder. Overall, these accelerators are geared to combat social issues such as employment, homelessness, inequality, among others. Frequently, these types of accelerators display strong local ties and are supported by policy organizations such as economic development corporations and chambers of commerce.
Evaluating Accelerator Operations and Effectiveness
The academic literature to date has focused on defining the value of accelerators for a wide range of non-government stakeholders involved\(^1\). Investors in accelerators and accelerated firms can gauge success based on returns. Additional beneficiaries can be found in the world of risk capital (Miller & Bound, 2011). For instance, angel investors not affiliated with the accelerator may reap the benefits of having a third-party validate and aggregate potential investees. Upstream investors such as venture capital firms are also able to generate a pipeline of investments. Further down the line, large firms use accelerators as an opportunity to scout startups for acquisition or talent, while administrative service providers offer their services to startups.

Operation
From a program evaluation perspective, researchers have proposed various indicators that accelerator leadership teams should consider when assessing the success of both the accelerator operation and the startups they support. Among others, these indicators include (Caley, 2013; Deepcentre, 2015):

<table>
<thead>
<tr>
<th>Accelerator indicators of success</th>
<th>Characteristics of participating firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational characteristics</td>
<td></td>
</tr>
<tr>
<td>• Startups’ post-accelerator status (operating, closed or acquired)</td>
<td>• Number of applicants and percentage accepted;</td>
</tr>
<tr>
<td>• Average size of investment</td>
<td>• Number of participants per cohort;</td>
</tr>
<tr>
<td>• Percentage equity stake</td>
<td>• Cohorts per year</td>
</tr>
<tr>
<td>• Number of employees</td>
<td>• Founder demographics</td>
</tr>
<tr>
<td>• Mentors/firm</td>
<td>• Mentor engagement</td>
</tr>
<tr>
<td></td>
<td>• Number of investors attending Demo Day</td>
</tr>
<tr>
<td></td>
<td>• Participant exit interviews and surveys</td>
</tr>
</tbody>
</table>

Hoffman & Radojevic-Kelley (2012) highlight the factors that appear to be at the heart of the success of these organizations. One of these determinants is the set of selection criteria

\(^1\) However, no study to date has looked at the value of accelerators to the broader society.
used to evaluate the start-up candidate pool. Accelerator managers expressed a proclivity for selecting firms composed of teams with expertise in their area of work, a strong founder, an idea that solves a real problem, and founders who are willing to listen to clients, investors and other stakeholders. In their view, firms that are unlikely to succeed are those that cannot pin-point their target market, do not know how to advertise and sell their idea, and are unwilling to pivot and adapt if initially unsuccessful. Organizationally, managers identified two on-going concerns with the operation of an accelerator: securing resources to accept a new generation of candidates and being able to identify firms with potential.

Kim & Wagman (2014) identify the theoretical incentives of operators in determining the size of their portfolio and the information they are likely to disclose of their firms to external partners. For portfolio size, accelerators benefit from accepting a large number of firms because it increases their probability of success. However, if the portfolio increases in size, the equity that can be charged to firms decreases, because as the pool of candidates increases, the perception that an organization can identify winners decreases accordingly. In the case of positive or negative signals of information disclosure, the authors explain that operators have incentives to selectively reveal the prospects of start-ups. This is due to the fact that accelerators are likely to be successful if their investment firms are valued highly after leaving the program; hence, complete information transparency is unlikely. They are also likely to sell their stakes in firms early in an effort to secure the resources required to keep operating.

**Assessing Impact of Accelerator Participation**

Hallen, Bingham, and Cohen (2016) obtained proprietary information on four cohorts of firms at “top accelerator programs” (a total pool of 1600 applicants). To understand the effect of accelerators, they compared firms selected to participate (45) with those not selected in the final
round (217). Overall, they found statistically significant evidence that participants that were accelerated performed better than their non-accelerated peers in terms of business survival, number of employees, amount of capital raised, and web traffic after one year of operation. In the four cohorts that were analyzed, accelerated firms performed better than almost accepted peers in virtually all cases. As an example, accelerated firms raised between 27.9 and 176.8% more capital than non-accelerated firms.

Comparing Entrepreneurial Support Mechanisms

By comparing publicly available information of firms that were accepted into two prestigious accelerators (n=389) with those that received funding from angel investment groups (n=230), Smith & Hannigan (2015) attempt to identify whether accelerators are more effective than their alternatives in catalyzing start-up firms. The results of the analysis imply that accelerated firms achieved exit (either by acquisition or failure) 18 times faster than their angel-funded counterparts. This provides credence to the idea that the pre-defined temporality of accelerators increases the speed by which participating firms evolve. Accelerated firms were also 2.2 times more likely to receive continuing funding in the short-term. However, firms that work with angel funding groups are more likely to receive funds over their entire life-cycle.

Methods

The academic literature provides clear distinctions between entrepreneurial support mechanisms. Yet, there is no definitive database that categorizes all of these support entities in the U.S. Initially, the research team conducted a review of academic and grey literature to explore if a comprehensive list of accelerators had been developed to further understand the population of accelerators. Unfortunately, the search identified only partial lists of accelerators, often with defunct organizations. Among the most comprehensive lists we identified were the winners of the annual Small Business Administration’s (SBA) Growth Accelerator Fund
Competition, the Seed Accelerator Ranking Project (SARP)\textsuperscript{2} which has been ranking the top 20 accelerator programs in the United States since 2012, and Seed-DB\textsuperscript{3}, a publicly available investment database on accelerator programs. We also reviewed lists of accelerators posted by individual entrepreneurs and researchers and found that our compiled list captured the same accelerators.

After pulling these sources, we individually validated each organization to ensure that they matched Cohen and Hochberg’s definition of an accelerator. As can be seen by the pie chart below, most of these organizations could ultimately not be categorized as accelerators; rather, they were incubators or other support organizations such as maker-spaces. Many of these organizations had characteristics similar to accelerators but did not completely fit within our chosen definition. The lack of equity taken was the most common limiting factor that excluded organizations from our sample. However, this occurred less than 15 times through our search. This process further highlighted the need for clear definitions of entrepreneurial support organizations and the value of a central repository of information on these organizations.

\textsuperscript{2} See http://www.seedrankings.com for detail.
\textsuperscript{3} See http://www.seed-db.com/accelerators for detail.
We were also interested in understanding how prevalent each type of accelerator is within the U.S. As the original classification by Pauwels et al. was developed for European accelerators, we reviewed information from accelerators’ websites and media coverage to classify each accelerator in our set. The pie chart below indicates the distribution for the 131 accelerators we identified. The majority of U.S. accelerators are deal-flow makers that mirror the original Y Combinator accelerator.

Figure 1. RAND aggregated database of U.S. potential accelerators

Figure 2. U.S. based accelerators by type
From the larger population of accelerators, we chose to interview accelerators that had received funding from the Small Business Administration’s (SBA) Growth Accelerator Fund Competition. In choosing this population, we assumed that these accelerators were likely to understand and relate to public policy issues, since they sought out and were funded by a public program. In addition, although this population of winners have geographic and sectorial diversity, they are not a representative sample of accelerators throughout the U.S. Further, their responses highlight their experience operating an accelerator and no independent validation was made of their claims.

To identify accelerators to interview, we used publicly available lists of accelerators from the SBA. However, in discussions with the Competition staff, we learned that not all winners would fit the standard definition of an accelerator. Therefore, we reviewed accelerator websites and news articles to validate if the accelerators matched the academic definition. Ultimately, we identified 51 accelerators within the broader population of 138 winners. Among the non-accelerators, we found organizations that operated as co-working spaces, incubators, among others. Of the winners, 37 were deal flow makers, none were ecosystem builders, and 14 were welfare stimulators. The distribution of winners by type does not perfectly match the overall population of accelerators that we identified but there were still a large majority of deal-flow maker winners. We contacted individuals that led the accelerators via email to ask them to participate in an interview and we included a letter of introduction from the SBA.

Semi-structured qualitative interviews were conducted to explore the barriers experienced by accelerator managers. In designing the interview protocols, we made two fundamental assumptions to guide our approach. First, we assumed that if we directly asked entrepreneurs to identify public policy concerns and opportunities in assisting accelerators, we would receive
little information due to the lack of understanding of what encompasses “public policy.” A recent study by RAND supports this assumption (Ablon and Golay, 2017). Second, we assumed that interviewees would identify policy problems across levels of government (local, state, and Federal) and a broad range of issues that address multiple aspects of public policy.

These assumptions led us to design an interview protocol that did not focus primarily on asking about specific policies that have created challenges. Rather, questions elicited information from participants on the most pertinent barriers and challenges that they experienced during multiple stages of accelerator development. In addition, we asked participants to identify difficulties with specific areas of operations such as personnel, financing, and recruitment. The interview protocol is presented in Appendix 1.

We conducted 15 semi-structured interviews with accelerator leaders by telephone (29% success rate). Interviews typically lasted 45-60 minutes. Leaders interviewed were often co-founders, partners, or operations managers within accelerators. These interviews were recorded and then later transcribed. Using NVivo, a qualitative coding package, we coded each interview to identify emergent themes using an inductive approach. All interview transcripts were read before initial coding was conducted. A first round of initiating coding revealed a wide-range of opinions and ideas from accelerators. Initial codes were then refined to merge duplicate ideas and clarify the definition of each code. A final review of the transcripts ensured that all text relating to the identified codes was captured.
Who Seeks Out Government Support

The SBA’s Growth Accelerator Fund Competition has received hundreds of applications. However, not all accelerators in the U.S. that are eligible have applied for an award. In an effort to understand how accelerators ultimately decide whether to seek out government support, two sets of questions were asked. In the first set, interviewees explained the factors for deciding to seek out government support. Our goal with these questions was to identify a common set of components across organizations that led to the procurement of government support. Second, interviewees described the key characteristics of their program with the hope of determining if a particular type of accelerator was inclined to seek out government support.

The common components across interviewees for seeking out government support, whether through the SBA Competition or other government efforts, were knowledge/awareness of the program and the ease of the application process. Naturally, accelerators cannot apply to a program they have not heard of or do not understand. Several accelerators indicated that program information is not centrally available. Rather, several accelerators indicated that they heard about government programs through word-of-mouth from other accelerators leaders or entrepreneurs. In addition, several interviewees noted that the ease of applying influenced their decision to seek out support. If the application process was easy and straightforward, interviewees indicated that they were willing to consider applying.

At the end of each interview, accelerator managers were asked a number of questions related to their operations and investments to identify whether there were similarities among accelerators that were interviewed that could offer some clues on specific types of accelerators that seek out government support. The results of these questions are summarized in the table below.
Table 2. Key characteristics of accelerators in sample

<table>
<thead>
<tr>
<th>Metric</th>
<th>Mean</th>
<th>St. Dev.</th>
<th>Min</th>
<th>25th pct</th>
<th>Median</th>
<th>75th pct</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average size of investment</td>
<td>$ 45,705</td>
<td>$ 38,670</td>
<td>$ 0</td>
<td>$ 18,750</td>
<td>$ 50,000</td>
<td>$ 50,000</td>
<td>$ 125,000</td>
</tr>
<tr>
<td>Average equity stake</td>
<td>6.68%</td>
<td>4.56%</td>
<td>0.00%</td>
<td>4.50%</td>
<td>6.00%</td>
<td>6.75%</td>
<td>15.00%</td>
</tr>
<tr>
<td>Number of founders</td>
<td>2.05</td>
<td>0.42</td>
<td>1.50</td>
<td>1.75</td>
<td>2.00</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Mentors / Startups</td>
<td>4.86</td>
<td>5.90</td>
<td>0.00</td>
<td>0.84</td>
<td>1.58</td>
<td>7.85</td>
<td>16.00</td>
</tr>
<tr>
<td>Acceptance rate</td>
<td>11.92%</td>
<td>14.69%</td>
<td>1.00%</td>
<td>4.38%</td>
<td>7.75%</td>
<td>10.00%</td>
<td>50.00%</td>
</tr>
<tr>
<td>Number of investors on demo day</td>
<td>120.10</td>
<td>146.28</td>
<td>0.00</td>
<td>10.25</td>
<td>60.00</td>
<td>187.50</td>
<td>450.00</td>
</tr>
</tbody>
</table>

As can be seen from the table, business accelerators that sought out government resources display substantial differences in terms of investments, mentorship practices and intensity, as well as overall selectivity and service provision. Ultimately, our small sample did not reveal a set of similar operational characteristics that define a common type of accelerator that seeks out government support. However, there appears to be two key issues that lead to accelerators seeking out public support: saliency and ease of application. While they may seem obvious, interviewees often were not aware of all the government programs that were available to them.

**Barriers to Accelerators’ Successes**

Interviewees identified a wide range of barriers to the success of their accelerators, including issues that originate from the unique business model that accelerators use and issues that are either a direct or unintended consequence of public policy. The following section outlines the broad range of barriers mentioned by the interviews.

**Issues with Accelerator Model**

Several accelerators highlighted that an important barrier to their success was attempting to implement the accelerator model as designed and executed by successful analogues in the west coast such as Y Combinator. The unique nature of this scheme created unexpected difficulties uncommon to other forms of entrepreneur support organizations.
Recruiting Startups

Several leaders discussed how the recruitment of startups was a barrier to their success. They noted that the most difficult moment to convince firms to join occurred when the accelerator had no history to justify their value or extensive networks that could encourage firms to apply. However, most accelerators in our sample now have fairly low acceptance rates (from 3-20%), which may indicate that their efforts have allowed them to develop large applicant pools and become more selective. It is useful to note that one interviewee highlighted that a larger number of applications are immediately discarded because they do not meet the minimum criteria for consideration.

Accelerators that were classified as welfare stimulating accelerators noted much higher acceptance rates and lower applicant pools. One interviewee had an almost 50% acceptance rate and stated that they struggle to recruit startups focusing on improving social issues. This suggests that for some accelerators, recruitment may continue to be a barrier to their success, potentially due to the unique blend of a financial investment business model and a strong social mission.

Staffing

The majority of accelerators that were interviewed were staffed by less than four full time equivalents (FTEs). One accelerator leader explained that the administrative cap on the investment fund raised to invest in startups and run the organization severely limited their ability to hire needed human resources. Other interviewees explained that understaffing was a problem when trying to create and deliver workshops for their startups. Interns, part-time employees, and volunteers are used as supplements for full time staff. An accelerator leader also indicated that they hire short-term consultants only for the duration of the accelerator cohort residence to keep staffing costs manageable.
Operating Funds
Similar to staffing, a few accelerator leaders noted that operating funds are generally limited. This often requires partners and investors to provide support without compensation to ensure that the accelerator can offer seminars and workshops for its startups. One accelerator described insufficient operating funds as a bottleneck in their system that limits the number of startups they can support and ultimately limits their likelihood to obtain positive investment returns.

Identifying Accelerator Value
Entrepreneurs also discussed challenges in identifying how to best support startups and provide value while they were part of the accelerator. While seminars, one-on-one advising, and workshops are common components of accelerators, some leaders mentioned challenges in determining a syllabus that would teach startups what they needed to succeed and that would be relevant to a cohort of firms that could find themselves at different phases of development.

Financial Sustainability
A few welfare stimulators discussed the financial sustainability of their organization. One interviewee noted that many of their accelerator’s services rely on free labor, given the limited operational funding they have secured. This creates some concern for the long-term viability of their accelerator if these volunteers stop offering their services. The financial concerns were focused on operational funds rather than investment capital.

Physical Space
Finally, interviewees identify physical space as a barrier to their success. Most accelerators run short-term programs that require startups to re-locate to a centralized facility for the duration of the program. However, that space is not necessarily needed during the rest of the year when accelerator staff are recruiting, marketing, and planning for future startup cohorts.
Therefore, finding space that can be utilized for other purposes when programs are not in session or finding large spaces that can be rented for only a few months a year can be challenging. According to accelerator leaders, the overhead costs of maintaining a large space can be difficult to cover, if the accelerator does not offer other programs such as incubators or on-going workshops.

**Issues Resulting from Government Actions**

In addition to barriers that result from the accelerator model, interviewees identified a series of issues that their accelerators faced due to government actions (and inaction). While none of these government actions were originally targeted at accelerators, they have negatively impacted their operation according to those interviewed.

**Visas**

Several accelerator leaders expressed concerns with visas for non-U.S. founders that participate in their programs. They explained that while short-term visas can be secured, there are often issues with keeping these entrepreneurs in the country after the program ends. In some cases, visas were secured to keep at least part of founders in the U.S. after the accelerator program ended so they could continue to grow their U.S.-based businesses. In other cases, founders voluntarily returned to their home country while they applied for new visas.

Interviewees further stated that these entrepreneurs should be allowed to stay in the country if they are creating jobs, and should ultimately be able to base their companies in the U.S. To overcome the visa issue, one of the accelerator leaders was seeking to partner with a local university program that could grant special visas to entrepreneurs as a way to keep founders in the country after their accelerator program ended. In other cases, accelerator leaders had hired outside law firms to explore options. However, many stated that their law firm’s
recommendation was that the best option for foreign founders was to go back to their home country and apply for an H1B visa. In a few cases, accelerator leaders stated that past complications with immigration have caused them to stop reviewing applications from foreign startups.

**Investment Limitations**

One accelerator leader noted that certain types of institutions, such as banks, are prohibited from being able to invest in accelerators. They believed that this limited the pool of potential funders for their investment fund. However, he remarked that these types of regulations are probably made for a good reason. This regulation was not focused on accelerators, but since they use an investment fund, they must follow the financial regulations for all investments.

**Legal Requirements for Certain Industries**

An accelerator leader who works with healthcare startups noted that certain industries are heavily regulated. In the healthcare field in particular, Federal privacy regulations are extensive. He viewed his role as helping startups understand these guidelines and laws so they can address them appropriately. However, he also thought that this may be a core challenge for some of his startups.

**Public Partners Inability to Act Quickly**

Finally, an accelerator complained about the fact that the generally slow pace of government limited their ability to partner with them. The bureaucratic nature of policymakers and the multistep approval processes necessary to establish partnerships severely diminished this interviewee’s interest in working with government entities. In particular, the interviewee believed that startups could not afford the long wait it can take to collaborate and team-up with city governments. This interviewee did not target a particular city or type of government
organization; rather, his comment was focused on the general timelines of startups (and the accelerators that support them) being incongruent with pace of government.

**Agenda**

In designing this project, we aimed to identify a range of potential public policy interventions that government agencies could carry out at the local, state, or Federal level to further support accelerators based on the barriers experienced by interviewees. Rather than ask accelerator leaders to identify interventions at each of these levels and across public policy domains, we asked broader questions about the issues that they faced as they started, managed, and grew their accelerators. Our plan was to map these barriers to specific public policy intervention levels and particular agencies that may have the authority to address these issues. However, our coding revealed very few local and state barriers. In addition, issues with the accelerator model were mentioned by accelerators across local and state lines. This suggests that a Federal role may be the right approach in mitigating accelerator model issues given the concern exists across the U.S. Through reviewing each possible Federal agency that could support accelerators, it became apparent that the Federal Small Business Administration has both the mission and the authority to address most of the issues identified.

Given the SBA’s current interest in supporting accelerators we decided to translate the barriers identified by our interviewees into an agenda for SBA to consider adopting as they seek to further support accelerators. This agenda could be pursued within the Office of Innovation and Investment that currently runs their accelerator competition or it could be pursued individually through the SBA’s district offices. Agenda items were developed to address all of the barriers identified through interviews. They overlap in some cases and should be considered a range of options for the SBA if they are interested in further supporting accelerators. These items were
developed through reviewing interviewees recommendations for new government programs, existing programs offered by the SBA, and traditional roles of public policy as noted by Eugene Bardach in his classic book, *A Practical Guide for Policy Analysis*. This agenda focuses on three sets of activities: educational activities to inform entrepreneurs and investors; convening activities to bring together accelerators; and research activities to better understand accelerators.

**Education Initiatives**

Accelerators are a relatively new way to support startups. Therefore, multiple educational activities could be undertaken by SBA to educate accelerators, startups, and potential future accelerator investors and leaders. The following table outlines a few educational activities that could be undertaken by the SBA in support of accelerators.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Potential Barriers Addressed</th>
<th>Target Population</th>
</tr>
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</table>
| Grant Opportunities for Accelerators and Startups | • Operating Funds  
• Staffing | • Accelerators  
• Startups |
| Successful Accelerator Models | • Recruiting Startups  
• Financial Sustainability  
• Identifying Accelerator Value  
• Physical Space | • Accelerators |
| Starter Kits for Investors | • Financial Sustainability  
• Identifying Accelerator Value | • Angel Investors |

Accelerator leaders noted that they often found out about the SBA Growth Accelerator Fund Competition from friends rather than from a centralized resource or SBA outreach. In discussing other grant programs, accelerator leaders highlighted that they were unaware of grant programs for their startups. In reviewing agency websites, we found no central resource for accelerators or startups that clearly describes the grant opportunities available to them. Since operating fund and staffing limitations were described as barriers to success, it could be valuable for the SBA to educate accelerators on grant opportunities that could provide additional funding.
to accelerators. Similarly, a centralized resource on grant opportunities for startups could enable startups to grow faster without having to rely on equity investments from accelerators.

The SBA could also consider educating accelerators on successful models to emulate to ensure newer accelerators are able to recruit startups, become financially sustainable, identify the key value of their programs, and identify the optimal way to procure physical space. Several accelerators noted that they were learning by trial and error without much guidance on how to successfully build an accelerator. Since the SBA does not have a financial stake in individual accelerator success, but believes these organizations can help build a strong entrepreneurial ecosystem, they are in a key position to educate new accelerators on to build for success.

Finally, accelerators rely on investors to provide funding and mentorship. However, several accelerators noted that they struggled to educate angel investors on the value of investing an accelerator. As described earlier, angel investors interact with startups in a different way than accelerators. When starting a new fund to develop an accelerator, founders must convince angel investors that their approach to selecting, investing, and mentoring startups had advantages over traditional, independent angel investing. The SBA could develop a starter kit for investors that helps educate them on the differences in entrepreneurial support entities and the potential value of accelerators. If accelerators can get more investments from traditional angel investors, they may be able to strengthen their financial security and increase the mentorship base that provides value to the startups that they support.

**Convening Activities**

Through the multitude of programs and district offices that SBA runs to support small businesses, they have a unique opportunity to act as a broker to convene disparate groups of entrepreneurs. By connecting entrepreneurs, SBA could develop learning communities among
different types of accelerators, further explore startup issues by leveraging accelerators who
directly work with a multitude of startups each year, and build local entrepreneurial ecosystems.
The table below highlights convening activities that SBA could undertake that would strengthen
accelerators directly and indirectly.

<table>
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<tr>
<th>Activity</th>
<th>Who to Convene</th>
<th>Goal for SBA</th>
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| Develop Learning Communities Among Accelerators | Groups of accelerators by type:  
  - Welfare Stimulators  
  - Ecosystem Builders  
  - Deal-Flow Makers | Enable accelerators to openly discuss success and failures to learn from one another |
| Explore Startup Concerns Using Accelerators | Diverse group of accelerators representing a variety of industry foci and geographic areas | Identify additional programs or policies that could further support startups |
| Connect Entrepreneurs to Build Ecosystems | Within individual communities:  
  - Accelerators  
  - Startups  
  - Incubators  
  - Angel Investors  
  - Other Entrepreneurs | Develop stronger entrepreneurial ecosystems across the country |

The SBA could develop learning communities of accelerators to enable them to educate
each other on ways to overcome or mitigate the barriers they previously identified. There is no
current entity in the private or public sector that enables new or emerging accelerators to gather
together to share lessons learned. The SBA could develop a platform that enables accelerators to
connect with one another and explore similar concerns.

The SBA could also use its connection with accelerators to explore startups concerns.
Accelerators have access to a wide-range of startups through their application processes and
cohort programs. Unfortunately, the SBA cannot access these startups as easily since they are
often early stage firms that do not appear in SBA’s standard surveys of small businesses.
Therefore, accelerators offer a unique way for the SBA to connect to startups to identify potential
public policy interventions that could further support innovative startups. It is possible that
through interviewing startups in accelerators, the SBA may also identify additional activities that could strengthen accelerators.

Finally, the SBA could use its district offices to connect entrepreneurs together in specific geographic regions to strengthen innovation ecosystems. Through its programs, the SBA has connections with incubators, accelerators, startups, angel investors, and other entrepreneurs. While many accelerators expressed an interest in strengthening regional ecosystems, they do not have the same coverage as the SBA. In addition, the SBA is a neutral party in this endeavor. The SBA could further assist accelerators in developing innovation ecosystems through bringing together startups and entrepreneurial support organizations in regional areas.

**Research Activities**

Finally, the SBA already conducts research on its programs and the needs of small businesses. However, further research is needed to understand how accelerators operate and the policies and programs that impact them. Potential research projects could examine 1) why accelerators are evolving to provide additional services? 2) the issues created from limiting the types of businesses that are able to invest in accelerators, and 3) how to further strengthen the Growth Accelerator Fund Competition to ensure it is having the maximum intended impact? The table below outlines each of these potential studies.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Motivation</th>
<th>Potential Approaches</th>
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</table>
| Explore Accelerator Plus Models | • Accelerators are discussed in the literature as individual entities  
• Our research indicates accelerators often manage other entrepreneurial activities such as executive training camps or incubators | • Interviews with accelerators to determine their motivation for offering additional entrepreneurial services  
• Surveys to determine the prevalence of accelerators offering additional services |
<p>| Evaluate Investment Limitations in Accelerators | • Financial regulations limit the types of organizations that can invest in accelerator funds | • Review existing laws and regulations to determine their impact on accelerator investment funds |</p>
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<th>Topic</th>
<th>Motivation</th>
<th>Potential Approaches</th>
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| **Conduct a process and/or impact evaluation of the Growth Accelerator Fund Competition** | • The current program focuses primarily on providing 1-year of operational funds  
• The agenda identified indicates that the SBA could further support accelerators in particular areas in addition to direct funding | • Develop a logic model with program staff to determine the data needed to assess effective implementation of the program  
• Collect and analyze activity, output, and outcome data on accelerators who won and accelerators who applied but didn’t win  
• Interview applicants and winners to identify potential programmatic changes |

**Conclusion**

This exploratory research identified numerous barriers that a small sample of accelerators face as they aim to support innovative startups. However, most of these barriers are inherent to the model that accelerators have developed, rather than caused by public policy failures or inaction. The barriers that are related to public policy are often issues for the broader business community and not specialized to accelerators. However, the entrepreneurs we interviewed offered several suggestions for further public policy interventions that could strengthen the accelerator community. These activities map well to the authority and purview of the Small Business Administration. As the SBA continues to explore ways to support accelerators, the agenda we identified may provide guidance on further research to conduct, simple educational efforts that could make a large impact, and new roles SBA could undertake to further its mission.
References


Caley, E. (2013). Seeding Success: Canada’s Startup Accelerators: MaRS Data Catalyst


Appendix 1: Interview Protocol

The following interview protocol was used to guide discussions with accelerator leaders. As semi-structured interviews, not all questions were asked of all participants. In addition, not all sub-questions were asked of all participants.

Background & Describing the Accelerator
1. Let’s start with some very general questions before talking about your specific accelerator.
   a. How do you define an accelerator?
   b. What are the advantages of being an accelerator rather than operating as an angel investor or another investment model?
2. Now let’s turn to your accelerator. How did you become involved in the accelerator?
   a. What is your role? How long have you held this role?
   b. Can you give me a brief history of the accelerator?
3. What services do you offer startups?
   a. How is your support structured?
   b. When startups leave your accelerator, what types of continued services do you provide?

Issues Facing Accelerators
4. What are the primary challenges you and your staff deal with on a daily basis regarding:
   a. Operations?
      i. Physical Space?
      ii. Resources for startups (digital, education, mentors, etc.)?
   b. Recruitment of startups?
   c. Immigration and visa issues for founders?
   d. Procurement of capital?
   e. Human resources?
   f. Business model?
5. When starting your accelerator, what were the primary barriers and challenges? Internal challenges? External challenges?
   a. What types of resources would have helped you during the startup phase?
6. In identifying, recruiting, and educating your last cohort of startups, what constraints limited the number of startups you were able to support?
   a. What constraints limited the types of support you were able to offer?
   b. What constraints limited the success of your startups?
7. Are there particular government programs, policies, or procedures that create challenges? At the local level? State level? Federal Government level?
8. As accelerators continue to pop up, what will limit their success?
   a. If you could advise new accelerators on how to succeed, what types of advice would you give them?
   b. If you were advising an investor on whether to create an incubator, accelerator, or maker space, what issues would you advise them to consider?
9. How have the challenges faced by the accelerator changed over time?
Decisions To Seek Government Funding

10. What led you to apply for the SBA Accelerator program?
   a. Who was consulted when deciding to apply?
   b. What types of information or resources were used to inform your decision?
   c. Who ultimately made the decision?
   d. What was the rationale for your decision?

11. How have you used the funding from SBA?
   a. If you didn’t have the SBA funding, would you have been able to pursue these purchases/personnel hires?

12. Will you apply for SBA funding again? Why or why not?

13. What other types of government programs have you considered seeking out or applying for?
   Local? State? Federal?

14. If you were responsible for the creation of a government program, what type of support mechanisms would you create for accelerators?
   a. If you had the opportunity of funding an additional individual at your accelerator, what tasks would this person perform?

Startups

15. How do you define success for the startups that participate in your accelerator?

16. What is a typical outcome for a company that was part of your accelerator?

17. Can you please provide the following information on your accelerator?
   a. Average size of investment:
   b. Average equity stake:
   c. Number of employees:
   d. Proportion of mentors to firms:
   e. Acceptance rate:
   f. Average number of investors on demo day: