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Bridging the "Pioneer Gap"
The Role of Accelerators in Launching High-Impact Enterprises

Despite our current age of unprecedented global wealth, billions of people worldwide still live in poverty. Over the past decade, however, governments, the nonprofit sector, and the business world have explored the ability of small and growing businesses (SGBs) to reduce poverty, particularly in emerging markets. The promise of finding market-based solutions to social problems has generated a good deal of excitement about impact investing—an investment strategy that seeks social/environmental returns in addition to financial returns. According to a 2013 study by J. P. Morgan and the *Global Impact Investing Network (GIIN)*, a total of $17 billion is expected to be deployed into socially beneficial sectors in 2012-2013.[1] However, this capital is not yet reaching many of the innovative small and growing businesses that can help to alleviate poverty through the jobs they create and the products and services they provide. While social enterprises continue to emerge—Village Capital alone has seen over 5,000 applications from impact-focused entrepreneurs worldwide over the last three years—many innovative companies in their early stages have had difficulty getting off the ground. They are still not able to access and take advantage this new flow of capital, or the other types of support and resources they need to succeed.

A 2012 report from Monitor-Deloitte and the Acumen Fund highlights this paradox: The Pioneer Gap: While there are thousands of early-stage innovators seeking to launch companies that can drive social change worldwide, very few are able to build the teams, find the customer base, or raise the investment necessary to scale.[2] The so-called pioneer gap specifically refers to the burden shouldered by enterprises that are pioneering new business models for social change. Monitor and Acumen identify four stages that these firms typically go through, from the

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blueprint stage to validation, preparation, and, finally, scale. The pioneer gap occurs in the early stages of an enterprise's growth, when it is not yet considered investable by many impact investors.

The pioneer gap hypothesis is supported by additional research on the social impact sector. In an industry survey conducted by Village Capital in 2012, of more than 300 self-described impact investment funds, fewer than 10 invested, at less than $250,000 per company.[3] Additionally, a Monitor study of African impact investors found that only 6 of 84 invested in companies still in the early stages.[4]

According to a 2013 GIIN/J. P. Morgan report, impact investors cite a "lack of appropriate capital across the spectrum" and a "lack of investable enterprises" as the top two barriers to deploying more impact investment, which suggests that the bottleneck of (a) not enough quality companies in the early stage and (b) not enough effective support to produce later stage investable companies is thwarting the growth of this sector.[5]

THE ROLE OF ACCELERATORS

Over the past several years, actors in the impact investing sector have developed a growing recognition that early stage support—specifically in the form of business incubators and accelerators—is a key intervention for addressing the pioneer gap. Business incubators and accelerators support early stage entrepreneurs by providing them with (a) business development support (e.g., consulting, technology assistance); (b) infrastructure support (e.g., access to office space, shared back-office services); (c) network support (e.g., access to potential customers, investors, mentors); and (d) financial support (in the form of grants/investments). This study surveys 52 impact-focused accelerators worldwide in order to understand their characteristics, operations, and performance more fully.[6]

This research is particularly timely, as the number of accelerators has grown significantly over the past five years—in fact, 73 percent of accelerators surveyed are fewer than five years old. While the role accelerators play in entrepreneurship has been studied to some extent (we review the existing literature in the next section), existing studies are largely limited to those focused on technology companies in developed markets—that is, the U.S. and Europe. There is little research on accelerator activity in emerging markets and almost none on the role of accelerators focused on impact investment. With over 40 impact-focused accelerators founded in the last half-decade, we need an accurate assessment of what accelerators are doing and where so that we can eventually understand how well accelerators are doing in addressing market-based solutions to poverty.[7]

The *Aspen Network of Development Entrepreneurs* (*ANDE*) and Village Capital believe there is a pressing need for a more holistic, evidence-based approach to leveraging the potential of incubators and accelerators and to understanding what makes them successful. This report, which builds on an earlier piece of research conducted by Village Capital, represents the first data-driven analysis of the social enterprise accelerator landscape.[8] Through a comprehensive survey of

accelerator pipelines, services, networks, and outcomes, we expect our findings to be relevant to accelerators, impact investors, philanthropists, entrepreneurs, and the broader field of SGB development.

BACKGROUND

Incubators and Accelerators in Traditional Business Sectors

The study of incubators and accelerators that are focused on having a social impact is in its infancy. However, the research on business incubators and accelerators in developed markets provides solid guidance for this study. The critical work of researchers, most prominently VanderStraeten, McMullen, and Sherman, stresses that any accelerator has a relatively high financial cost for funders when compared to traditional venture capital as a percentage of funds deployed, and a high time cost for participants. Thus they emphasize the importance of evaluating an accelerator's performance up front while recognizing that measuring such performance is often challenging.[9]

Lalkaka and Bishop state that the performance of a business incubator should be measured by "the survival and growth of the businesses it incubates."[10] However, there is little consensus among researchers on the best way to measure enterprise growth. Various studies suggest using growth in sales, employees, cash flow, and assets as measures of success.[11] Based on a review of the literature on performance measures for incubators by Vanderstraeten and Matthyssens, we found the following two measures of incubator performance the most relevant for our study: the percentage of graduate enterprises companies that have received a major investment, or are operating profitably (success rate), and the percentage of graduate enterprises that are surviving (which includes firms that may not yet be profitable).[12]

There is some consensus on the key factors that lead to accelerator success:

- **Organizational resources.** Some research suggests that resource dependence, or the funding structure for accelerators, can have an impact on their performance. Chandra and Fealey suggest that overreliance on philanthropic support can have a negative impact on accelerator performance.[13]
- **Selection.** A number of studies confirm that enterprise selection has a critical relationship with accelerator performance, and that a rigorous selection process enables incubators and accelerators to evaluate key enterprise characteristics. Screening best practices includes evaluating managerial, product, and financial characteristics, as well as market dynamics.[14]
- **Quality of (and access to) services.** The same researchers suggest that access to professional management services, as well as other supporting resources (administrative support, accounting, marketing, legal support), is considered important, yet the quality of services and the period of engagement have a stronger relationship with the success of an accelerator.[15]

- **Networks.** Haapasalo and Ekholm argue that the most important factor for incubator success is organized networking, and the most critical service a strong network of experts, potential investors, and business contacts.[16]

However, evidence to date on accelerator performance in traditional business sectors is mixed. Both Ferguson and Olofsson, and Löfsten and Lindelöf suggest that startup companies with accelerator intervention have a higher survival rate and rate of sales growth than similar startup companies without exposure to an accelerator.[17]

However, the data is inconclusive. Amezcua studied a nationally representative sample of U.S. firms and found that incubated firms demonstrate short-term employment and sales growth but in fact fail 10 percent sooner than their non-incubated counterparts, which suggests that the protective environment of an incubator may actually inhibit firms from developing resilient routines and competencies.[18] In this same vein, in his study of business incubators in Europe, de Oliveira found that there is often a mismatch between the services that incubators offer and the needs of participating enterprises.[19]

Underscoring all these findings is the relative paucity of significant research conducted on accelerator inputs and enterprise outcomes, which demonstrates the need for a study on the impact investing/social entrepreneurship landscape.

Incubators and Accelerators in the Impact Investing Sector

According to our findings, the number of accelerators serving impact enterprises has grown rapidly over the last five years (over 70 percent of the accelerators surveyed were founded in 2008 or later). Despite this strong growth, there is only limited research and data-driven analysis of accelerators' role in the impact investment ecosystem. This report aims to generate a greater understanding of accelerators in that sector and is part of a broader strategy to analyze, evaluate, benchmark, and strengthen accelerators. It is not intended to be a comprehensive evaluation of impact accelerators but an initial assessment of the landscape of these organizations

We have divided this report into six sections:

- The landscape of accelerators. We present an overview of the data collected from 52 incubators and accelerators between November 2012 and February 2013, focusing on key descriptors such as organizational structure, finances, geographic scope, and human capital. This overview presents the landscape of a growing group of accelerators that are seeking to have an impact beyond financial returns.
- Enterprise pipeline and selection. We discuss key impact areas, the stage of the enterprises they support, and their recruitment and selection processes.
- Services and benefits. We examine the various services that accelerators provide to their enterprises, the duration of their programs, and the frequency of the mentoring sessions. We also study the post-program support accelerators provide.

- Accelerator networks. We review the various kinds of formal partnerships accelerators typically seek, with impact investors, commercial investors, foundations, governments, and universities. We also present findings from our survey of investors about their connections with accelerators.
- Metrics and evaluation. We discuss accelerators' efforts to collect financial and social performance data from their enterprises and identify gaps in current practices.
- Measuring accelerator performance: First steps. Drawing from the literature on traditional incubators and accelerators, we examine which factors are associated with improved accelerator performance in terms of organizational age, structure, selection, services, and networks. We do not suggest any potential causality but expect our findings to guide more rigorous future evaluations of the performance of social enterprise accelerators.

Based on our findings, we highlight common conclusions and trends that we hope can help funders, investors, and enterprises leverage accelerators most effectively to drive their enterprises' impact and growth. We conclude by providing a series of recommendations for these various groups.

DATA AND METHODOLOGY

Village Capital launched the first phase of this project in spring 2012, gathering initial data from accelerators in the impact investment sector, and it joined with ANDE that summer to integrate the initial findings into a broader research strategy on accelerators. In October 2012, Village Capital and ANDE shared the findings from an initial survey of 25 accelerators at the conference of the Society of Consumer Affairs Professionals in Business, or SOCAP, and other conferences in a report titled, "Bridging the Gap: The Role of Accelerators in Impact Investing."

Based on feedback from various stakeholders, including impact investors, accelerators, foundations, and academics, Village Capital and ANDE revised the survey in October 2012, sending it in mid-November to approximately 50 additional accelerators identified through our networks. The 25 original respondents also received a supplemental survey to enable a comparison of data points from the first research report. In January 2013, we identified 122 additional incubators and accelerators through F6S, a website that serves as a bulletin board for upcoming incubator and accelerator programs for startups. We asked all accelerators surveyed up front for their "impact objectives beyond financial returns," and allowed accelerators to state that they "have no impact objective beyond financial returns" in order to enable a comparison of impact-focused accelerators to non-impact-focused programs.

Initial feedback from the first report also focused on investors; given that 98 percent of the accelerators surveyed listed "access to investors" as a primary benefit of the program, industry feedback suggested that an appropriate study of the accelerator landscape should also focus on investors' engagement with accelera-

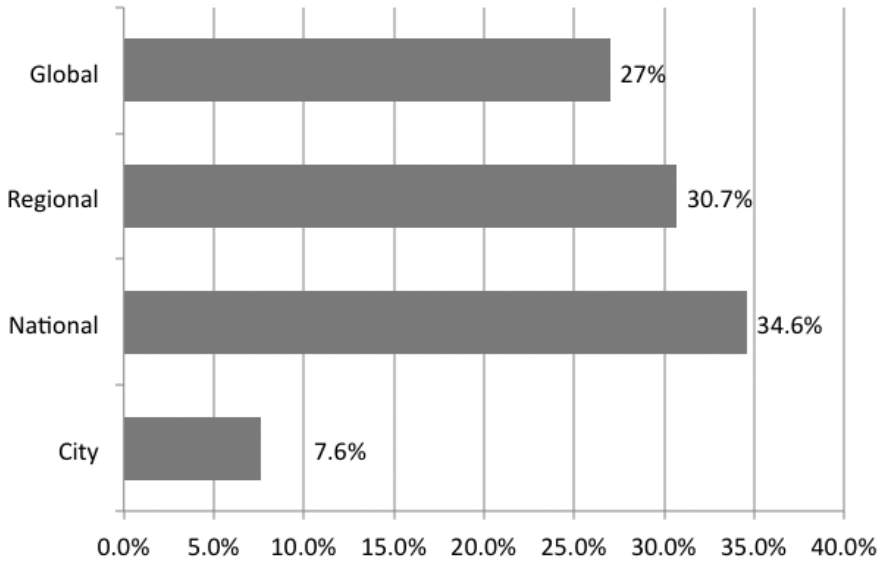

Figure 1. Geographic scope (n = 52)

tors. We surveyed 60 impact investors on different variables relative to their relationship with accelerators.

After significant follow-up via email and phone from December 2012 to February 2013, we closed the surveys in mid-February with a final response rate of 33 percent (65 out of 197 accelerators). We also received a 60 percent response rate for the investor survey (36 out of 60 investors surveyed).

We dropped seven incomplete responses due to insufficient data, leaving us with 58 complete responses. However, only six accelerator respondents identified themselves as having "no impact objectives beyond financial returns," which was not a sufficient sample to make a reasonable comparison between impact-focused and non-impact-focused accelerators. Therefore, we dropped these six observations and focused on the 52 social impact-focused accelerators in this study.

In presenting our findings, we provide descriptive statistics on key accelerator characteristics and performance, and also conduct some preliminary analysis of the factors that may contribute to better performance. We used t-tests to compare accelerators' performance in different categories related to organizational structure and funding, selection, services, and networks. Given the relatively small sample size and the fact that all the data are self-reported, we are cautious about making strong inferences at this stage.

However, we suggest that these findings will be helpful in pointing the way for further, more rigorous analysis of incubator and accelerator performance. We are currently developing a more extensive analysis on this topic by building a longitudinal dataset of social enterprises—both accelerator and non-accelerator gradu-

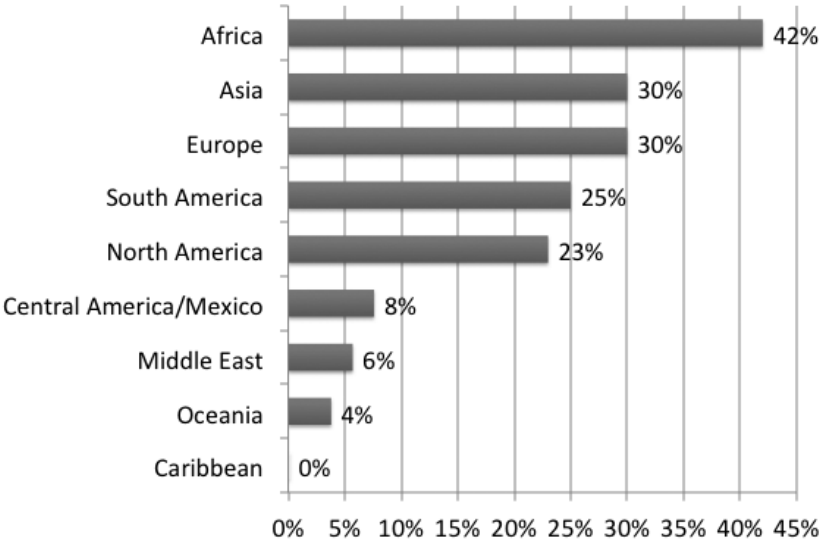

Figure 2. Geographic focus (n = 52)

ates—to find relationships between accelerator interventions and enterprise performance, as well as an evaluative framework to assess accelerator performance.

THE LANDSCAPE OF IMPACT-FOCUSED ACCELERATORS

Geographic Scope

Of the 52 accelerators surveyed, 27 percent are open to enterprises across the globe (e.g., the Unreasonable Institute and the Global Social Benefit Incubator); 31 percent are open to ventures from specific regions (e.g., GrowthAfrica is open to ventures from East Africa, Agora Partnerships is open to ventures across Central America and Mexico); 35 percent operate nationally (e.g., Artemisia is open to ventures in Brazil, New Ventures-Mexico operates pan-Mexico), and 8 percent operate in specific cities (e.g., the SEHub focuses on Singapore-based ventures) (Figure 1). The majority of accelerator operations in this study are focused on Africa (Figure 2).

Organizational Structure

As a baseline analysis of accelerators, we first analyzed the founding of organizations, as well as their structure and funding sources. As mentioned before, accelerators are relatively new, although though the oldest in our sample was founded in 1996. Perhaps counter-intuitively, impact-focused accelerators seem more focused on developing revenue streams beyond philanthropic support than traditional

Human Capital

With the growing awareness of accelerators' valuable role in impact investment, these organizations are attracting significant human capital and resources to their operations. On average, accelerators employ about 11 staff members (eight full-time and three part-time employees).* Older accelerators (those founded before 2008) are considerably larger, with an average of 27 employees, than younger accelerators, with about six employees, suggesting that accelerators have the potential to scale. As newer accelerators become more established and strengthen their operations, we expect them to need more human capital.

* We excluded a large accelerator with 280 employees for this estimate. If included, accelerators in the sample would have an average of 17 employees.

business accelerators. Interestingly, while research on incubators and accelerators in traditional business sectors suggests that the majority are structured as nonprofits, 38 percent of the accelerators in our sample are set up as for-profits, 44 percent as nonprofits, and 17 percent as hybrids.[20]

Funding Sources

Accelerators appear to have sufficient resources to operate but they are by no means self-sustaining. In fact, 57 percent of the respondents stated their financial condition was "operating smoothly," while 16 percent reported operating with a surplus. Only about a quarter of the respondents said they were "strapped for cash."[21] Accelerators' current sources of revenue include, in order, philanthropic capital, program fees, consulting contracts, program fees, and investment closing fees (Figure 3).

- **Philanthropy.** Even though almost two-thirds of the accelerators we surveyed report being structured as for-profits or hybrids, 74 percent of all accelerators rely on philanthropic support for their operations and 54 percent of the total capital currently used by accelerators is from philanthropic sources. This finding suggests that, while many accelerators expect to develop revenue streams in the future, the majority are also likely to rely on grants to support some portion of their operations for the foreseeable future.
- **Entrepreneur fees.** About one-third of the accelerators surveyed charge participants fees, while an additional 17 percent plan to have fees in the future. Accelerators charge from $120 to $5,000, averaging $1,300 per enterprise, excluding three that charge $10,000 or more.
- **Consulting contracts.** The second-highest source of accelerator budgets is revenue from consulting contracts. Accelerators have the unique position of having high exposure to a large volume of enterprises and are able to monetize their expertise in two ways: (a) research on knowledge and insights gained from enterprise exposure, and (b) direct business development assistance provided to entrepreneur graduates.

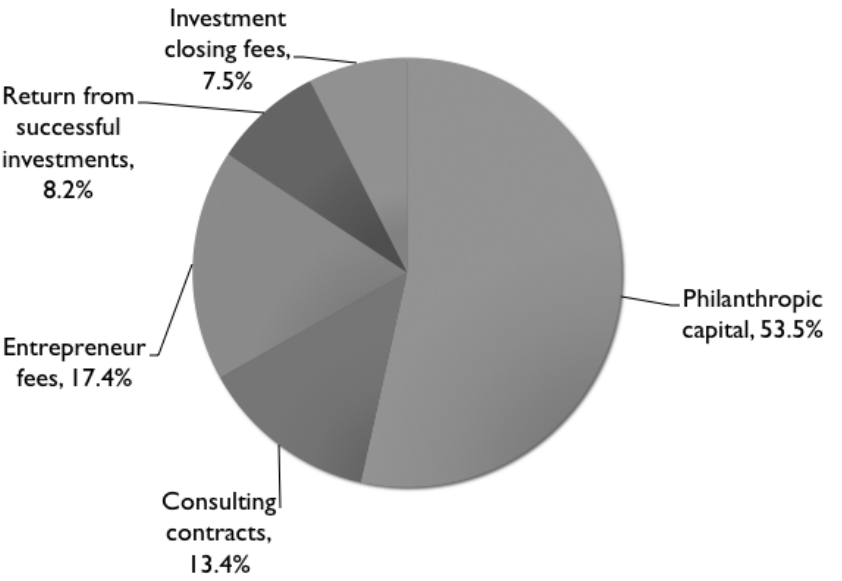

Figure 3. Accelerator budgets by funding source (n = 50)

- **Returns from investment.** Returns from investment represents a small percentage of revenue (8.2 percent), although nearly half the accelerators surveyed reported taking some equity in the enterprises that go through their programs. This is unsurprising, given that the sample of accelerators is relatively young, and that liquidity events from impact investments are rare and can take several years to materialize.
- **"Success fees" from investment.** Ninety-eight percent of accelerators promote access to investors as a valuable service, and many monetize it by charging "success fees" for investments that are brokered. While this remains the lowest line item of all accelerator budgets, nearly 7.5 percent of all accelerator budgets are funded by success fees.

ENTERPRISE PIPELINE AND SELECTION

Sector and Impact Objectives

Twenty percent of accelerators focus on entrepreneurs from one particular sector, 40 percent work with entrepreneurs from several specific sectors, and 40 percent are not sector specific. As certain sectors continue to grow, we expect to see more specialization.

We focused our study specifically on incubators and accelerators that claim to have at least one impact objective beyond financial returns. Based on our sample, the types of impact objectives can be put into two broad categories: employment, and products and services for the underserved. The majority of accelerators sur-

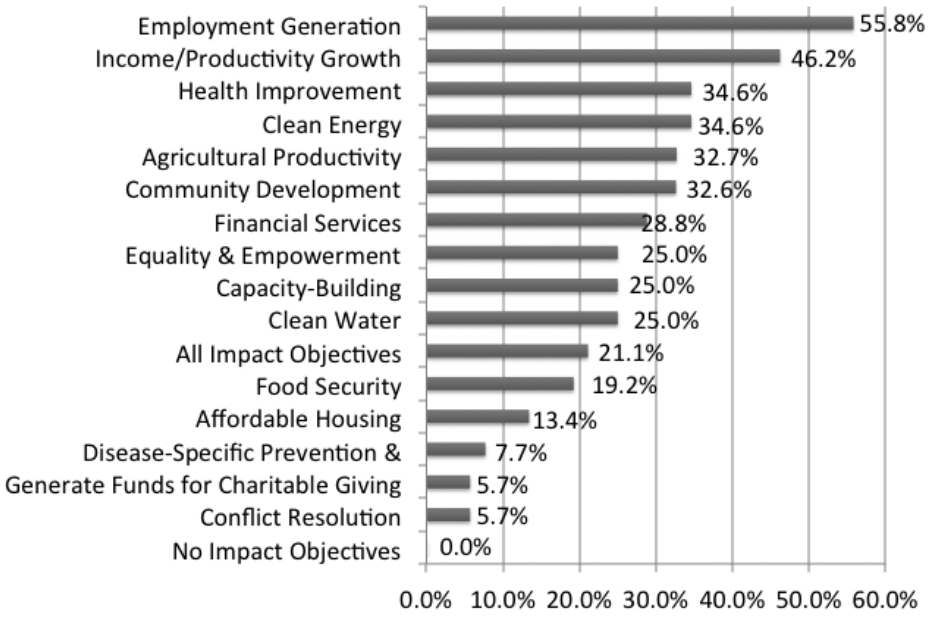

Figure 4. Impact objectives (n = 52)

veyed (Figure 4) focus on employment generation (56 percent) and income and productivity growth (46 percent), and they aim to stimulate socioeconomic development by supporting SGBs. However, a significant proportion also focus on supporting enterprises working in health care (35 percent), clean energy (35 percent), and agriculture (33 percent). This finding is consistent with previous data suggesting that these three sectors are the largest and fastest growing in impact investing.[22]

Enterprise Stage of Development

The accelerators surveyed work with enterprises in a range of developmental stages, ranging from the idea stage to the growth stage (Figure 5). To focus on specific areas where accelerators have intervened in ventures, we clearly defined four areas of enterprise development and identified the percentage of accelerators that reported working with ventures in each stage (some accelerators reported involvement in multiple stages):

- Idea stage (40 percent of accelerators). The proverbial "idea on paper"; ventures at this stage do not yet have a working prototype, good/service/product, or customers.
- Prototype stage (75 percent of accelerators). The most common stage for accelerator involvement, "prototype stage" is where accelerators have a working "minimum viable model" of their good or service but do not yet have revenue.
- Post-revenue stage (65 percent of accelerators). Ventures have customers and typically functioning revenue models; however, their business model is not yet at scale, they are not yet cash-flow positive, and they typically have not raised sig-

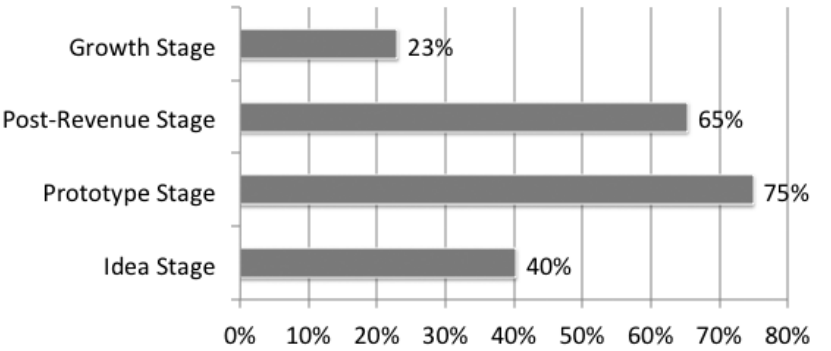

Figure 5. Enterprise stage of development (n = 52)

nificant financing outside "friends and family."
- Growth stage (23 percent of accelerators). Ventures are operating business models at scale; they typically are cash/flow positive and/or have raised significant outside venture financing.

Of particular note is a less clear distinction between incubators and accelerators in the social enterprise space than in traditional business sectors, where these roles are more clearly defined. Social enterprise accelerators tend to work across a fairly wide spectrum of enterprise development stages, perhaps reflecting the relatively limited pipeline of firms.

Enterprise Recruitment and Selection

Accelerators devote significant resources to the recruitment and selection process; the 52 we surveyed have worked with a total of 20,216 entrepreneurs. While 7 percent of accelerators spend less than a month on recruitment activities, 33 percent spend between three months and one year, but most common are the 60 percent that spend between one and three months recruiting each new cohort.

Accelerators recruit entrepreneurs through a host of different channels. The most common sources cited include:

1. Referrals from entrepreneurs affiliated with the accelerator
2. Impact investors (individuals and investment funds)
3. Commercial investors (individuals and investment funds that do not self-identify as impact investors)
4. Entrepreneurial associations (fellowships, scholarships) in the social impact space
5. Entrepreneurial associations that do not identify with social entrepreneurship or impact investing
6. Universities
7. Industry associations focused on specific sectors

Technology- and Invention-based Enterprises

While accelerators are not necessarily focused on technology/invention, we studied the degree to which accelerators were actively focused on invention-based enterprises, which we define as enterprises that have a core technology that was invented/created by the founding team, who owns or seeks to own core intellectual property on the invention.

Twenty-five percent of accelerators surveyed focus exclusively on working with enterprises that have technology and/or an invention at the center of their enterprises, while another 41 percent have an active focus on technology but still work with non-technology or invention-focused entrepreneurs. Only 31 percent have no active focus on tech innovations, and only one accelerator had no technology-based companies in its program (Figure 6).

8. Sector-specific conferences (e.g., agriculture, education)
9. Social entrepreneurship or impact investing conferences
10. Requests from outside program marketing efforts and social media
11. Direct, cold-call recruitment (e.g., finding and contacting entrepreneurs on the web, Facebook, LinkedIn)

Not all sources are equally helpful. Accelerators ranked the following sources, in order, as most helpful:

1. Referrals from entrepreneurs affiliated with the accelerator (considered "helpful" by over 50 percent of the organizations surveyed)
2. Requests from outside program marketing efforts (30 percent)
3. Referrals from entrepreneurial associations (19 percent)
4. Referrals from upstream impact investors (15 percent)

Interestingly, social entrepreneurship and impact investing conferences were listed as the least helpful. This finding is somewhat surprising, considering the prevalence of conferences in the sector that promote themselves as a way to connect with entrepreneurs. However, it may be that social enterprise conferences typically feature more successful and mature enterprises, making them a less useful source of early stage companies that might apply to participate in accelerators.

Based on our sample, accelerators in the impact investment sector appear to be less competitive in terms of selection—average acceptance rate, almost 21 percent—than accelerators in the traditional business sector—average acceptance rate, about 5 percent.[23] The reasons for the lack of selectivity are unclear, but it is possible that there is simply a much smaller pipeline of socially oriented enterprises or that, due to the high percentage of accelerators earning revenue from entrepreneur fees, investment returns, and success fees, accelerator managers may admit these enterprises more readily in order to bring in more revenue. Philanthropic support may also be linked to the number of entrepreneurs being supported, which would also encourage accelerators to accept a greater percentage of applicants. But selectivity does matter: below we compare key performance

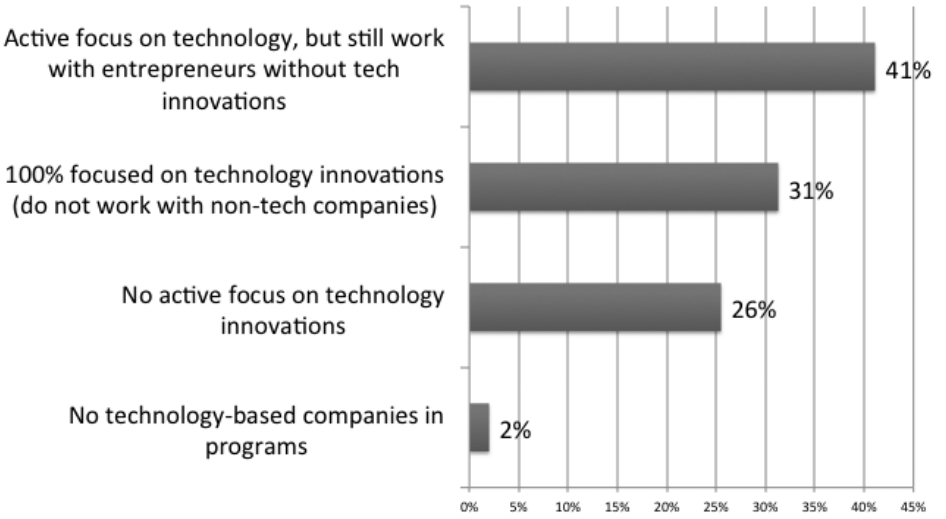

Figure 6. Focus on technology and invention (n = 50)

characteristics of accelerators that accept 10 percent or fewer of their applicants with those of less selective accelerators.

SERVICES AND BENEFITS

Program Duration and Frequency

The average duration of the accelerator programs surveyed is six months.[24] The frequency of meetings during this period varies widely, ranging from every day (26 percent) to once a month (14 percent), with many different meeting frequencies in between (Figure 7, following page).

Program Services and Benefits

Eighty-three percent of accelerators describe their support approach as "high-touch." In this case, accelerators focused on social impact appear to be similar to the majority of incubators and accelerators in traditional business sectors that provide "high-touch," highly tailored services to a small group of enterprises.

Almost all programs surveyed provide the following benefits: mentorship from experts (100 percent), access to potential investors (98 percent), a network of partners and customers (97 percent), and business skills development (97 percent). The majority of programs provide direct funding (54 percent), while a minority provide technology training and assistance (33 percent) (Figure 8, following page).

Other self-identified benefits of accelerators include media exposure, brand recognition, access to a co-working space, referrals to vetted talent and human capital, exposure to relevant and timely R&D, and membership in an extensive

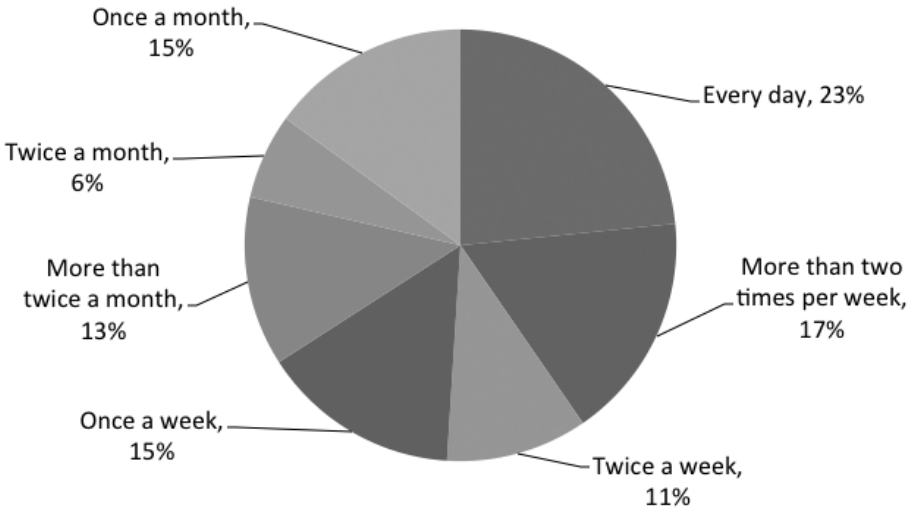

Figure 7. Frequency of program sessions (n = 47)

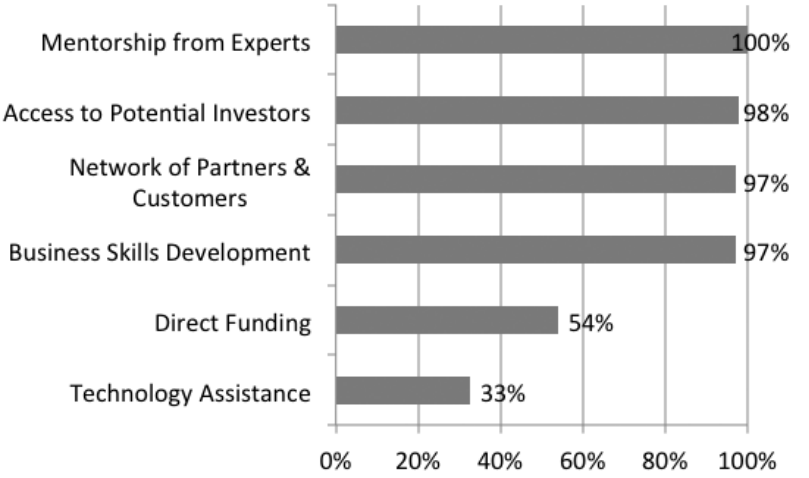

Figure 8. Accelerator services and benefits (n = 52)

alumni network consisting of other like-minded entrepreneurs, service providers, and investors.

However, the existing literature reinforces the fact that when a service is provided it is not necessarily of high quality. We expect to dive deeper into this issue through the next phase of our research strategy by collecting enterprise-level data from ventures that have participated in accelerators, and comparable enterprises that have not received accelerator support.

Post-Program Support

The majority of accelerators (66 percent) offer post-program support to all of their graduates at no cost; 28 percent provide free post-program services on a case-to-case basis; 4 percent provide these services for a fee on a case-to-case basis; and 2 percent do not provide post-program support at all, due to a lack of bandwidth or resources.

Of the accelerators that do provide post-program services to their entrepreneurs, 21 percent offer them for between one and six months after an entrepreneur graduates from their program, and 9 percent offer support for between six and eight months. The majority (70 percent) offer services longer than nine months, possibly as long as the entrepreneurs' ventures exist. The types of post-program services offered include public relations opportunities, connections with investors, board participation, HR/recruitment support, regional meet-ups, alumni networking, and online communities listing funding and promotion opportunities.

ACCELERATOR NETWORKS

Types of Formal Partnerships

Many accelerators have formal partnerships with other organizations, which we define as

- "pipeline/deal flow partners," which recommend enterprises for the accelerator program and attend events/pitchfests, but do not commit financial support to either the accelerator or the entrepreneurs;
- "enterprise support partners," which pre-commit capital to enterprises but do not fund the accelerator program's operations;
- "organization support partners," which fund accelerators' organizational/operational expenses but do not fund the underlying enterprises; and
- "enterprise and organization support partners," which commit capital to both the accelerator's operations and the underlying enterprises.

Accelerators have partnerships with five main groups: corporations, universities, investors, foundations, and governments (Figure 9, following page).

Partnerships with Impact Investors

To corroborate our data from the accelerator survey and to understand accelerators' connections with impact investors more fully, we also collected data from 38

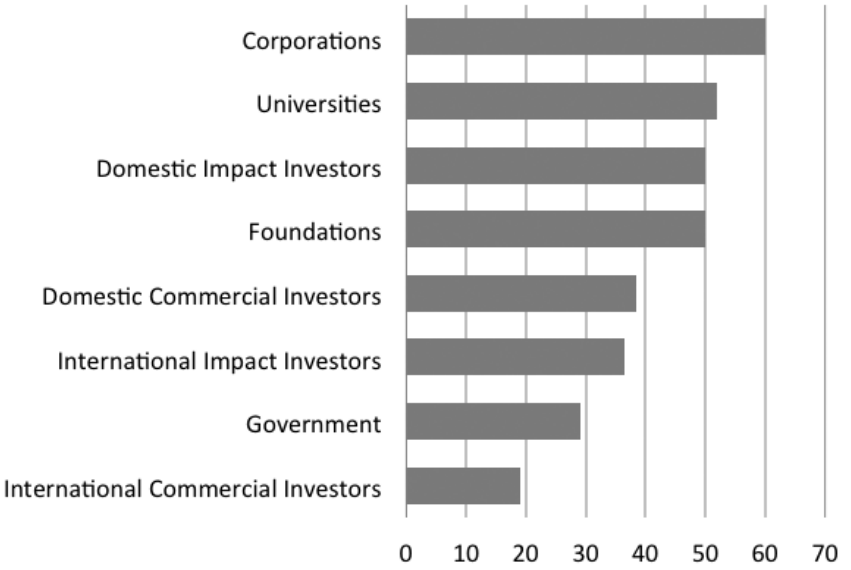

Figure 9. Types of organizations with which accelerators have formal partnerships

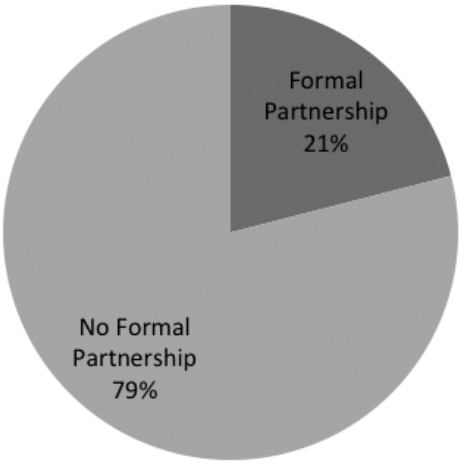

Figure 10. Impact investors that have a formal partnership with an accelerator

impact investment funds. Only 21 percent of the investors we surveyed had established formal partnerships with accelerators (Figure 10, following page). The following are the most common reasons for not partnering with an accelerator:

- **Mandate fit.** Forty-three percent of investors surveyed view accelerators as valuable "feeders" for their pipeline but do not consider it within their mandate to fund them directly.

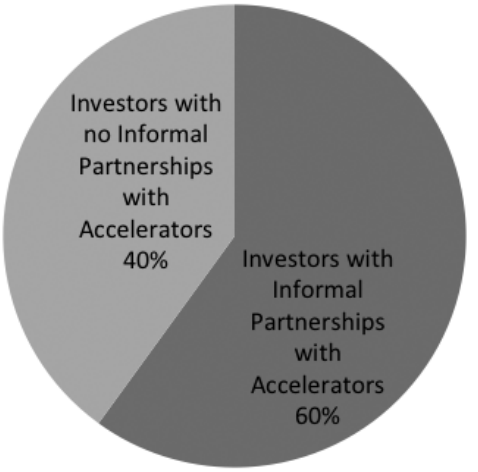

Figure 11. Impact investors with informal partnerships with accelerators ‘

- **Not additionally useful.** Twenty-three percent of investors state that they were able to meet their current investment goals without relying on accelerators.
- **Interested, but no current partnerships.** Sixteen percent of the investors state that they are interested in pursuing formal relationships with accelerators but have not yet done so.

Despite the lack of formal partnerships and funding from impact investors, 60 percent of the investors in our sample did report having informal partnerships with accelerators (Figure 11). In our survey, we defined an informal partnership as one in which an investor regularly communicates with accelerator staff, attends events, or stays otherwise informed, with a primary goal of obtaining deal flow, but does not fund the accelerator directly.

The range of accelerator/investor engagement is wide across the board. Some accelerators are in sync with impact investors: 32 percent of investors report that up to 20 percent of their portfolio was sourced from accelerators. However, a plurality of impact investors does not rely on accelerators for "deal flow"; 47 percent report that none of their current portfolio was sourced from accelerators.

Our findings underscore the critical need for philanthropic support for accelerators in the near term and also raise important questions about aligning the services that accelerators provide with the needs of impact investors. Many impact investors do not look to accelerators for deal flow, and the majority do not contribute to accelerators' budgets in any formal and consistent way. We suggest that accelerators need to calculate the specific value that they add for investors in terms of lower searching and due diligence costs more accurately, and to design their pipeline and curriculum in collaboration with experienced investors. ANDE is

Co-Working Spaces

Many accelerators' work is made financially viable by their operating out of free or affordable co-working spaces. In fact, 61 percent of accelerators surveyed maintain a formal partnership with a university, organization, or co-working space (e.g., the Hub) to lower the cost of their operations.

pursuing additional research on developing a framework to analyze the value created by accelerators (described in Conclusions and Next Steps).

METRICS AND EVALUATION

Based on our analysis, metrics and evaluation are key target areas for improvement among impact-focused accelerators. Unfortunately, a significant proportion of organizations that we surveyed do not track financial or social performance data on an ongoing basis, making it difficult to assess performance and establish benchmarks for the sector.

Financial and Social Performance Data Collection

We asked accelerators to report on the status of their graduate enterprises. While the majority of accelerators (96 percent) collect financial data from their enterprises, 23 percent do not track the status of their graduate enterprises at all, which makes it difficult to evaluate their performance. We noticed the following gaps in accelerator data analysis:

- **Lack of any data collection.** Of the accelerators we surveyed, 4 percent do not collect any financial performance data from their enterprises, while 28 percent do not collect any social or environmental performance data (Figures 12, 13). We find this discrepancy surprising, given the impact-oriented focus of these accelerators. Potential interventions to improve the impact-oriented data collection with accelerators could be to support the introduction of standardized reporting frameworks also used by those who invest and provide capital in the sector, such as IRIS and GIIRS.
- **Data tracking venture performance over time.** Additionally, 14 percent of the respondents only collect financial data at a single point in time (e.g., at the beginning or end of their program), and 15 percent only collect social and environmental data (n=48) at a single point (Figure 14, below). This makes it difficult to assess whether there is any change in the social or financial performance of the enterprises that go through these programs.
- **Accelerator-driven data collection mandates.** Finally, 28 percent of respondents consider reporting by their program participants to be "optional."[25] The majority of the accelerators that do require reporting expect enterprises to provide data for at least one year after the end of their programs, and about one-third require reporting as long as the enterprise is in operation.

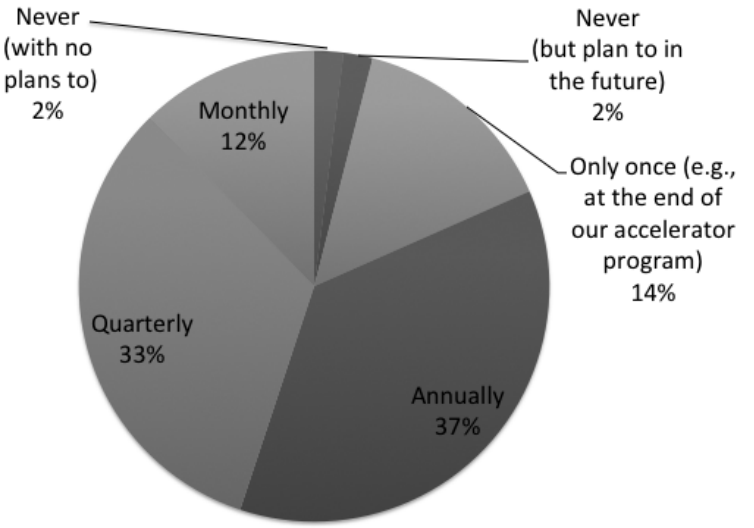

Figure 12. Frequency of financial performance data collection (n = 49)

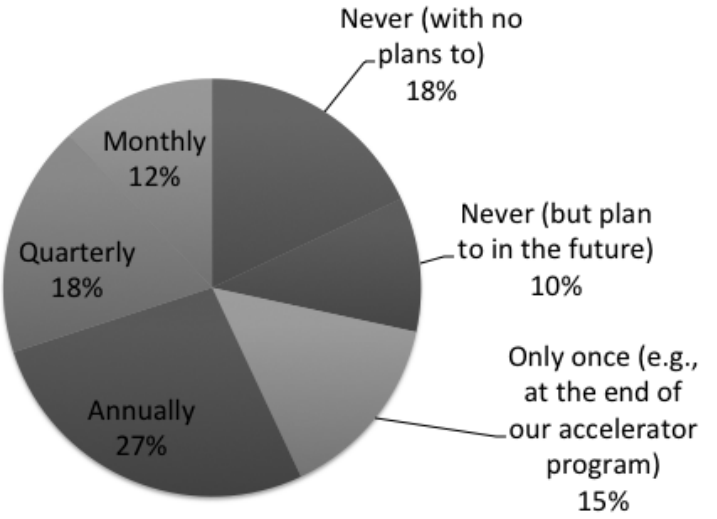

Figure 13. Frequency of social and environmental performance data collection (n = 48)

- **Data-collection methodologies.** The primary method of collecting data also varies widely, with 64 percent of accelerators collecting data through in-person interviews or site visits, 52 percent via phone, and 50 percent via email or online mechanisms. The variety of methods used in data collection also affects how reliable and unbiased the data are.

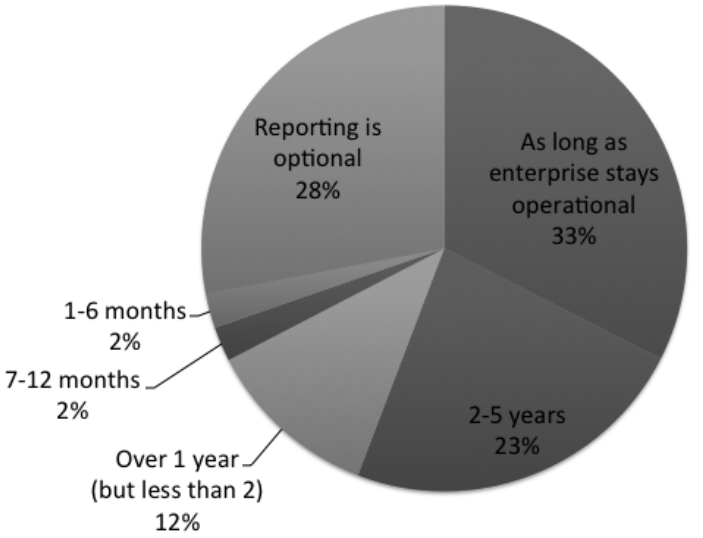

Figure 14. Data reporting period (n = 48)

Accelerator Graduate Performance

About 77 percent of the accelerators in our sample track the status of their graduate enterprises, though their data-collection methodologies are varied and incomplete. We analyzed the performance of ventures that graduated from the accelerators that do collect data (n=40): 31 percent are reported to be profitable and/or have received major investment, another 46 percent are still in operation but are not yet profitable and/or have not yet received major investment, and about 10 percent are no longer operating. There is no data available on 13 percent of the enterprises, even for the accelerators that do track their enterprises (Figure 15).

MEASURING ACCELERATOR PERFORMANCE: FIRST STEPS

Based on research on incubators and accelerators in developed markets, we analyzed four key factors among the sample size of this study that typically affect accelerator success: organizational funding sources, selectivity, services, and networks. We also analyzed the variable "accelerator years in operation" to compare older accelerators (those that have been in operation over five years) to younger accelerators. We used the following two self-reported variables as measures of accelerator success, consistent with the literature on incubators and accelerators.[26]

- **Enterprise success rate.** Percentage of graduate enterprises operating at a profitable level, and/or having raised major investment ($500,000 or more)
- **Enterprise survival rate.** Percentage of graduate enterprises that are operating at a profitable level, and/or have raised major investment ($500,000 or more), or

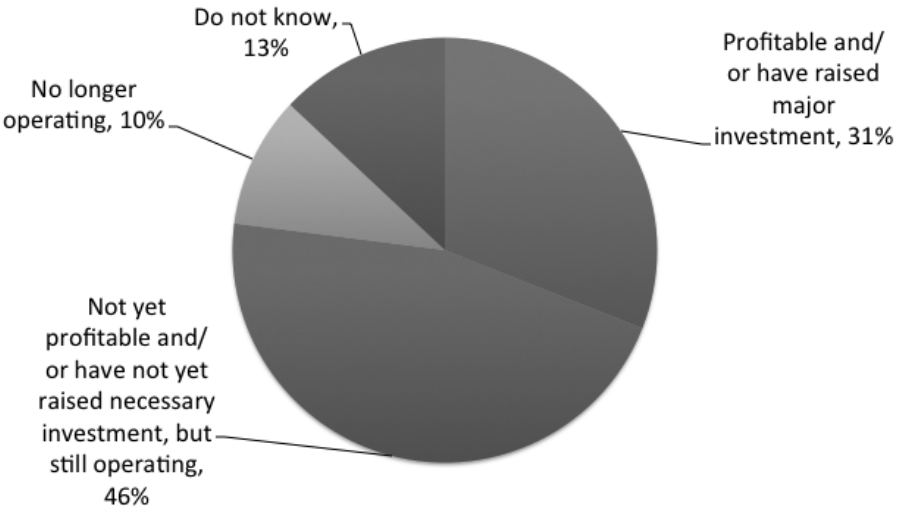

Figure 15. Status of graduate enterprises (n = 40)

are still operating, but are not yet profitable and/or have not yet raised necessary investment (i.e., inclusive of previous category)

We conducted independent sample t-tests to compare average performance measures across different categories for these factors.[27]

Accelerator Years in Operation

While many accelerator characteristics can influence their performance, based on the literature, we hypothesized that older, more established accelerators would perform better on average, given their experience and track record.[28] In our sample, we find that older accelerators do perform better in terms of their enterprise success rates, with an average of 46 percent as compared to only 25 percent for younger accelerators, a difference that is statistically significant at the 5 percent level. However, we do not observe any differences in terms of survival rates, with older accelerators achieving an 80 percent survival rate, compared to a 76 percent survival rate for younger programs (Table 1). A more thorough study could investigate whether the discrepancy in results is due to graduates of older accelerators having more time to develop successful business models, thus we are proposing to conduct an enterprise-level study as a follow-up to this initial study in order to investigate this hypothesis more thoroughly.

	Accelerators founded before 2008 (n=11)	Accelerators founded after 2008 (n=29)
Avg. Enterprise Success Rate	46 percent	25 percent
Avg. Enterprise Survival Rate	80 percent	76 percent

Table 1. Comparing accelerators by age

	Majority Philanthropic Support (n=27)	Majority Non-Philanthropic Support (n=13)
Avg. Enterprise Success Rate	29 percent	35 percent
Avg. Enterprise Survival Rate	74 percent	82 percent

Table 2. Comparing organizational funding sources

Organizational Funding Sources

In our sample, we found that about two-thirds of respondents relied primarily on grants for their operations, defined as over 50 percent of annual revenue. However, we did not find any significant differences in this study in the enterprise success rate or the enterprise survival rate (Table 2). Accelerators reliant on grants had an average enterprise success rate of 29 percent and a survival rate of 74 percent, while those that were not grant reliant had a success rate of 35 percent and a success rate of 82 percent.

Selectivity

We found that, consistent with general theory on incubators, selectivity is a key characteristic of successful incubators/accelerators in the social enterprise sector. In traditional incubator literature, a 5 percent acceptance rate is considered a characteristic of a good program. Incubators in the social enterprise space are still relatively new, so we defined accelerators that accept 10 percent or fewer of their applicants as "selective" and the rest as "non-selective."

We were only able to gather data points from 34 accelerators for this part of the analysis, so it is difficult to draw definitive inferences at this stage. However, in conducting t-tests across selective and nonselective accelerators, we found that selective accelerators do appear to perform better, with an average enterprise suc-

	Selective (n=21)	Nonselective (n=13)
Avg. Enterprise Success Rate	39 percent	23 percent
Avg. Enterprise Survival Rate	91 percent	69 percent

Table 3. Comparing selective and nonselective accelerators

cess rate of 39 percent and an average enterprise survival rate of 91 percent. In comparison, nonselective accelerators have an average enterprise success rate of 24 percent and a survival rate of 69 percent. The differences are weakly significant, at the 10 percent level (Table 3). However, we believe more research is needed to understand why social enterprise incubators in general are not as selective, and the extent to which selectivity factors into accelerator performance. We hope to examine this issue in more detail by encouraging more accelerators to collect data from their graduate enterprises and by developing a longitudinal dataset of enterprises,

Services

We received data from 52 accelerators globally. We found that the majority of accelerators provide the same core services: business skills training, mentoring, a network of partners/customers, and access to potential investors. The only differentiation was whether or not an accelerator provided direct funding to its enterprises as part of its program.

Thirty-nine accelerators responded to the question on providing direct funding. Surprisingly, we found that accelerators that do not provide direct funding appear to have higher enterprise survival rates, although the results were not statistically significant. On average, accelerators that did not provide any direct funding had enterprise survival rates of 84 percent, compared to 71 percent among those that did (Table 4, next page).

NETWORKS AND PARTNERSHIPS

As discussed previously, accelerators partner with a wide range of organizations, including investors (both commercial and impact focused), foundations, universities, corporations, and governments. We found no apparent differences between accelerators that partnered with the following types of organizations and those that did not:

- International impact investors
- Domestic impact investors
- International commercial investors
- Foundations
- Universities

	No Direct Funding (n=17)	Direct Funding (n=22)
Avg. Enterprise Survival Rate	84 percent	71 percent

Table 4. Comparing accelerators that provide direct funding to those that do not

	Domestic Commercial Investor Partnership (n=15)	No Domestic Commercial Investor Partnership (n=25)
Avg. Enterprise Success Rate	41 percent	26 percent
Avg. Enterprise Survival Rate	85 percent	72 percent

Table 5. Comparing accelerators that have partnerships with domestic commercial investors to those that do not (n = 40)

• Governments

When we compared accelerators that had formal partnerships with "domestic commercial investors," such as the local banks, angel investors, and venture capital funds in their networks, we found differences in the average enterprise success and enterprise survival rates. In this sample of 40 accelerators, those that had formal partnerships with these investors had an average 41 percent success rate and 85 percent survival rate. In comparison, accelerators that did not have formal partnerships with these types of investors had an average enterprise success rate of 26 percent and an enterprise survival rate of 72 percent. The differences in the enterprise success rate were also weakly significant, at the 10 percent level (Table 5).

It is interesting to note that formal partnerships with impact investors were not statistically related to enterprise success rates for these acceleration programs, suggesting a potential disconnect between accelerators and investors with similar impact objectives.

CONCLUSIONS AND NEXT STEPS

The number of incubators and accelerators providing tailored support to social enterprises continues to grow. In many countries, these incubators and accelerators are the first entry point for social enterprises into a broader ecosystem and impact investing community that can help them grow at a key stage of development, creating the opportunity for organizations to play a critical role in bridging the pioneer gap.

This study identified several key variables that are related to the success and failure of accelerators, as well as several key gaps that may be holding back accelerator success. We have outlined key findings below and provided recommendations that reflect these findings.

Partnership with in-country commercial investors matter.

For many impact accelerator graduates, the next step in financing may not be impact investors—a 2012 Emory-Village Capital study found that fewer than 10 impact investors invested less than $250,000 per enterprise—but traditional commercial investors such as banks, angel networks, and strategically aligned corporations that find a particular interest in the impact objective of the accelerator. The form of partnership that generated the greatest difference between enterprise success rates was the domestic commercial investor; local investors that were able to finance ventures but did not necessarily self-identify as impact investors.

Two relevant examples are Nigeria's Wennovation Hub, which has partnered with Google Africa in a move to enable all ventures to use Google products to build their businesses, and Nairobi's m:Lab, which has partnered with Nokia and Samsung to help mobile-based entrepreneurs who are developing products to address needs of the poor. In our own experience, Village Capital is launching a program with the Pearson Affordable Learning Fund in India to source, accelerate, and invest in education interventions that support the base of the pyramid.

Selectivity matters.

It stands to reason that the accelerators selecting the best ventures are likely to have the best results. Various studies on traditional business accelerators suggests that programs with a lower acceptance rate and more rigorous selection process had a higher degree of success among their graduate ventures.[29] Knowing that most startups fail, accelerators cast a wide net when recruiting ventures. Our research, which is consistent with the broader literature on the topic shows that impact accelerators with a lower percentage acceptance rate have a higher proportion of successful graduates. This finding provides two actionable steps for accelerators: (1) overresource recruiting so that accelerators are not required, for business model reasons, to accept substandard ventures; (2) focus on the quality rather than the quantity of entrepreneurs served and develop a rigorous selection process.

Further research could explore the cumulative impact of more selective accelerators, as some accelerator programs operate a high-volume, light-touch model that they believe may lead to less selective cohorts and a higher failure rate, but ultimately have a greater impact per dollar invested due to a high volume of graduate ventures.

Philanthropy is currently necessary for accelerators to survive but is not statistically related to enterprise success.

Three out of four accelerators rely on philanthropy to survive, and 54 percent of all accelerator budgets are funded through grants. This finding suggests the following: (1) impact accelerator business models are not yet proven to the point where they can develop sustainable revenue streams, and accelerators currently require grants to fill the gaps they are seeking to address; and (2) most accelerators are providing resource leverage on philanthropy by complementing grants with sources of earned revenue. We believe that philanthropy will play a critical role in supporting impact-focused accelerators in the immediate future. However, donors can also encourage accelerators to explore new revenue streams that will allow them to become less reliant on grants without compromising their social mission.

Most impact investors are looking to accelerators for investment opportunities but are not finding them.

While 60 percent of impact investors say they have an informal sourcing partnership with accelerators, 47 percent say they have sourced "zero" portfolio companies directly from an accelerator. This disconnect reflects a more fundamental challenge that accelerators face, balancing the business development needs of social entrepreneurs on the one hand while trying to meet the specific criteria of impact investors on the other. Investors cite "lack of fit with our investment criteria" as a primary reason they do not invest in accelerator graduates, suggesting that accelerators could do a better job of engaging proactively with investors in the selection process to develop cohorts that are more ready for follow-on investment.

Accelerators might face a "free rider" problem.

At the same time, while the majority of impact investors look to accelerators as a sourcing mechanism, only 20 percent help accelerators fund their operations. The primary reason for this lack of involvement is "mandate fit"—investors do not view it as their role to support accelerators. In the long run, as cash-strapped accelerator programs try to fund their operations, they may see a "free-rider" problem that causes a misalignment between accelerators and investors. Accelerators, investors, and donors need to find a funding model that covers the cost of quality business acceleration for entrepreneurs, maintains the impact focus, and also generates a reasonable value proposition for all parties.

We have little systematic data on how accelerators are performing, and many accelerators are not even collecting data.

These findings are from a sample of 52 accelerators worldwide; however, we need much more data on the effectiveness of incubators and accelerators to assess the quality of services provided, as well as the importance of selection and networks. While small for conducting statistical analysis, our sample of accelerators is relatively large, given the current stage and size of the impact investing sector. We

believe that expanding this dataset will allow a more refined, multivariate analysis of key accelerator success factors.

To assess accelerator performance more fully, we need more and better longitudinal data on the enterprises that receive support, and on those that apply but do not receive support. Village Capital and ANDE, in collaboration with several key partners, are currently working with Emory University's Social Enterprise @ Goizueta to develop a longitudinal database of enterprise performance. This project will address the following:

- How do entrepreneurs that participate in accelerator programs perform differently than others?
- Are there differences in measurable impact between general/global accelerator programs and those that focus on specific sectors or regions?
- What specific program design choices (related to participant selection, services provided, and network development) are associated with more positive accelerator impacts?

Over the longer term, this database will allow additional longitudinal analysis of how various interventions can affect social enterprises at different stages of their development.

The majority of accelerators that did not collect data cited a lack of time/resources for data collection. Most accelerators are startups themselves, and we recommend that philanthropists or investors who support accelerators also provide support for data collection/assessment.

Finally, ANDE is collaborating with I-Dev International to develop a common framework to quantify the value created by incubators and accelerators for investors and enterprises. I-Dev is evaluating and benchmarking six-eight impact incubators and accelerators, identified through the ANDE-Village Capital survey, and using this framework to compare the performance of "accelerated" versus "unaccelerated" SGBs that have received investment. Through this analysis, we hope to quantify the monetary value created for both SGBs and investors by comparing the costs associated with deal sourcing, due diligence, investment cycle, advisory services, and probability of exits.

We believe this broad, multipronged initiative will provide significant value for the enterprises, incubators, and funders that support accelerator services. Our work will provide answers to critical questions and thus allow entrepreneurial firms to make more educated decisions about whether to join an incubator and, if so, which one. It will inform accelerator managers about best practices and provide mechanisms to improve their performance. Finally, foundations, investors, and development institutions will be able to assess the impact of their investments and identify strategies to scale or replicate successful incubator models.

RECOMMENDATIONS

Based on this research, we recommend several actions for various players in this ecosystem: incubators and accelerators, impact investors, foundations, and academics.

For Incubators and Accelerators

- Invest in platforms and systems to encourage and enable quality data collection from the enterprises you support,
- Collect data from all enterprises that apply to your programs, even those that are not accepted or do not receive services, to assess performance against a control group more comprehensively. Simple data-collection processes can be built into your application form.
- Collect data from participating enterprises for at least five years post-graduation to track progress and growth over the medium to long term. The impact of accelerator support can take several years to materialize.
- Partner with academic institutions and industry associations to develop stronger data-collection systems.
- Strengthen your processes for searching and sourcing ventures for your programs. Being in a position to select the top ventures without compromising quality matters.
- Develop more rigorous, multistage selection processes, drawing from best practices in other sectors. Engage other ecosystem members, such as investors, foundations, and technical experts, in the selection process so that you are building a cohort that aligns with the needs of upstream financers.
- Build networks with the local financial sector, particularly domestic commercial investors, which may be able to directly support a plurality or majority of your graduates more readily than impact investors.
- Build networks with corporate supply chains, both domestic and international. Enterprises need not only investment but access to markets.
- Explore other revenue streams such as investment closing fees and direct investment.

For Impact Investors

- Leverage the networks and reach of incubators and accelerators, and collaborate with them to strengthen your pipeline and explore potential areas for improved alignment in their activities.
- Build formal partnerships with accelerators that are closely aligned with your investment strategy and that have strong performance records.
- Invest in accelerators with either time or money. Accelerators will be more inclined to deliver you the deal flow you're asking for as a customer if you help them do the work they are trying to do.

For Foundations

- Support the development and continuation of best practices among successful accelerators and incubators by contributing to their operations, development of performance management systems, and dissemination of their results.
- Emphasize quality of services over quantity of entrepreneurs served when supporting incubator and accelerator grantees.
- Build stronger networks between investors and incubators to enhance ecosystem efficiency.
- Provide support for accelerators to track enterprise performance.

For Academics

- Focus on developing methodologies to assess incubator and accelerator performance more effectively.
- Conduct empirical research on key success factors for incubators and accelerators, including an analysis of the quality of services, the relevance of the selection process, and the effects of strong partnerships and network.

APPENDICES

Organization Names (in alphabetical order)

1. Agora Partnerships*
2. Angels Initiatives
3. Artemisia*
4. Betaspring
5. Global Accelerator Network
6. Bethnal Green Ventures
7. BiD Network*
8. Capital Innovators
9. Dasra*
10. Eleven Accelerator Venture Fund
11. Endeavor*
12. Endeavor Global*
13. FATE Foundation*
14. Fledge
15. Global Catalyst Initiative*
16. Global Social Benefit Incubator*
17. Groundwork Labs
18. GrowLab
19. GrowthAfrica/The GrowthHub*
20. Hired By Society
21. HUB Vienna Incubation
22. iAccelerator, Centre for Innovation Incubation and Entrepreneurship, IIM-Ahmedabad
23. ImpactAmplifier

24. Incubate
25. Intellecap (Intellectual Capital Advisory Services Pvt. Ltd.)*
26. Invest2Innovate*
27. Investment Ready Program
28. iStarter
29. LGT Venture Philanthropy Foundation*
30. m:lab East Africa
31. Mara Foundation
32. Mozilla WebFWD
33. National Collegiate Inventors and Innovators Alliance
34. NESsT*
35. New Ventures India*
36. NewME Accelerator
37. Nxtp Labs
38. Panzanzee
39. Sinapis Group
40. StarCube
41. Startupbusiness
42. good.bee
43. Startup Farm
44. StartupYard
45. SURF Incubator
46. Tree Labs
47. UnLtd India
48. Unreasonable Institute
49. Village Capital*
50. Wennovation Hub
51. Villgro*
52. Z80 Labs Technology Incubator

* ANDE Members

Organization Names (in alphabetical order)

1. Accion Venture Lab*
2. Adobe Capital
3. Anavo
4. Angel Ventures Mexico
5. Annona Sustainable Investments BV
6. Bamboo Finance*
7. Creas
8. EcoEnterprises Fund*
9. eVA Fund
10. Ferd Social Entrepreneurs
11. Good Capital
12. Gray Ghost Ventures*

13. GroFin *
14. Injaro Agricultural Capital Holdings
15. Insitor Management
16. Inversor Fund *
17. Invested Development
18. Jacana Partners *
19. LGT Venture Philanthropy*
20. Lundin Foundation*
21. ManoCap
22. Oasis500 (Oasis Ventures 1)
23. Oikocredit USA
24. Peery Foundation
25. PhiTrust Partenaires
26. Pomona Impact
27. Renewal2 Investment Fund
28. RSF Social Finance
29. Small Enterprise Assistance Fund (SEAF) *
30. SITAWI-Finance for Good
31. Social Venture Fund
32. TBL Mirror Fund
33. Unitus Impact *
34. Unitus Seed Fund
35. Vox Capital *
36. Voxtra *
37. Willow Impact Investors*

* ANDE Members

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1. Y. Saltuk, A. Bouri, A. Mudaliar, and M. Pease, *Perspectives on Progress: The Impact Investor Survey.* New York City, NY, USA: J. P. Morgan and Global Impact Investing Network, 2013.
2. H. Koh, A. Karamchandani, and R. Katz, F*rom Blueprint to Scale: The Case for Philanthropy in Impact Investing.* New York City, NY, USA: The Monitor Institute and Acumen Fund, 2012.
3. R. Baird, H. Hedinger, and C. Seekins, *Bridging the Gap: The Role of Accelerators in Impact Investing*. Atlanta, GA, USA: Village Capital, 2012.
4. M. Kubzansky, A. Cooper, and V. Barbary, *Promise and Progress, Market Based Solutions to Poverty in Africa*. Cambridge, MA, USA: Monitor Group, 2011.
5. Y. Saltuk, A. Bouri, A. Mudaliar, and M. Pease, *Perspectives on Progress: The Impact Investor Survey.* New York City, NY, USA: J. P. Morgan and Global Impact Investing Network, 2013.
6. In traditional business sectors, incubators and accelerators generally focus on different stages of enterprise development. Incubators typically serve earlier stage enterprises (pre-customers and pre-revenue), while accelerators support enterprises with existing customers and revenue. However, we have found that these differences are less distinct for the impact investing sector. For the purposes of this paper, we will use the term "accelerator" to describe an organization that provides some subset of the support outlined in the previous paragraph.
7. Over the past 30 years, several terms have been used to describe market-based solutions to social problems: "social entrepreneurship," popularized by Bill Drayton, the founder of Ashoka; "impact investing," pioneered by the Rockefeller Foundation and GIIN; "bottom of the pyramid" business-

es, coined by Prahalad and Hart; and several others (e.g., "triple-bottom-line investing," "inclusive business"). Given that accelerators typically aim to serve both enterprises and investors, for this report we use the terms "impact investing" and "social enterprise" to encompass all business activity that seeks to use markets to address social problems, as well as investment strategies that proactively seek social/environmental returns in addition to financial returns.

8. R. Baird, H. Hedinger, and C. Seekins, *Bridging the Gap: The Role of Accelerators in Impact Investing*. Atlanta, GA, USA: Village Capital, 2012.
9. J. Vanderstraeten and P. Matthyssens, "Measuring the Performance of Business Incubators: A Critical Analysis of Effectiveness Approaches and Performance Measurement Systems," paper published in ICSB conference proceedings, pp. 978-0). Cincinnati: ICSB, June 2010; H. Sherman and D. S. Chappell, "Methodological Challenges in Evaluating Business Incubator Outcomes." *Economic Development Quarterly* 12, no. 4 (1998): 313-321; E. McMullan, J. J. Chrisman, and K. Vesper, "Some Problems in Using Subjective Measures of Effectiveness to Evaluate Entrepreneurial Assistance Programs." *Entrepreneurship Theory and Practice* 26, no. 1 (2001): 37-54.
10. R. Lalkaka and J. Bishop, *Business Incubators in Economic Development: An Initial Assessment in Industrializing Countries*. New York City, NY, USA: United Nations Development Programme, 1996.
11. Hacket, S. M. & D.M. Dilts (2008). "Inside the Black Box of Business Incubation: Study B – Scale Assessment, Model Refinement, and Incubation Outcomes," *The Journal of Technology Transfer*, 33, 439-471.

Schwartz, M. & M. Gothner (2009). "A Multidimensional Evaluation of the Effectiveness of Business Incubators: an Application of the PROMETHEE Outranking Method," *Environment and Planning C: Government and Policy*, 27, 1072-1087.

12. Vanderstraeten and Matthyssens "Measuring the Performance of Business Incubators," *op cit*.
13. A. Chandra and T. Fealey, "Business Incubation in the United States, China and Brazil: A Comparison of Role of Government, Incubator Funding and Financial Services." *International Journal of Entrepreneurship* 13, no. 13 (2009): 67-86.
14. F. A. Khalid, D. Gilbert, A. Huq, and U. T. M. Melaka, "Investigating the Underlying Components in Business Incubation Process in Malaysian ICT Incubators." *Configurations* 1, no. 1 (2012); K. Aerts, P. Matthyssens, and K. Vandenbempt, "Critical Role and Screening Practices of European Business Incubators." *Technovation* 27, no. 5 (2007): 254-267; J. R. Lumpkin and R. D. Ireland, "Screening Practices of New Business Incubators: The Evaluation of Critical Success Factors." *American Journal of Small Business* 12, no. 4 (1988): 59-81.
15. Khalid et al., "Investigating the Underlying Components"; Aerts et al., "Critical Role and Screening Practices"; Lumpkin and Ireland, "Screening Practices of New Business Incubators."
16. H. Haapasalo and T. Ekholm, "A Profile of European Incubators: A Framework for Commercialising Innovations." *International Journal of Entrepreneurship and Innovation Management* 4, no. 2 (2004): 248-270.
17. R. Ferguson and C. Olofsson, "Science Parks and the Development of NTBFS: Location, Survival and Growth." *The Journal of Technology Transfer* 29, no. 1 (2004): 5-17; H. Löfsten and P. Lindelöf, "Science Parks and the Growth of New Technology-Based Firms: Academic-Industry Links, Innovation and Markets." *Research Policy* 31, no. 6 (2002): 859-876.
18. A. S. Amezcua, Boon or Boondoggle? Business Incubation as Entrepreneurship Policy. Whitman School of Management, Syracuse University, 2010.
19. T. F. R. A. de Oliveira Are They Helping? An Examination of Business Incubators' Impact on Tenant Firms. Twente, Netherlands. University of Twente, 2011.
20. Vanderstraeten and Matthyssens, "Measuring the Performance of Business Incubators," *op cit*.
21. We received 37 responses for this question (71 percent of the sample).
22. Aspen Network of Development Entrepreneurs, 2012. ANDE 2012 Impact Report. Washington, DC, USA. The Aspen Institute.
23. Aerts et al., "Critical Role and Screening Practices," *op cit*.
24. We excluded two outliers that have 60- and 84-month engagement periods. If we include those

organizations, the average duration would be over nine months.

25. Forty-three accelerators responded to this question (83 percent).
26. Vanderstraeten and Matthyssens, "Measuring the Performance of Business Incubators," *op cit*.
27. The independent sample t-test is used to compare averages for two groups of cases (e.g., for-profit/nonprofit), to see if any differences are statistically significant. A result may be significant at the 10 percent, 5 percent, or 1 percent level, which means that you are 90 percent, 95 percent, or 99 percent sure of a difference between the means in this sample, respectively. We provide sample means for various categories, along with sample sizes in parentheses.
28. T. F. R. A. de Oliveira *Are They Helping? An Examination of Business Incubators' Impact on Tenant Firms*. Twente, Netherlands. University of Twente, 2011.

D.N. Allen "Business Incubator Life Cycles", *Economic Development Quarterly,* 2(1), 19-29 (1988)

29. S. M. Hackett & D.M. Dilts, "A Systematic Review of Business Incubation Research," *Journal of Technology Transfer,* vol. 29, no. 1, pp. 55-82. 2004; Khalid et al., "Investigating the Underlying Components"; Aerts et al., "Critical Role and Screening Practices"; Lumpkin and Ireland, "Screening Practices of New Business Incubators," *op cit*.