Measuring the Value for Money of Acceleration

AN INTRODUCTION AND METHODS BRIEF

September 2018

EMORY | GOIZUETA BUSINESS SCHOOL
SOCIALENTERPRISEGOIZUETA
Aspen Network of Development Entrepreneurs | THE ASPEN INSTITUTE

GALI

About the Global Accelerator Learning Initiative

The Global Accelerator Learning Initiative (GALI) is a collaboration between the Aspen Network of Development Entrepreneurs (ANDE) and Social Enterprise @ Goizueta (SE@G) at Emory University. GALI is designed to explore and answer key questions about enterprise acceleration, such as: Do acceleration programs contribute to revenue growth? Do they help early-stage ventures attract investment? Do they work differently for different types of entrepreneurs? GALI builds on the Entrepreneurship Database Program at Emory University, which works with accelerator programs around the world to collect data describing the entrepreneurs that they attract and support.

The Global Accelerator Learning Initiative has been made possible by its co-creators and founding sponsors, including the U.S. Global Development Lab at the U.S. Agency for International Development, Omidyar Network, The Lemelson Foundation, and the Argidius Foundation. Additional support for GALI has been provided by the Australian Government, the Kauffman Foundation, and Stichting DOEN.

Acknowledgments

This brief was developed out of a literature review and methodological guide from Elizabeth Brown, PhD. The insights into value for money derive from Elizabeth's work, and any errors belong to the authors of this brief. In addition, GALI funders and accelerator partners provided feedback at multiple stages. Thank you for your helpful support!

Table of Contents

INTRODUCTION

Why Measure Value for Money?

Accelerators are a relatively new form of entrepreneur support that has grown around the world in the past decade. Programs have coalesced around a general model of cohort-based support over a limited duration, typically 3-6 months, often focused on not just skill building for entrepreneurs but also network development and linkages to seed funding. Anecdotal evidence of successfully accelerated ventures has been followed by more rigorous studies by GALI and some emerging academic research (see the "Benchmarking Acceleration" section). But as the evidence behind accelerator effectiveness expands, the question remains—at what cost?

Accelerator managers typically run multiple programs, tweaking the design of their support as they go. Investors into accelerators have many options when deciding where to place their philanthropic funding or investment, including a diverse range of accelerators (ranging from sector-specific programs in a single city to virtual, multi-sector programs) and other types of entrepreneurial support such as incubation, consulting, and coworking spaces. Both accelerator funders and managers need a way to compare programs against each other and to alternative forms of entrepreneurial support.

Researchers and evaluators use various methods to assess how efficiently a program or project converts inputs into outcomes, often referred to as "value for money." For example, for every $1 invested into an accelerator program, how many jobs were created? How much additional revenue did businesses earn?

This methods brief first frames the various ways accelerators can think about value for money of their programs. Then, it explores one practical approach to calculating value for money. Finally, the brief summarizes similar evaluations conducted for other types of entrepreneur support programs. Accelerators and funders can use this guide to understand their options for assessing value for money and to consider how they could incorporate this concept into their data collection and program assessments.

PART 1

"Value for Money" in the Context of Acceleration

A Practical Methodology: Adapting Cost-Effectiveness Analysis for Acceleration

This brief focuses on a practical calculation of cost effectiveness that accelerator managers and funders can use as a management tool in helping compare, design, and fund programs. This analysis requires information about changes over time, so is most useful as a retrospective look at programs to inform future investments. This approach is not useful in determining effectiveness of programs during the course of implementation.

Value for money considers the quality of what is being produced in addition to the economy and efficiency with which it is being produced. In other words, both how good the program was, and how efficiently it produced that value. The concept of value for money is explicitly comparative, for example against a benchmark, other similar programs, or alternative interventions, to show which approach produces the best outcome for a given cost. That said, cost-effectiveness analysis does not explain why some programs perform better than others.

The options laid out in this brief provide guidance for practitioners to conduct this type of analysis themselves, and thus limits the discussion to calculations that could be undertaken with data commonly collected by programs. This practical approach loses some rigor and accuracy compared to a cost-effectiveness analysis that an economist might conduct.

Using formal cost-effectiveness analysis as a guide, and with the data that accelerators currently track either on their own or through GALI, there are two broadly feasible calculations any program could undertake:

1. Average Cost Effectiveness

This approach is applicable for programs that collect baseline and follow-up information from their cohort ventures, but do not have data from a comparison group. This calculation assesses the cost per average change in a single outcome over a certain period of time.

$$\text{Average Cost Effectiveness} = \frac{\$ \text{ Program Cost per Venture}}{\Delta \text{ Average Change in Outcome}}$$

$ Program Cost per Venture = Total Program Cost + Total Capital Invested by the Accelerator

Δ Average Change in Outcome = Cohort Average Outcome in Year$_n$ – Cohort Average in Baseline Year

A resulting statement might be: "Every $1,000 in accelerator costs was associated with the creation of one new job at cohort companies after two years." The denominator and numerator can be flipped, and the result would just be stated differently, for example "every $1 in accelerator costs was associated with 0.001 new jobs at cohort companies after two years."

2. Net Cost Effectiveness

This method is for programs that collect baseline and follow-up information from their cohort members and from a comparison group. Incorporating a comparison group is a practical way for accelerators to assess what happened to their cohort members alongside what happened to another, similar group of ventures that did not go through their program. The comparison group helps account for the change that would have occurred anyway, without the program. Net cost effectiveness subtracts the average change for the comparison group from the average change for cohort ventures in an attempt to isolate the portion of the program outcome that is associated with participation in the accelerator.

$$\text{Net Cost Effectiveness} = \frac{\$ \text{ Program Cost per Venture}}{\Delta \text{ Average Net Change in Outcome}}$$

$ Program Cost per Venture = Total Program Cost + Total Capital Invested by the Accelerator

Δ Average Net Change in Outcome = (Cohort Average Outcome in Year$_n$ – Cohort Average in Baseline Year) – (Comparison Average Outcome in Year$_n$ – Comparison Average in Baseline Year)

A resulting statement might be: "Every $2,000 in accelerator costs was associated with one additional new job at cohort companies two years later, in comparison to non-cohort companies."

Background on Value for Money Calculations

There are two approaches to comparing the benefits of a program to its costs: Cost-benefit analysis and Cost-effectiveness analysis (see Table 1). Cost-effectiveness analysis compares a change in a particular outcome per dollar spent, while cost-benefit analysis monetizes all benefits.

In both cases, a formal analysis would likely be out of scope for accelerator practitioners for a few reasons. First, the analysis should isolate the effect of the program itself compared to what would have happened anyway, for example through a randomized control trial or quasi-experimental design. The calculation would also not only include direct costs of running the program, but opportunity costs for the entrepreneurs who participated in the program. The future benefits would ideally also be discounted to reflect the time-value of money, in other words the economic value of long term impacts would be adjusted to reflect current dollars since a dollar today is worth more than a dollar tomorrow.

That said, the guidance in this brief adapts many of the concepts from these formal calculations. The table below outlines cost-effectiveness analysis and cost-benefit analysis; however, this brief focuses only on an adaptation of cost-effectiveness analysis. Its straightforward calculation and focus on specific, relevant outcomes makes it more suitable for practitioners.

FORMAL CALCULATIONS OF VALUE FOR MONEY

◀ *Table 1* ▶

Method	COST-EFFECTIVENESS ANALYSIS	COST-BENEFIT ANALYSIS
Description	Estimates a cost per unit change in a single outcome produced by a program	Converts disparate outcomes into common monetary units to compare benefits and costs over time
Sample result	$1000 spent per job created	Every $1 invested returns $6 in benefits
Calculation	Cost-Effectiveness Ratio = Costs / Outcome achieved Effectiveness-Cost Ratio = Outcome achieved / Costs	Cost-Benefit Ratio = Sum of the discounted benefits of the program / Sum of the discounted costs
Considerations	• Each outcome is separate, and the overall impact cannot be aggregated across different units (such as money, people, or skill level). • Fewer assumptions and estimates are built into this analysis, since the results are expressed in terms of the outcome itself rather than its monetary value. • Accelerators and funders can focus on the outcome(s) that are most meaningful to them.	• Because all outcomes are defined in monetary terms, the overall impact can be aggregated. • The analysis must include estimates for the conversion of an outcome into monetary value, which can be challenging. • Accelerators should consider broad impacts, including an estimate of wider economic impacts (for example, in a reduction in the need for public benefits).

What Outcomes Do Accelerators Aim to Achieve?

To calculate cost-effectiveness, the value that the accelerator sets out to create must first be clearly defined. Despite their common model, accelerators have diverse goals and are oriented around different types of outcomes, including purely commercial returns, the development of a particular sector or geographic area, or innovation that addresses social challenges.

Based on conversations with accelerators and their funders, there are four broad types of outcomes accelerators strive towards (see Table 2).

ACCELERATOR TYPES AND GOALS

◀ *Table 2* ▶

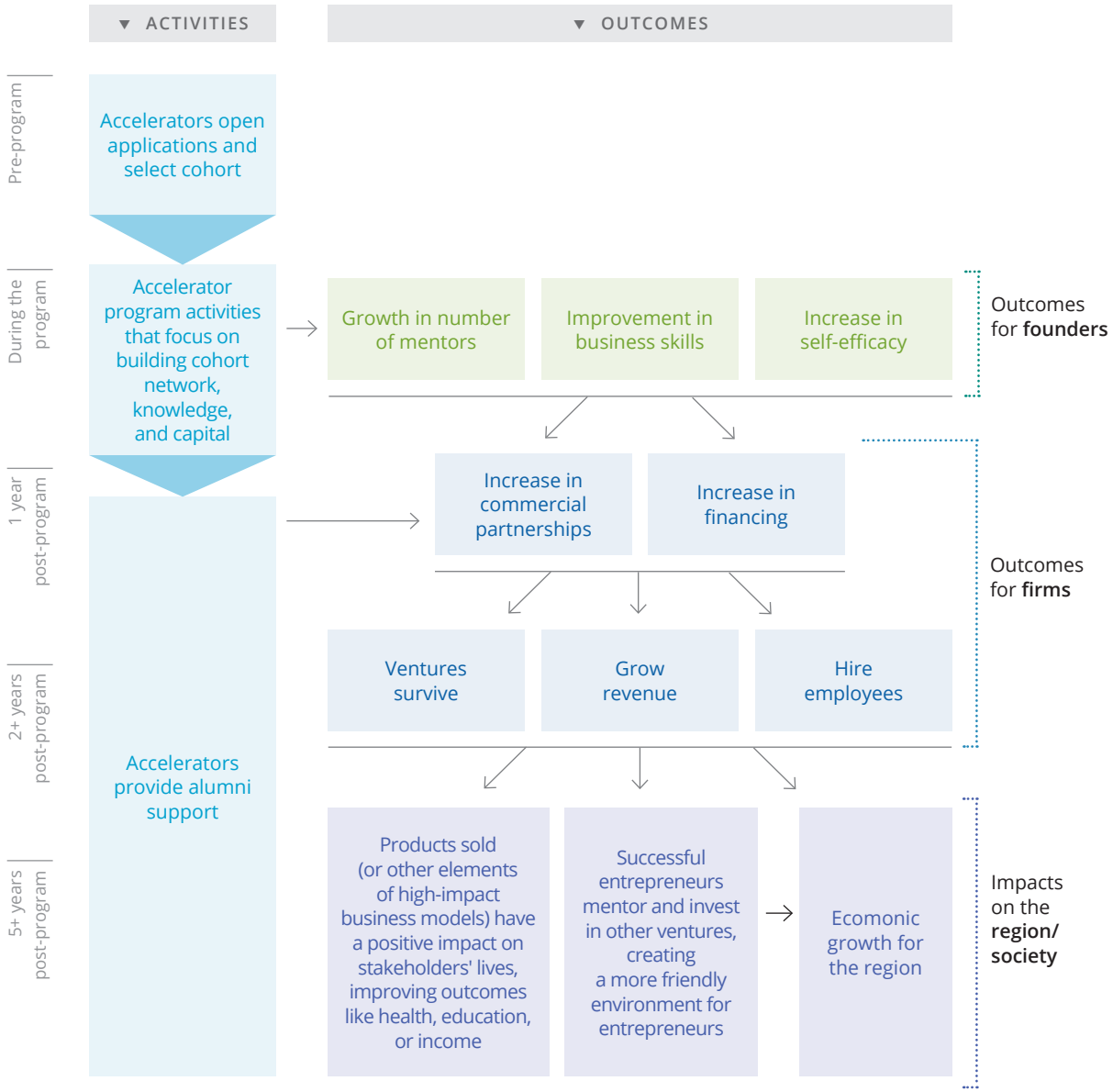
Accelerator Type	Goal(s)
Business development-oriented	Venture growth Job creation
Impact-oriented	Positive social or environmental impact
Entrepreneur-oriented	Personal development of entrepreneurs
Ecosystem-oriented	Entrepreneurial ecosystem / regional economic development

With these goals in mind, Figure 1 maps out a basic theory of change for accelerators, showing how a program acts as a vehicle to identify and select high-potential, early-stage ventures; crowd-in business finance, mentoring, social capital, and indirect learning; scrutinize each venture's business model; and produce small cohorts of ventures, ready for follow-on investment deals. These deals can help to support firm growth and job creation and may ultimately enable accelerated firms to contribute to regional economic growth and to building the entrepreneurial ecosystem.

The benefits of acceleration change with time, and to date there is no agreement on the precise duration of short, medium and long-term outcomes. Figure 1 outlines accelerator metrics based on the timeframes over which one might expect to see positive outcomes and considers how the metrics could be linked to input costs, although these will differ program-to-program.

SIMPLIFIED THEORY OF CHANGE FOR ACCELERATORS

◀ *Figure 1* ▶



Based on this theory of change, accelerators and their funders should set different expectations for the timing of short-term and long-term outcomes. For example, venture growth may actually stall in the year of the program since entrepreneurs may spend time away from day to day operations, refining the business model and gearing up for scale. Broader impacts, such as economic development or social impact of products, would take place over the longer term.

The more directly linked an outcome is to accelerator activities, the easier it will likely be to measure. Table 3 lays out short and medium-term outcomes that accelerators could reasonably track.

MEASURABLE ACCELERATOR OUTCOMES

◀ *Table 3* ▶

Time frame	Type	Outcome to measure	Example metrics
Immediately post-program	Founder	Growth in mentorship support	Number of mentors
		Improvement in business skills	Change in self-rated ability in different content areas
		Increased confidence	Change in self-rated confidence level
1 year post-program	Venture	Increase in commercial partnerships	Change in number of corporate partnerships
		Increase in financing*	Change in equity or debt funding
2+ years post-program	Venture	More ventures survive	Proportion of ventures that are still active
		Increase in revenue*	Change in revenue Revenue growth rate
		Jobs creation*	Change in number of employees

**Variables captured in the Entrepreneurship Database Program survey*

Table 3 does not include longer-term outcomes such as entrepreneurial ecosystem development or social impact, since those would likely be out of scope for a typical accelerator manager to measure. Understanding the change in an entrepreneurial ecosystem requires data collection from outside an accelerator's direct stakeholders. If an accelerator is interested in assessing ecosystem outcomes, partnering with an academic institution or consortium of practitioners would be one potential solution. In some cases, researchers have used public data sources to assess elements of an ecosystem, for example tracking the amount of financing available in a region based on deals in funding databases. In other cases, researchers have conducted new surveys to assess elements of an ecosystem that might not be captured in public sources, an example being ANDE's Uganda Entrepreneurial Ecosystem Initiative.[1]

1 More information is available at **www.andeglobal.org/UgandaEcosystem**

Many accelerators are interested in supporting entrepreneurs to solve specific social challenges; they typically track intermediate outcomes, such as revenue growth, as a proxy for social impact. If an accelerator supports entrepreneurs in one impact area and can collect outcome data that is standard for all cohort members, assessing cost-effectiveness would be feasible. For example, the accelerator might work with businesses in the health sector that develop medical devices, and could estimate impact by multiplying the potential lives saved with a single device by the number of devices sold. However, most accelerators focus on multiple sectors, or do not have access to the type of outcome data that would be needed for this type of social impact assessment.

Failing Fast and Survival Rate

There is some evidence that one benefit accelerators provide, beyond growing successful businesses, is encouraging unsuccessful businesses to fail faster. Moving on relatively quickly from a business model that does not work can benefit the entrepreneur (who can take on more productive projects) and investors (who can be directed to more promising ventures). That said, "helping businesses recognize failure" is not in the typical accelerator mission statement.

One study in the United States showed lower rates of survival among accelerated firms compared to non-accelerated (Yu, 2016). Extrapolating from this research, practitioners may initially find higher rates of business closure but subsequently higher growth rates among those businesses that do survive, since in theory only the best ventures continue on past the highly intense acceleration period.

PART 2

Guidance for Calculating and Using Value for Money Analysis

Example Steps to Calculate Net Cost Effectiveness

This section outlines the steps to calculate net cost effectiveness, which compares the per-venture cost of running a program to the outcomes accrued by accelerated ventures in comparison to a benchmark group of ventures.

Maintaining consistency is most important when comparing cost-effectiveness ratios, to ensure both the costs and the outcomes are accurate comparisons. This means ideally the accelerator has thought through what to collect and how before the program has even started, so data can be consistent from baseline to follow-up. However, even if a program has already ended, accelerators can still collect useful follow-up information from that cohort: matching survey questions to the application questions can create a comparable dataset.

STEP 1

Collect Data

- Data should help accelerators understand whether they are achieving their goals, so the first step should be to align the questions asked with what the program cares about assessing.
- Any outcome measure requires an assessment of change over time. This means starting with a baseline number, which accelerators typically collect during the application process, and then periodically following up with cohort members after the program has ended.
- It is important to create standard questions to compare baseline responses to follow-up responses. If a question is changed or added mid-stream, it is impossible to compare the change from before the program to after the program.
- Ideally, the program will track not only what happened to the entrepreneurs that it worked with, but also what happened with a set of similar entrepreneurs who did NOT go through the accelerator program. This comparison group will create a benchmark for progress of accelerated ventures.
- Programs should attempt to get a fairly complete set of responses from cohort members. Cohorts are typically small—between 10-20 ventures—and a low response rate would make it difficult to make inferences about the full cohort. Understanding why some ventures do not respond may require additional online research: for example, are those entrepreneurs running

a very successful business and too busy to answer a survey, or has their business shut down and their contact information is no longer current? These reasonings would indicate a different treatment of the data and the follow-up.

Beyond Survey Data

Rather than rely solely on survey data, some researchers collect public information about accelerated and non-accelerated ventures as a proxy for the information they would get through direct questioning. For example, one group used web presence as a measure of survival, the number of employees on its LinkedIn page as a measure for hiring, the number of likes on Facebook as a measure of market traction, and recorded fundraising amounts from the database CB Insights.

STEP 2

Calculate Cohort Outcomes

Calculate the average outcome for the cohort over a specific period of time.

When making this calculation, consider the number of ventures in the cohort and how widely dispersed their outcomes are. If there is a lot of variance in the data, the median would provide a more accurate measure of the "typical" outcome of the cohort than the mean. However, it depends what information the accelerator program is seeking to demonstrate. For example, if a program's expectation is for one or two "superstar" ventures to stand out and achieve stellar outcomes, the mean would capture achievements on the high end of the spectrum.

STEP 3

Calculate Comparison or Benchmark Group Outcomes

- To make a comparison, the questions asked of the comparison group should be consistent with those asked of the cohort. For example, if cohort ventures are asked to report their revenues over the previous calendar year, clarify this time frame for the comparison group as well. When asking about employees, clarify whether or not to include temporary hires.
- Participants in the Entrepreneurship Database Program (EDP) already have information from a comparison group, since Emory University surveys every applicant to the accelerator program.
- Programs that are not EDP participants and have not collected data to build their own benchmark may be able to use the dataset made publicly available by the EDP each year. Users will need to make decisions about how to pull from and interpret that data and should align their own survey questions with the EDP survey questions for comparability. Some considerations include:
    - To create a benchmark of non-accelerated ventures, include only those ventures not accepted into a program.
    - Include only ventures from the region and/or sector relevant to the cohort.
    - Include only those ventures whose track record at application was very similar to the cohort being analyzed. For example, decide to look at only pre- versus post-revenue, only focus on later stage companies, or filter by capital raised.

Using Data from the Entrepreneurship Database Program

The Entrepreneurship Database Program at Emory University partners with a range of accelerators to collect consistent data from entrepreneurs during their application cycles, and then records whether each applicant participated in the program. Then every subsequent year, participating and non-participating ventures complete follow-up surveys that capture year-over-year changes in several variables that indicate new venture performance including investment, revenue, and employees.

Each year, the Entrepreneurship Database Program releases a new anonymized data file for download. As of September 2018, that file included baseline information from 13,000+ ventures that applied to one of 175+ accelerator programs between 2013 and 2017.

Read more and request access to the data file at **www.galidata.org**.

STEP 4

Calculate Accelerator Costs

- As with cohort outcomes, be clear and consistent in the approach to calculating the cost of acceleration. If the accelerator has an existing financial analysis by program, this metric is straightforward. Where the accelerator does not, this metric requires additional estimates or assumptions.
- Elements to include might be direct costs (such as venue or travel) plus a portion of fixed costs such as personnel and rent. Direct investments into ventures should be included, for example seed funding or grants.
- Divide the total program cost by the number of ventures in the cohort to calculate the cost per venture.

Considerations for Calculating Accelerator Costs

An accelerator's approach to calculating program costs can dramatically influence the results of a value for money calculation. If two programs result in the same outcome, but the first includes only direct costs and excludes overhead expenses like salaries and rent, and the second program includes all costs, the first program would calculate a higher value for money. In addition, R&D costs may often be excluded from the analysis—for example, the cost to develop a new curriculum. Accelerators that include R&D costs would calculate a much lower value for money for the first program to utilize this investment than subsequent programs that build off of this initial investment. Regardless of how accelerators decide what to include and exclude, they should be consistent and transparent with their approach to calculating costs.

STEP 5

Putting It All Together

- Calculate value for money using the net cost-effectiveness equation:
  Net cost-effectiveness = Cost per venture / Net change in outcome for accelerated ventures
- For example, imagine an accelerator program with $150,000 in total costs for a cohort made up of 10 ventures. The program tracks the number of employees over time and has information from both the cohort companies and a comparison group from the time each company applied to the program (baseline) to the following year. Using the calculations below, the program could state that around $9,000 in program costs was associated with each additional new job at accelerated companies, compared to companies that applied to but did not go through the program.

COMPONENTS OF COST EFFECTIVENESS ANALYSIS

Costs		
Program Costs	$100,000	
Amount Invested	$50,000	
Number of Ventures in Cohort	10	
Outcomes		
	Cohort Ventures	*Comparison Group*
Baseline Average: Number of Full-Time Employees	2.5	1.3
Follow-up Average: Number of Full-Time Employees	5.125	2.3
Calculation Components		
	Cohort Ventures	*Comparison Group*
Cost Per Venture	$15,000	
Average Change in Number of Full-Time Employees	2.625	1
Results		
Average Cost-Effectiveness	$5,714	
Average Effectiveness-Cost (per $1,000)	0.18	
Net Cost-Effectiveness	$9,231	
Net Effectiveness-Cost (per $1,000)	0.11	

You can access a downloadable version of this table at **www.galidata.org/value-for-money.*

GALI Benchmark for Cost Effectiveness

GALI conducted a net cost-effectiveness analysis across participating programs and found that on average, $1 in program costs was associated with a net increase in equity investment of $1.14 in the year after application for accelerated ventures compared to those that applied but did not participate. However, there was actually a negative association for revenue during the year of the program: every $1 in program costs was associated with $0.18 less revenue for accelerated ventures in comparison to non-accelerated ventures. These results match the accelerator theory of change in figure 1 that maps out increases in revenue occurring as a longer-term outcome, compared to investment capital raised.

Read more at **www.galidata.org/publications/entrepreneurship-and-acceleration-questions-from-the-field-roti/**

Using Value for Money Calculations

We anticipate that this method for calculating value for money will be most useful to accelerators and their funders when comparing very similar programs. A tech accelerator in Detroit will likely demonstrate a different pattern of outcomes compared to a virtual accelerator for East African social enterprises.

In addition, some outcomes are inherently more expensive than others and require different time frames (for example building entrepreneurs' skills in financial management and creating jobs should not be compared alongside each other). So in addition to geography, grouping programs around their theory of change, and the outcomes they are striving for, will be important.

For accelerator managers, this analysis may demonstrate that some programs are a relative drain on organizational resources for low benefit, while others more efficiently use the accelerator's human and financial capital. This ratio can be a management tool to understand when it might be necessary to reduce the costs of a program or work to improve net outcomes.

For funders, this analysis may indicate which types of programs are best suited for an allocation of resources towards a specific goal. That said, without the more precise estimate of program effect that would come through an impact evaluation, these measures are most useful as comparative tools to assess a portfolio of projects by a common standard, rather than as a stand-alone metric or as a judgement on the general efficacy of acceleration.

Since value for money calculations are designed for comparisons among programs, ideally accelerators or their funders would integrate this (or a similar) methodology into ongoing data collection processes. Rather than conducting a one-off analysis, value for money calculations could help build intelligence over time to help both funders and managers make better decisions about which approaches are best at turning financial resources into desired outcomes.

PART 3

Benchmarking Acceleration against other Entrepreneur Support Programs

Academic research on accelerators is still relatively new. To date, no one has conducted a randomized experiment of acceleration—in part because the selection process itself is so important to the accelerator model. Other forms of entrepreneur support have a longer research history, including some with randomized control trials. Funders may be interested in comparing not just accelerator programs with each other, but also to other forms of entrepreneur support. Table 4 summarizes the research identified on the cost effectiveness of various programs in creating jobs or increasing wages.

RESEARCH ON COST EFFECTIVENESS OF ENTREPRENEURSHIP SUPPORT FOR JOB CREATION

◀ *Table 4* ▶

Type of Support	Study Location	Result	Citation
Incubation	Europe	$4,275 per job created	Centre for Strategy & Evaluation. 2002. "Benchmarking of Business Incubators." Final Report. European Commission.
Business plan competition	Nigeria	$8,538 per job created	McKenzie, David. 2017. "Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition." American Economic Review 107 (8): 2278–2307.
Business plan competition	Review (multiple countries)	$9,000 per job created	Barrows, G. 2018. "Do Entrepreneurship Policies Work? Evidence From 460 Start-Up Program Competitions Across the Globe." FAERE Working Paper. French Association of Environmental and Resource Economists.
Consulting services	Mexico	$1 of consulting services increased wages paid by $3.85	Bruhn, Miriam, Dean Karlan, and Antoinette Schoar. 2018. "The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico." Journal of Political Economy 126 (2): 635–87.

In addition to rigorous evaluations with cost-effectiveness ratios, research about the effectiveness of interventions provides some useful guidance to funders and others considering acceleration as one of many possible ways to support entrepreneurs. Below is a summary of the research on outcomes of entrepreneurship support programs.

Accelerators

Research to date on accelerators has been relatively limited, but emerging academic work has found that accelerator programming positively impacts early stage firms, rather than just the selection and signaling to investors, and that accelerators influence the entrepreneurial ecosystem.

- An evaluation of Startup Chile found that training plus plus grant funding and access to basic services through the program's coworking space significantly improved venture performance, but there was no effect for ventures that received cash and coworking services alone (Gonzales-Uribe and Leatherbee, 2017).
- A study of multiple accelerator programs in the United States found evidence that programs were accelerating venture growth. The researchers found that the program itself ("learning via consultation") drove a substantial portion of the result, in addition to the effects of "selection, sorting, and signaling" (Hallen, 2016)
- A study of the impact of accelerator programs on the regional supply of venture capital found that programs crowded in seed and early stage financing, not just for cohort members but for non-accelerated ventures as well (Fehder, 2014).

Incubators

Incubators provide typically longer-term services to early stage ventures, including office space and back-office support.

- Researchers have found that incubated firms fail faster, relative to their non-incubated counterparts (Amezcua, Ratinho, and Jayamoha 2013; Amezcua 2010). Several studies also indicate that the job growth rates of incubated firms outpaced that of non-incubated firms (Amezcua 2010; Stokan, Thompson, and Mahu 2015; Colombo and Delmastro 2002).
- According to one systematic review of incubators performed in 2002, incubators are not great job-creators, but are more cost-effective economic development tools in comparison to regional business attraction programs (Hackett and Dilts 2004).

Coworking Spaces

Coworking spaces allow businesses to work independently in a shared space, providing community and access to office services for small organizations.

- Preliminary results suggest that the HIVOS coworking spaces (HIVOS members were selected into the coworking space using a competitive process), were more likely to innovate their products and services, but no more likely than a control group to create additional jobs (Taha 2017).
- Evidence from other qualitative analyses suggests proximity to colleagues confers modest benefits in terms of collaboration and knowledge exchange (Parrino 2015). A report commissioned by the UK's Mayor of London suggests numerous coworking spaces have created jobs, but the cost of doing so has yet to be evaluated (Roberts 2016).

Business Plan Competitions

Business plan competitions provide prize money to winning applicants, in some cases alongside training or other non-financial support and in others just as a cash transfer. This type of support is easiest to randomize, so research into its effectiveness is relatively developed.

Benefits of these programs typically include higher rates of survival, faster revenue growth, and higher employment. However, two studies have found that training, versus just prize money, did not add additional benefits.

- A rigorous evaluation of the 'YouWin' business plan competition in Nigeria suggests that the business plan competition successfully attracted skilled entrepreneurs. Winning the business plan competition enabled the selected entrepreneurs to successfully overcome credit constraints. Entrepreneurs used their $50,000 grants to achieve higher growth by purchasing capital inputs and hiring more workers (McKenzie 2017).
- Fafchamps and Quinn (2017) gave $1,000 cash prizes to the winners of a business plan competition in Ethiopia, Tanzania, and Zambia and compared the business performance of winners to the performance of second and third place runners-up six months later. Winners, selected by a committee of experienced entrepreneurs, were 33 percent more likely than the runners-up to be self-employed. In addition, the average monthly sales, self-reported profits, calculated profits (sales minus costs) and the number of employees were significantly higher for winners.
- A separate study by Fafchamps and Woodruff (2017) in Ghana ran a small business plan competition in which selected winners received individualized training but not cash. The evaluation found no significant impact of the training on venture growth.
- Finally, (Barrows 2018) uses a regression discontinuity design to estimate the impact of winning a business competition based on analysis of 460 competitions across 113

countries and over 20,000 competing firms. Winning a competition "increases the probability of firm survival by 64%, the total amount of follow-on financing by $260,000 USD, and total employment by 47%." The estimated cost per added job was approximately $9,000 (on average firms created three new jobs and cost per job was determined by dividing the number of jobs by the average value of the prize).

Consulting Services

Evidence for tailored consulting services that address specific management issues is also growing. Studies in Mexico and India found that consulting services increase productivity and profits, and ultimately employment.

- Bruhn, Karlan, and Schoar (2018) examine the short run and longer run impacts of consulting services on 432 micro, small and medium-sized enterprises in Mexico using a randomized control trial. In the short run, consulting services lasting four hours, once a week for a year increased firm's productivity, return on assets and profits. Over the longer run, evidence shows that treated firms increased the number of employees by 57% on average and increase the total wage bill by 72% between years 2 and 5.
- A study in India randomly assigned some Indian textile firms to receive free consulting advice over four months. Firms that received this advice raised productivity by 17% in the first year through reduced inventory and improved quality and efficiency, and within three years led to the opening of more production plants. Firms assigned to the consulting services were estimated to increase annual profits by $325,000 (Bloom, 2013).

Conclusion and Next Steps

This brief is meant to provide an introduction to the concept of value for money and to serve as a guide for one practical approach to calculating value for money in the context of acceleration. Until this approach is tried by accelerators and results are shared and discussed, it is unknown how useful this methodology can be for operational and strategic decision-making by practitioners and funders. The GALI team welcomes feedback on this brief and alternative approaches to calculating value for money or thinking about the intended outcomes of acceleration.

Learn more at **www.galidata.org**, and share your feedback at **www.galidata.org/ask-a-question**.

This publication has been funded by the Australian Government through the Department of Foreign Affairs and Trade. The views expressed in this publication are the author's alone and are not necessarily the views of the Australian Government.

Works Cited

Amezcua, Alejandro S. 2010. "Boon or Boondoggle? Business Incubation as Entrepreneurship Policy. A Report from the National Census of Business Incubators and Their Tenants." Syracuse University. https://search.proquest.com/openview/48c3c0f7864b7e8000660d54527efcd7/1?pq-origsite=gscholar&cbl=18750&dis=y.

Amezcua, Alejandro S., Tiago Ratinho, and Parvathi Jayamoha. 2013. "Performance Differentials of Aggomeration and Strategic Groups: A Test of Incubation and New Venture Strategy." In . Babson College. https://ris.utwente.nl/ws/portalfiles/portal/5451023.

Barrows, G. 2018. "Do Entrepreneurship Policies Work? Evidence From 460 Start-Up Program Competitions Across the Globe." FAERE Working Paper. French Association of Environmental and Resource Economists.

Bloom, N., Eifert, B., Mahajan, A.v, McKenzie, D., & Roberts, J. (2013). Does management matter? Evidence from India. The Quarterly Journal of Economics, 128(1), 1-51.

Bruhn, Miriam, Dean Karlan, and Antoinette Schoar. 2018. "The Impact of Consulting Services on Small and Medium Enterprises: Evidence from a Randomized Trial in Mexico." Journal of Political Economy 126 (2): 635–87. https://doi.org/10.1086/696154.

Colombo, M., and M. Delmastro. 2002. "How Effective Are Technology Incubators? Evidence from Italy." Research Policy 31 (7): 1103–22. https://doi.org/10.1016/S0048-7333(01)00178-0.

Fafchamps, Marcel, and Simon Quinn. 2017. "Aspire." The Journal of Development Studies 53 (10): 1615–33. https://doi.org/10.1080/00220388.2016.1251584.

Fafchamps, Marcel, and Christopher Woodruff. 2017. "Identifying Gazelles: Expert Panels vs. Surveys as a Means to Identify Firms with Rapid Growth Potential." The World Bank Economic Review 31 (3): 670–86. https://doi.org/10.1093/wber/lhw026.

Fehder, D., & Hochberg, Y. 2014. Accelerators and the regional supply of venture capital investment.

Hackett, Sean M., and David M. Dilts. 2004. "A Systematic Review of Business Incubation Research." Journal of Technology Transfer 29: 55–82.

Hallen, B., Bingham, C., & Cohen, S. 2016. Do accelerators accelerate? If so, how? The impact of intensive learning from others on new venture development.

McKenzie, David. 2017. "Identifying and Spurring High-Growth Entrepreneurship: Experimental Evidence from a Business Plan Competition." American Economic Review 107 (8): 2278–2307.

Parrino, Lucia. 2015. "Coworking: Assessing the Role of Proximity in Knowledge Exchange." Knowledge Management Research & Practice 13 (3): 261–71. https://doi.org/10.1057/kmrp.2013.47.

Roberts, Carys. 2016. "Start Me Up: The Value of Workspaces for Small Businesses, Entrepreneurs and Artists in London." London: Institute for Public Policy Research.

Stokan, Eric, Lyke Thompson, and Robert J. Mahu. 2015. "Testing the Differential Effect of Business Incubators on Firm Growth - 2015." Economic Development Quarterly 29 (4): 317–27. http://journals.sagepub.com/doi/pdf/10.1177/0891242415597065.

Taha, Tamer. 2017. "Impact of Coworking on Innovation and Employment." UNU-MERIT.

Yu, Sandy. 2016. "How Do Accelerators Impact High-Technology Ventures?" Revise and Resubmit, Management Science. Berkeley, CA: U.C. Berkeley.