The Entrepreneurship Database Program at Emory University

2019 Year-End Data Summary

(Released May 2020)

About the Global Accelerator Learning Initiative

The Global Accelerator Learning Initiative (GALI) is a partnership between Emory University and the Aspen Network of Development Entrepreneurs. GALI builds on the Entrepreneurship Database Program at Emory University, which has worked with dozens of accelerators to collect standardized data from entrepreneurs during the application process. The program then follows up with annual surveys for all the entrepreneurs who applied to these programs, including those that were accelerated and those that were not.

This project has been made possible by its co-creators and founding sponsors, including 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.

Executive Summary

This report summarizes application data collected by the Entrepreneurship Database Program from entrepreneurs who applied to participating programs from 2013 to 2019. The observations presented below are based on 23,368 early-stage ventures. The performance data presented refer to the calendar year before each responding venture applied to an accelerator program.

Key observations from this 2019 Year-End Data Summary include:

- Roughly one-sixth of the ventures applying to accelerator programs report receiving prior outside equity investment. A slightly lower percentage report taking on debt to help start their ventures, while a higher percentage is supported by prior philanthropic contributions.
- Roughly half of the ventures report positive revenues in the prior year, while almost two-thirds report having at least one full-time or part-time employee.
- Ventures with women on their founding teams are significantly less likely to attract equity investors. However, they are significantly more likely to report positive prior-year revenues.
- Ventures operating in lower, lower-middle and upper-middle income countries are less likely than ventures from high-income countries to attract equity investments, but have a greater likelihood of reporting revenues in the prior year and are more likely to report prior-year employees.
- Ventures established by experienced entrepreneurs (i.e., those who founded companies before) are significantly more likely to attract equity investments, and significantly more likely to report revenues and employees in the prior year.
- Ventures whose founders hold patents, copyrights or trademarks are significantly more successful in attracting equity investments, and significantly more likely to report revenues and employees in the prior year.
- A small minority of the sampled ventures measure impacts using the IRIS or B Lab approaches, and the dominant reason for not implementing either of these approaches relates to a lack of awareness.
- There is an (understandable) preference among program selectors toward ventures with more established track records. Applicants that end up participating in programs were significantly more likely to report revenues in the prior year.

Introduction

The Entrepreneurship Database Program at Emory University leverages relationships with a range of accelerator programs to collect systematic data from entrepreneurs who apply to and, if selected, participate in these programs. By establishing mutually beneficial procedures and protocols, this project has set a *de facto* standard for programs interested in collecting and analyzing data that meet their application, selection and program evaluation needs.

The aggregated longitudinal data that are collected support rigorous research over the medium to long term, while delivering shorter-term insights that will guide decisions made by accelerator program managers, funders, investors, and other sector stakeholders.

This 2019 Year-End Data Summary covers entrepreneurs who applied to accelerator programs that began accepting applications during the 2013 through 2019 window. After setting aside duplicate surveys, surveys with too much missing data, and surveys from entrepreneurs who declined to have their application information included in the program, the observations in this 2019 Year-End Data Summary are based on data describing 23,368 ventures whose founders applied to almost 370 programs run by more than 130 different organizations (see **Table 1**).

Table 1: Current sample

Accelerator Partners (with 5+ programs included in dataset)	Programs	N
Village Capital	54	4,268
ygap	15	546
GriffinWorx	11	327
Points of Light	11	756
TechnoServe	10	491
USADF	10	1,056
IMPAQTO	9	275
Pomona Impact	9	204
BlueBox Ventures	7	232
StartupLab.MX	6	484
Branson Centre of Entrepreneurship - Caribbean	5	185
C5 Accelerate	5	109
Intellecap	5	129
New Ventures Group	5	369
Proempleo	5	79
Unreasonable Institute Mexico	5	242
Yunus Social Business	5	496
Other Programs and Channels	192	13,120
Total	**369**	**23,368**

Table 2 summarizes how the sample breaks out by venture age and legal form. A majority of the ventures (roughly 80 percent) are for-profit companies. These for-profit ventures were younger on average than the 2,512 nonprofit ventures when they applied to accelerator programs.

Table 2: Venture age and legal form

	For-profit	Nonprofit	Undecided	Other
N	18,559	2,512	913	1,366
Average Age	2.5 years	4.6 years	1.6 years	3.1 years
Median Age	1 year	3 years	1 year	2 years

Questions asked: "Is your venture a: nonprofit, for-profit company, undecided, other? and "In which year was your venture founded?"

Venture Performance Indicators

Stakeholders in the social enterprise sector are interested in various aspects of the performance of early-stage ventures. Table 3 summarizes venture performance using five different indicators. Roughly one-sixth (15.8%) of all ventures in the sample report receiving some outside equity investment prior to completing their application surveys. A slightly lower percentage (11.7%) took on debt to help start their ventures, while a higher percentage (26.1%) are supported by philanthropic contributions. These percentages change to 18.4% (equity), 13.1% (debt) and 20.9% (philanthropy) when the nonprofit ventures in the sample are set aside.

Among the 3,020 ventures that report receiving equity investment, the median amount of equity received since founding is $65,000. The corresponding medians for debt and philanthropic investments are $40,000 and $18,000 respectively.

Almost half (49.2%) of the ventures report earning revenues in the prior year. Among the ventures that report positive prior-year revenues, the median value is $16,581. Almost two-thirds (62.5%) report having at least one full-time or part-time employee, and the corresponding median for prior-year employees is five.

The values reported by the 2019 applicants showed modest upticks compared to prior years. In particular, the percentages of ventures reporting positive prior year revenues (58.2%) and employees (70.4%) were higher than in the 2018 applications and above the seven-year sample average.

Table 3: Early-stage venture performance

	Some Equity Reported	Some Debt Reported	Some Philanthropy Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported
Percent Yes – All	15.8%	11.7%	26.1%	49.2%	62.5%
Percent Yes – All For-Profits	18.4%	13.1%	20.9%	49.0%	62.4%
Percent Yes – Applied in 2013	18.9%	23.2%	29.7%	47.7%	61.1%
Percent Yes – Applied in 2014	21.5%	14.5%	26.1%	40.6%	61.6%
Percent Yes – Applied in 2015	14.7%	10.9%	28.5%	49.8%	64.6%
Percent Yes – Applied in 2016	13.8%	9.7%	21.2%	40.7%	56.6%
Percent Yes – Applied in 2017	14.1%	11.1%	24.4%	47.8%	60.0%
Percent Yes – Applied in 2018	16.3%	11.7%	27.1%	53.5%	63.9%
Percent Yes – Applied in 2019	17.4%	11.7%	31.0%	58.2%	70.4%

Questions asked: "Overall, how much equity has your venture raised from all outside sources since founding?" "Overall, how much has your venture borrowed since founding?" "How much philanthropic support has your venture received since founding?" "What was your venture's total earned revenue in calendar year 2012 (2013) (2014) (2015) (2016) (2017) (2018)?" "Not counting founders, on December 31, 2012 (2013) (2014) (2015) (2016) (2017) (2018), how many people worked for your venture?"

Country of Operations

Although the ventures in this sample operate in more than 170 different countries, the majority come from the United States (N=5,036), Mexico (2,553), India (2,230), Kenya (1,605), Brazil (1,266), Chile (1,144), Uganda (1,077), Nigeria (1,070), and Colombia (598). The World Bank classifies countries into four categories: high-income, upper-middle-income, lower-middle-income and low-income.[1] Based on this breakdown, 15,639 of the ventures are working in low, lower-middle and upper-middle income countries. **Table 4** shows that these ventures have a lower likelihood of reporting prior equity investments than those working in high-income countries. However, they have a greater likelihood of reporting positive revenues (62.2%, 54.5% and 48.1% compared to 39.9% for high-income countries) and are more likely to have reported hiring employees (75.3%, 73.4% and 58.7% compared to 51.1%). It is noteworthy that ventures in the lower-middle and upper-middle income countries are less likely to report support from philanthropic sources (25.0% and 19.8% compared to 30.9%).

Table 4: Emerging market and high-income country ventures

Operates in:	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported	Some Philanthropy Reported
High-income economies (OECD)	7,322	20.2%	39.9%	51.1%	30.9%
Upper-middle-income economies	6,368	15.5%	48.1%	58.7%	19.8%
Lower-middle-income economies	5,580	14.2%	54.5%	73.4%	25.0%
Low-income economies	3,691	10.6%	62.2%	75.3%	29.8%

Table 5 groups ventures into the regions classified by the World Bank. The majority of the emerging-market ventures in this sample operate in Latin America & the Caribbean and Sub-Saharan Africa. Ventures in both of these regions have higher rates of reported revenue generation than those working in North America. However, both regions also have lower reported incidences of equity investment, with the lowest rates found among ventures working in Sub-Saharan Africa (9.7%).

Table 5: Ventures by region

Operates in:	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported	Some Philanthropy Reported
Latin America & Caribbean	7,630	14.9%	48.8%	59.0%	18.8%
Sub-Saharan Africa	5,670	9.7%	58.5%	71.9%	30.4%
North America	5,309	21.5%	41.2%	51.9%	34.0%
South Asia	2,572	18.2%	47.5%	75.0%	21.7%
Europe & Central Asia	726	24.4%	42.8%	57.3%	26.7%
East Asia & Pacific	619	14.4%	61.9%	63.8%	32.8%
Middle East & North Africa	435	19.5%	41.8%	64.8%	24.1%

Sectors and Impact Objectives

Table 6 summarizes performance indicators across the sectors represented in the sample. Equity investments are most common in the financial services sector (reported by 30.9% of the ventures), but least common in the culture and artisanal sectors (8.4% and 10.3%, respectively). Financial services and information & communication technology ventures are the least likely to report earning revenues (41.6%). By far, the sector with the greatest incidence of reported revenue generators is the artisanal sector (67.4%). Ventures in the agriculture sector are the most likely to report hiring employees (71.7%), while culture sector ventures are the least likely in this regard (52.5%).

[1] *See data.worldbank.org/about/country-and-lending-groups.*

Table 6: Sector participation

Primary Sector	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported
Education	3,457	16.3%	52.4%	63.6%
Agriculture	3,276	14.1%	59.5%	71.7%
Health	2,459	17.9%	41.8%	60.9%
Information & communication technologies	2,150	16.9%	41.6%	56.6%
Financial services	1,955	30.9%	41.6%	66.6%
Environment	1,295	11.4%	51.9%	61.3%
Energy	951	18.6%	49.8%	67.2%
Artisanal	571	10.3%	67.4%	66.5%
Tourism	540	11.9%	48.1%	57.4%
Supply chain services	483	15.3%	52.2%	60.0%
Culture	442	8.4%	50.5%	52.5%
Water	350	16.3%	55.7%	71.1%
Infrastructure/facilities development	294	11.9%	47.6%	61.9%
Housing development	286	10.5%	50.7%	66.4%
Technical assistance services	254	12.2%	46.1%	64.2%

Question asked: "What primary sector is being impacted by your venture's activities?"

Nearly 90% of ventures in the sample report having an explicit intent of creating social or environmental impact. The most commonly-identified impact objectives in the sample are employment generation and income/productivity growth. Table 7 summarizes venture performance outcomes across the impact objectives that were identified most often by entrepreneurs. The likelihood of attracting outside equity investment is consistent across impact areas, with two impact areas – employment generation and community development – reporting slightly lower rates (14.1% and 13.0%). There is somewhat more variance in the likelihood of reporting positive revenues. Here, ventures dedicated to health improvement are the least likely to have reported positive revenue in the prior year (45.6%). There is also some variance in the probability of reporting employees. Not surprisingly, ventures dedicated to employment generation are the most likely to report prior year employees (67.2%).

Table 7: Impact objectives

(IRIS) Impact Objective	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported
Employment Generation	6,419	14.1%	55.2%	67.2%
Income/Productivity Growth	5,206	16.8%	52.1%	64.9%
Community Development	4,400	13.0%	51.4%	62.7%
Access to Education	3,993	16.0%	52.9%	65.4%
Health Improvement	3,649	17.3%	45.6%	63.2%
Equality and Empowerment	3,698	16.6%	52.3%	63.8%

Question asked: "Which of the following impact objectives does your venture currently seek to address? (check up to three)"

Profit Margin Aspirations

Table 8 presents a similar summary across the different profit margin aspirations expressed by entrepreneurs. Focusing on the for-profit ventures, the largest groups are comprised of ventures that seek profit margins in excess of 20 percent (N=6,919). The ventures with the highest – and ironically lowest – margin objectives are, on average, most likely to attract equity investors (21.2% and 20.8% respectively). Differences are less clear in terms of earned revenues and employees.

Table 8: Profit margin aspirations

Profit Margin Aspiration	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported
Margins of 0% - 5%	231	21.2%	43.7%	66.2%
Margins of 6% - 10%	922	16.7%	54.3%	69.0%
Margins of 11% - 15%	1,532	18.2%	51.4%	66.8%
Margins of 16% - 20%	2,634	18.3%	57.7%	68.9%
Margins of more than 20%	6,919	20.8%	54.5%	66.5%

Question asked: "What annual profit margins would you be happy achieving on average?" Table includes only for-profit ventures.

Gender and Entrepreneurial Experience

More than half of the ventures report having at least one woman among the primary three founders. **Table 9a** compares ventures established with and without women on their founding teams. Teams with women report a significantly lower likelihood of attracting equity investment (12.2%, compared to 19.4% of the ventures with all-male teams). However, they are significantly more likely to report revenues in the prior year (52.7% compared to 45.8%). When teams with women founders are broken down into those that list a woman as the first founder versus those where a woman is listed second or third, this equity disadvantage is especially acute among what might be called "women-led" ventures.

Table 9a: Founders' gender

Teams with:	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported
Men Only	11,742	19.4%*	45.8%	62.1%
With Women	11,626	12.2%	52.7%*	62.9%
Woman Listed 1st (Women-led)	2,816	8.5%	49.3%	55.4%
Woman Listed 2nd or 3rd	8,810	13.4%*	53.8%*	65.3%*

** difference is significant at p<0.05*

More than half of the ventures have at least one founder with prior entrepreneurial experience - someone previously involved in the launch of another for-profit or nonprofit venture (see **Table 9b**). These experienced founding teams are significantly better at attracting equity; 18.6% attracted outside equity investment, compared to 11.8% of the corresponding inexperienced teams. Prior entrepreneurial experience also yields significant improvements in the likelihood that a venture reports earning revenues or hiring any employees.

Table 9b: Founders' prior entrepreneurial experience

Teams with:	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported
Inexperienced Founders	9,599	11.8%	44.2%	54.4%
Some Entrepreneurial Experience	13,769	18.6%*	52.7%*	68.1%*

** difference is significant at p<0.05*

Because founding teams that contain women are less likely to report prior entrepreneurial experience (60.2% for all-male teams versus 57.6% for teams with at least one woman), we expand the contents of **Table 9a** to focus on differences between inexperienced and experienced teams (see **Table 9c**). This shows that the gender-based equity disadvantage is significant among both the inexperienced and experienced founding teams.

Table 9c: Gender effects for inexperienced and experienced teams

Teams:	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported
Without Entrepreneurial Experience				
• Men Only	4,670	14.5%*	39.8%	53.2%
• With Women	4,929	9.2%	48.4%*	55.6%*
With Entrepreneurial Experience				
• Men Only	7,072	22.6%*	49.8%	68.0%
• With Women	6,697	14.4%	55.8%*	68.3%

** difference is significant at p<0.05*

Intellectual Property

Table 10 shows that 13,385 of the ventures report owning some intellectual property; i.e., patents, copyrights or trademarks. These ventures are significantly more successful attracting outside equity investment (23.4% versus 10.1%), significantly more likely to have hired at least one employee in the prior year (72.8% compared to 54.8%), and to report positive revenues in that year (58.0% versus 42.7%).

Table 10: Proprietary intellectual property

Own Patents, Copyrights or Trademarks	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported
No	13,385	10.1%	42.7%	54.8%
Yes	9,983	23.4%*	58.0%*	72.8%*

** difference is significant at p<0.05*
Question asked: "Whether assigned by an owner or obtained in some other way, does your venture have any of the following?" (patents, copyrights, trademarks)

Accelerator Programs

In their application surveys, each entrepreneur is asked to rank (on a scale of 1 through 7, with 1 being the most important) the potential benefits from these programs in terms of "how important they are to your venture's development and success". Table 11 indicates the relatively high priority that sampled entrepreneurs place on potential networking benefits (i.e., "network development", "connections to funders" and "mentorship"). On the other hand, "gaining access to like-minded entrepreneurs" and "awareness and credibility" rank the lowest among the seven potential benefits.

Table 11: Benefits from accelerator programs

Potential Benefits from Accelerator Programs	Average Rank (lower=more important)
Network development (e.g., with potential partners and customers)	3.4
Access and connections to potential investors/funders	3.5
Mentorship from business experts	3.5
Securing direct venture funding (e.g., grants or investments)	3.5
Business skills development (e.g., finance and marketing skills)	3.9
Gaining access to a group of like-minded entrepreneurs	5.0
Awareness and credibility (e.g., association with a recognized program, press/media exposure)	5.1

Question asked: "The following are some of the potential benefits that are typically associated with entrepreneurial accelerators. Please rank these benefits in terms of how important they are to your venture's development and success."

The relatively strong emphasis that entrepreneurs place on gaining access and connections to funders is not surprising. Entrepreneurs were asked how much additional investment (in equity and/or debt) they are planning to secure in the next 12 months. The median venture is seeking to raise $10,000 over the next twelve months.

The surveys also provide some information about the performance implications of prior accelerator participation. 7,382 of the ventures in the sample report having had at least one founder participate in another accelerator program. **Table 12** shows that this group with prior accelerator experience is significantly better in terms of attracting outside equity (24.3% versus 11.9%). They are also significantly better when it comes to revenue generation (57.3% versus 45.5%) and hiring employees (70.2% versus 58.9%). Finally, the ventures with prior accelerator experience are significantly more likely to report prior philanthropic support (39.6% versus 19.9%).

Table 12: Prior accelerator participation

Prior Accelerator Participation	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported	Some Philanthropy Reported
No	15,986	11.9%	45.5%	58.9%	19.9%
Yes	7,382	24.3%*	57.3%*	70.2%*	39.6%*

** difference is significant at p<0.05*
Question asked: "Has anyone on your founding team participated in any of the following accelerator programs?"

Impact Measurement

Two approaches to tracking the impacts of social enterprises are being developed and implemented by IRIS and B Lab. Entrepreneurs were asked to indicate whether they are using either of these measurement systems. **Table 13** indicates that only a small minority – 3,005 for IRIS and 1,520 for B Lab – are doing so. When queried about this low take-up rate, the dominant reason for not implementing relates to a lack of awareness. There is also some indication that more ventures are electing to go different routes with their impact measurement, as 5,863 of the entrepreneurs indicate that they are currently using "other established measurement approaches."

Table 13: Tracking impacts

	Yes	No
"Does your venture regularly track itself against any of the IRIS impact measures?"	3,005	17,824
(Reason given for "No": "We have never heard of IRIS")		(75.2%)
"Has your organization ever taken a B Impact Assessment?"	1,520	19,367
(Reason given for "No": "We have never heard of B Lab")		(76.7%)
"Does your venture regularly track impacts using any other established measurement approaches?"	5,863	15,029

Participating versus Rejected Entrepreneurs

Most of the accelerator programs in this sample have made their cohort selection decisions. Based on these decisions, the sample houses information on 17,527 rejected applicants and 3,757 entrepreneurs that participated in the program to which they applied. **Table 14** shows an (understandable) preference among selectors toward ventures with more established track records. Prior to application, participating ventures were significantly more likely to report revenues in the prior year (56.1% versus 46.7%) and to have at least one employee (64.1% versus 61.6%). Finally, there is a significantly greater tendency for participating ventures to report some prior equity investment (19.5% versus 15.3%) and some philanthropic support (29.4% versus 24.3%).

Table 14: Participating versus rejected applicants

Participated in Program	N	Some Equity Reported	Any Prior-Year Revenues Reported	Any Prior-Year Employees Reported	Some Philanthropy Reported
No	17,527	15.3%	46.7%	61.6%	24.3%
Yes	3,757	19.5%*	56.1%*	64.1%*	29.4%*

** difference is significant at p<0.05*

Database Program Plans for 2020

The data collected for this Year-End Summary came through partnerships with accelerators that opened and closed applications between 2013 and 2019. After these seven years of survey work, the Entrepreneurship Database Program stopped collecting application data at the end of 2019. Therefore, this report reflects the total application sample from this multi-year effort. The data from more than 23,000 ventures, almost 370 programs, and more than 130 unique accelerator organizations provide the social entrepreneurship research community with a powerful resource to anchor analysis and discussion.

Throughout 2020, the GALI team will collect a final wave of follow-up data from the entrepreneurs in the database, both those who participated in programs and those who were rejected. These expanding longitudinal data will allow researchers to examine the various factors that systematically influence new venture growth trajectories.

While data collection will cease in 2020, the Global Accelerator Learning Initiative will continue making these data available to researchers, supporting academic studies using the data, and supporting accelerators to utilize data planning, collection, and analysis resources to measure their impact and benchmark their performance.

- Anonymized 2013 through 2019 application data, as well as first-year follow-up data from ventures that applied to programs through the end of 2018, are available to researchers who want to conduct and publish their own studies of impact-oriented entrepreneurs and accelerator programs. Access is free and can be requested at www.galidata.org/data-request.
- To further support data access and use, GALI launched an on-line data portal (see www.galidata.org) that features customizable data tables that are similar to those presented in this report.
- GALI released its third major research report in early 2018, followed by a book, titled *Observing Acceleration: Uncovering the Effects of Accelerators on Impact-Oriented Entrepreneurs*, in early 2019. A fourth major report is planned for release later in 2020. To learn more and read over 25 reports analyzing these data, visit www.galidata.org.

Looking through and past 2020, the GALI team continues to work with various sector stakeholders to support research projects that use these (and related) data to improve our understanding of critical early-stage entrepreneurial and acceleration processes.