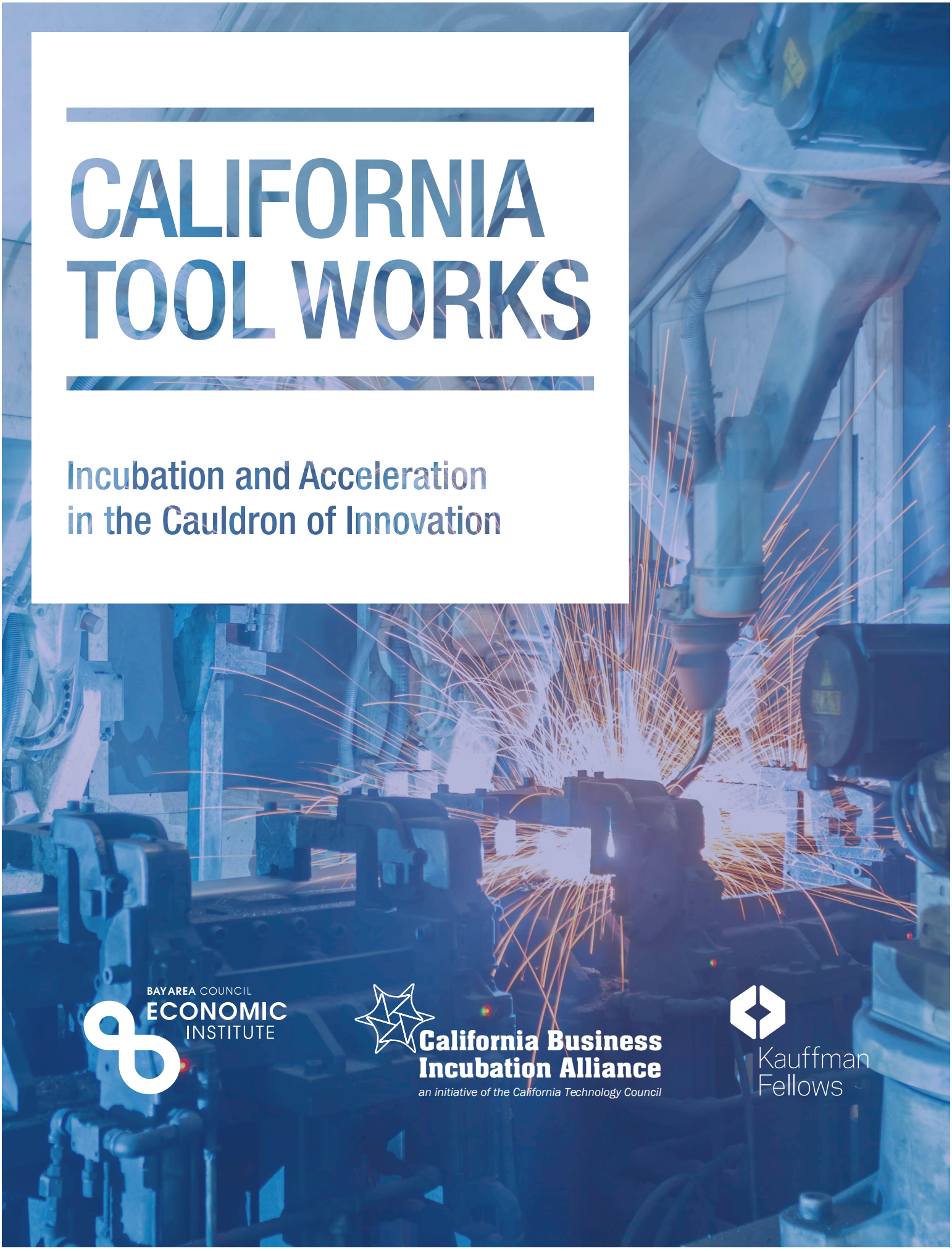


CALIFORNIA TOOL WORKS

Incubation and Acceleration in the Cauldron of Innovation

BAY AREA COUNCIL ECONOMIC INSTITUTE

California Business Incubation Alliance
an initiative of the California Technology Council

Kauffman Fellows

Made possible by generous support from:

Science For A
Better Life

California Tool Works: Incubation and Acceleration in the Cauldron of Innovation

Produced by:

California Business Incubation Alliance

in cooperation with

Bay Area Council Economic Institute

and Kauffman Fellows

Contributors:

Matthew Gardner, Principal Author

Daniel Levine, Editor

Jeff Hamaoui, Contributor

Kinkead Reiling, Contributor

Sean Randolph, Contributor

John McIntyre, Research Contributor

Bianca Flores, Designer

Kanchan Chauhan, Graduate Research Associate

Ian Hathaway, Economist

May 2016

Acknowledgements

This work was made possible by underwriting from the Wells Fargo Foundation, GE Ventures, and Bayer. All of the project partners are grateful for their support.

Significant research was conducted by Signals Intelligence Group on the U.S. landscape for incubators and accelerators for this project. The authors are grateful for the contribution of Signals, including their systems-level thinking, and application of frameworks around challenging concepts in innovation.

California Business Incubation Alliance (CBIA)

The California Business Incubation Alliance (CBIA) is a best practices membership organization serving practitioners in incubation and acceleration. Stakeholders include for-profit and non-profit incubators and accelerators, as well as corporate incubation and investment leaders and external innovation representatives from member organizations. The CBIA convenes best practice meetings on the daily issues that confront managers of incubators and accelerators across all industry sectors. From the most established incubators to the most recent accelerators, peers meet monthly through CBIA to share challenges, approaches, and insights.

SecondMuse

SecondMuse is an innovation consultancy that helps organizations solve systems-level grand challenges, assists governments connect with citizens and utilize their resources more effectively, and works with corporations to leverage their strengths and break silos to solve complex problems. That work manifests itself in the development of innovation strategies, technologies, and solutions that its team designs and executes in partnership with global clients.

Kauffman Fellows

Founded in 1995, Kauffman Fellows is a leadership program for venture capitalists and innovators of all kinds. The more than 400 graduates from this two-year apprenticeship, together known as the Kauffman Fellows Society, now lead venture capital, government, corporate, university, and startup innovation in over 50 countries around the world. John McIntyre and Whitney Rowe are Kauffman Fellows from Class 18. McIntyre now heads the Kauffman Fellows Network development program and was most recently the Managing Director of the Citrix Accelerator. Rowe is affiliated with Hatteras Funds, a private equity firm in North Carolina.

Bay Area Council Economic Institute

The Bay Area Council Economic Institute is a partnership between business, government, and academia. Through its economic and policy research, and its many partnerships, the Economic Institute addresses key issues impacting the competitiveness, economic development, and quality of life of the region and the state, including infrastructure, globalization, science and innovation, energy, and governance.

Contents

Figures & Tables

Introduction and Executive Summary

California's stock in trade is innovation. From ideas to capital to talent, the critical mass exists in California's complex business networks to deliver almost any concept to its fullest potential.

Accelerators and incubators play a vital role in the state's innovation ecosystem. Startups often find incubators and accelerators attractive as they go through the pains and pitfalls of early success and failure. As the model has proliferated, accelerators have become the epitome of an industrialized process: startups churned out in volume through an assembly line.

Little effort has been made to track and analyze the performance of incubators and accelerators, their impact on the economy, and whether they deliver value to the startups they serve. This is the first effort to assess the combined impact of California's incubators and accelerators and begin a process that moves beyond traditional measures of economic impact in an effort to standardize meaningful metrics to track both the contribution of incubators and accelerator to the state's economy and measure their success.

In the short time since the global financial crisis, the number of incubators and accelerators operating in California has risen sharply. Driven by an influx of capital, these new incubator and accelerator programs have become an important part of the innovation ecosystem supporting entrepreneurs. California's entrepreneurial culture and venture capital resources generate thousands of new startups each year.

Though the terms incubator and accelerator can mean different things to different people, this study uses the terms with specific meaning in mind. An incubator is typically a facility sub-divided into many small spaces, in which the provision of services to resident startups is generally dependent upon real estate and access to shared equipment. An accelerator is typically a program defined by a curriculum of several months of entrepreneurial training provided directly by the accelerator and augmented by networks of mentors.

Despite these generally accepted criteria, there are many shapes and varieties of both incubators and accelerators, including incubators with acceleration programming and accelerators with real estate and access to shared capital equipment more commonly associated with incubators. In short, the proliferation of programs has blurred the traditional lines between these two types of support for entrepreneurs.

Accelerators have become a key ingredient to supporting new generations of startups, whether they are corporate, nonprofit, academic, or private. Many global leaders have established new incubation or acceleration platforms in California in the last few years well beyond the traditional technology and biotechnology focus of the past. This includes automotive companies, big box retailers, and large financial services organizations among others. All of this has happened while the classic incubator structure associated with a university or nonprofit has evolved into new models providing both virtual and physical support facilities for startups.

The total risk capital attracted by portfolio companies of California's incubators and accelerators represents a massive economic engine for California, the United States, and indeed, the world. The capital raised by alumni of these programs has not been confined to spending within California or the U.S. economy. Those graduates have harnessed those resources for expansion in the U.S. and the world, and have invested in new jobs, facilities, and equipment, while their spending extends to every corner of the world.

Attracting venture investment is only one purpose served by these programs. Incubators and accelerators also provide critical education and services to help entrepreneurs successfully design and launch new products and build growing companies.

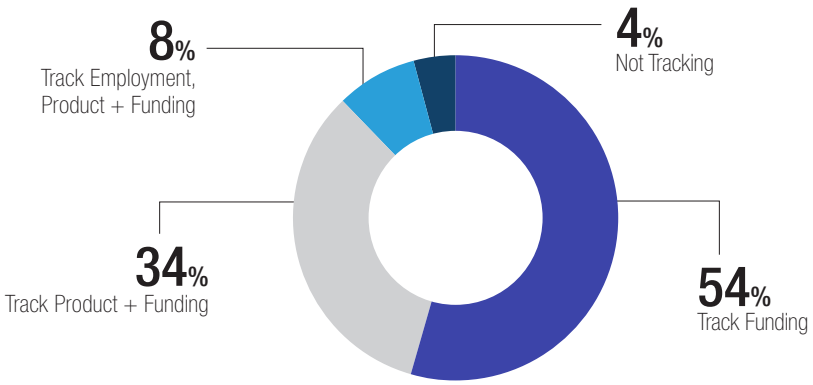
This report is designed to improve the understanding of the contribution of California's incubators and accelerators among government, universities, economic development organizations, incubator and accelerator professionals, corporate and open innovation representatives, angel and venture investors, and entrepreneurs.

As the growing number of accelerators turns out waves of startups, stakeholders will continue to interrogate and improve this business model in iterations. Investors and entrepreneurs alike have already come to wonder whether 6 percent of equity for four months of networking and pitch development is efficient or expensive, sustainable or untenable.

In addition to assessing systems-level trends, this report provides benchmarking and analysis of incubators and accelerators for the types of facilities and services they provide to entrepreneurs, their definition and measurement of success, and their contributions to the innovation landscape. The report synthesizes economic research, surveys, interviews, focus groups, and summits.

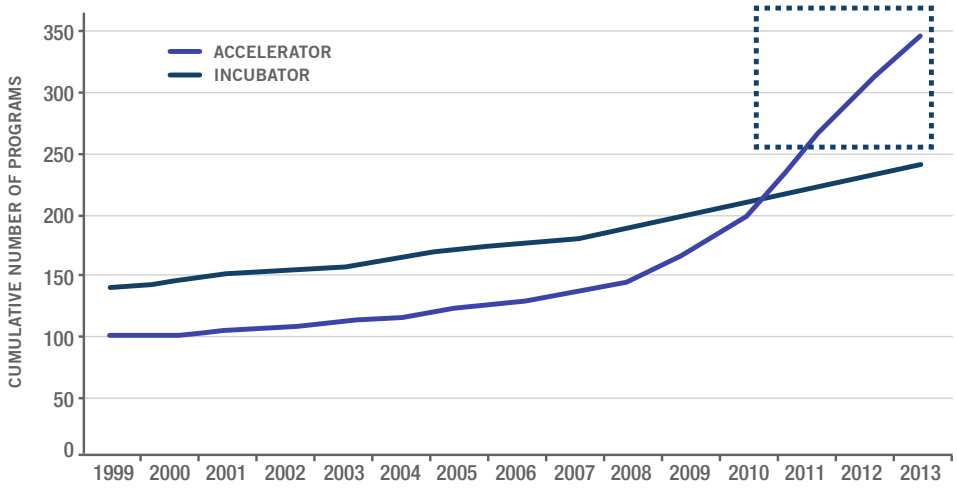
Success Tracking by Incubators and Accelerators

(By portion of those surveyed measuring portfolio company success indicators)



Number of Incubators and Accelerators in the United States, 1999-2013

Source: Signals Intelligence Group



66%

Programs Investing in Companies They Select

46%

Programs with Fixed Dates for Participating Startups

73%

Programs with Associated Physical Space

44%

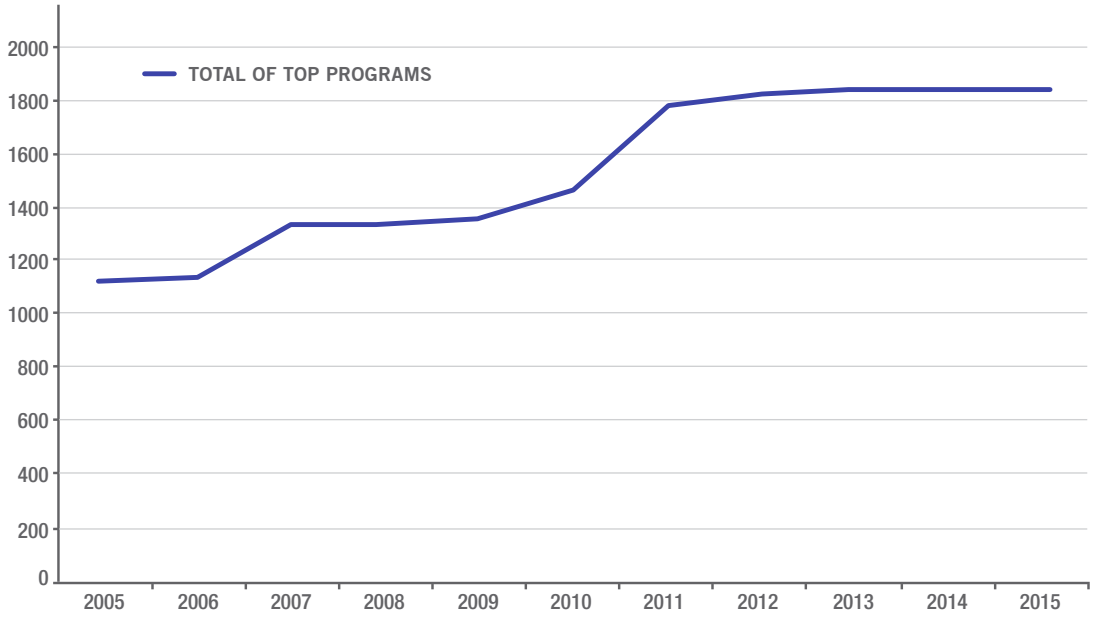
Programs Providing Access to Shared Equipment

32%

Programs Providing Access to Corporate Services

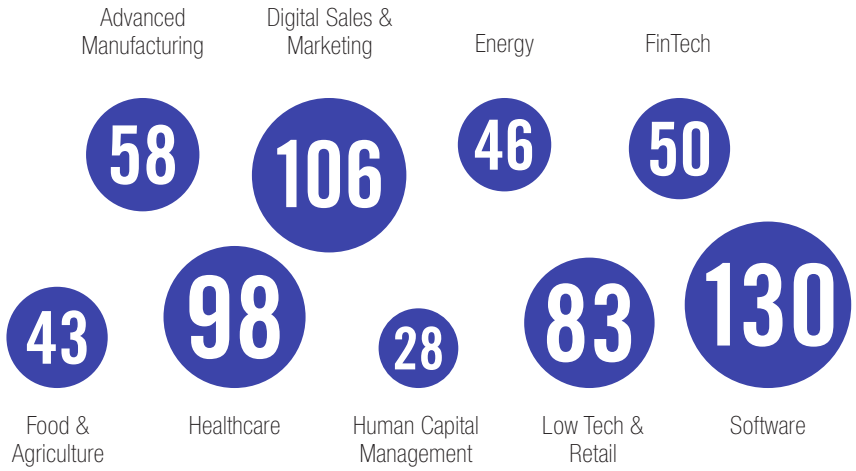
Cumulative Funding by Portfolio Companies of 44 Selected California Programs Based on Average Year Since 2004 ($ millions)

Source: PitchBook, SeedDB, CBIA research and calculations



Number of U.S. Programs by Industry Investment Focus

Source: Signals Intelligence Group



Key Findings

- Accelerators have become more prevalent than incubators since 2010
- About half of all programs have come into existence since 2010
- Investment professionals and accelerator managers are concerned about the sustainability of this volume of accelerators and the very model of accelerators
- Corporate sponsors of incubators and accelerators bring greater resources to bear, but their commitment to acceleration may change at any time due to factors outside the influence of the program. This kind of change often interrupts the operation of accelerators and their associated networks
- The process of creating and building a startup has been commoditized to the point that there are low barriers to establishing a new accelerator
- On the other hand, a generation of electronics, hardware, and life sciences incubators represent a very different level of investment and economic impact
- The average accelerator injects more than $400,000 annually into its local economy
- The typical hardware or life sciences incubator requires millions in equipment, in addition to real estate and personnel, to commence operations
- Venture investment in the clientele of incubators and accelerators has been consistent at the multi-billion dollar level in California since 2012
- Portfolio companies from top incubator and accelerator programs in California have raised $16.9 billion since 2004
- A total of 87 percent of programs surveyed responded that they track financial and product milestones of participating portfolio companies
- Some 8 percent of programs track employment change at portfolio companies
- More than 4 percent of programs are not tracking any performance metrics of their portfolio companies
- There is a backlash rising among entrepreneurs, concerned about the real value offered by some accelerators, and the perception that the accelerator model serves investors more than startups
- Even the most fundamental questions, e.g. what is the difference between an “incubator” and an “accelerator” were met with deeply inconsistent responses, even from very experienced innovation professionals
- A lack of consensus among practitioners presents multiple challenges to improving the practice of incubator and accelerator management
- A lack of consensus among practitioners on the need for and expectation of mutual accountability makes a case for peer pressure to participate in measurement
- The lack of standard measurement should serve as a caution to entrepreneurs to be thoughtful about choosing an accelerator or incubator and the need to ask tough questions regarding track record and performance

These investments and wider economic impacts represent important considerations for policymakers considering innovation strategies around the world. While most policymakers and economic developers prioritize the attraction of innovative companies, the importance of incubator and accelerator facilities within an ecosystem may depend on its overall context.

Policymakers need to consider the appropriateness of industry focus, whether such startup support mechanisms fit with other research and commercialization efforts, whether there is sufficient startup activity in a region, and much more.

While stakeholders around the world evaluate whether and how to replicate and adapt aspects of these programs for their regional innovation clusters, practitioners inside California's cauldron of innovation go on with a continuous process of evaluation, iteration, and improvement of the incubator and accelerator model.

Methodology

This report is a joint effort of a number of groups: the staff and board members of the California Business Incubation Alliance (CBIA), and the Kauffman Fellows program. SecondMuse conducted interviews, surveys, and research for this report. More than 200 business leaders contributed to the final report by participating in interviews, completing surveys, attending one of the quarterly meetings of the California Business Incubation Alliance, or meeting with team members and sharing their experiences and information.

Beginning in spring 2015, the California Business Incubation Alliance convened and conducted quarterly accelerator summits at which participants discussed their experiences and insights. During the course of 2015, members of this team and a small group of graduate MBA student interns from Santa Clara University and the University of San Diego conducted interviews with a diverse set of incubator and accelerator professionals, as well as entrepreneurs who had graduated from programs between 2010 and 2015.

Landscape research and analysis for the U.S. incubator and accelerator ecosystem was performed by Signals Intelligence Group, and supplemented by research from the California Business Incubation Alliance and SecondMuse.

Finally, an investment survey was conducted in the first quarter of 2016 by the California Business Incubation Alliance to survey incubator and accelerator professionals on their direct spending activity on the full year for 2015.

The final report includes data synthesized from all these sources, including insights from the landscape research, data collection, surveys, and particularly from the interviews of incubator professionals and entrepreneurs.

Section 1

Industrializing the Tools to Build Startups

California's stock in trade is innovation. From ideas to capital to talent, the critical mass exists in California's complex business networks to deliver almost any concept to its fullest potential. As California produces success in innovations impacting every industry, industries have responded with new approaches to scouting and investing in the startup universe.

Startups often find incubators and accelerators attractive as they face the challenges that lead to success and failure. Most landlords do not have the flexibility to offer short-term leases with the frequent changes that startups require. As a result, a rapidly evolving set of specialist service providers has emerged that provide small, flexible space for business incubation, with a subset of these providing angel funding and other services as business accelerators. Included among these are an increasing number of incubators directly attached to Fortune 500 companies, using these incubators as extensions of their open innovation strategies.

The incubator phenomenon is not new. They have long played a vital role in the start-up ecosystem. For decades, incubators affiliated with research universities, aligned with research parks, or financed by public sector economic development organizations, have supported small businesses of all kinds all over the United States and around the world. Since the late 1990s, however, the phenomenon has exploded in many directions simultaneously, from angel- and mentor-driven boot camps to a surge in short-term accelerators providing seed capital while propelling startups through to their first product.

Included among these are an increasing number of incubators or accelerators directly attached to Fortune 500 companies, which are using these platforms as extensions of their open innovation strategies. Many global leaders have established new incubation or acceleration platforms in California in the last few years, ranging from automotive companies to big box retailers to large financial services organizations. This has happened while the classic incubator structure associated with a university or nonprofit has evolved into new models, hybrids, and both virtual and physical support facilities for startups.

The confluence of explosion and evolution represents a challenge for more than mere measurement. Entrepreneurs may find it difficult to assess which programs are best for them, which programs will lead to varying kinds of results, and which programs are designed to suit their needs.

Differences are reflected in sheer number of choices startups face. The venture website F6S.com lists nearly 6,000 programs self-identifying as accelerators around the world. Venture resource AngelList includes more than 4,400 programs self-identifying as incubators, including many which include "accelerator" in their own descriptions.

Many of these programs function as short courses, offering entrepreneurs pitch prep en route to a demo day before investors. Many have developed greater resources, including the funding required to provide infrastructure, shared labs, major research equipment, and test spaces not otherwise available to entrepreneurs.

The resources and investment required to operate and maintain these vastly different startup support programs varies as much as the programs themselves. These are important considerations for entrepreneurs, as well as venture capitalists, policymakers, and corporate innovators.

Leadership Conversations

The History of Acceleration with Amy Millman, CEO & Co-Founder of SpringBoard

Is the accelerator phenomenon really new? Amy Millman is chief executive of Springboard Enterprises. Springboard was launched in the late 1990s, when law firms, collection of angel investors, and other amorphous groups sought to provide support to startups without the infrastructure required of incubators. This boot camp style approach was common in regions of innovation in the 1990s. Millman recalled some of that history and the evolution of Springbaord in an interview for this project.

CBIA: Let's go back in time to the late 1990s when Springboard was a glimmer in your eyes. What inspired the group of you to lift this off the ground?

AM: At the time that we came up with this idea, there weren't an enormous [number] of people working in this area. Things were growing and people were getting an idea of venture capital, but it was still in its nascent phases. We were out in California meeting with entrepreneurs who said, "If you want to do anything, you can increase the flow of investment capital to businesses," something that seemed [outside] the grasp of these entrepreneurs. We decided we would talk with a bunch of investors. The investors said to us, "If there were any women who had businesses that we would invest in, we would [already] know them." Big challenge – let's figure out if we can increase that deal flow.

CBIA: Did you have a sense that there was enough raw material there?

AM: No. What we learned was that you have to go to the data. There was a dataset called VentureOne (now part of ThomsonReuters). They were capturing data on management team by gender. We were able to see that, while less than 2 percent percent of the companies that got venture capital had a woman in a CEO or founder position, there were about 45 percent percent of them [having] women in [their] team. Here's a feeder school to the next CEO. Maybe now they'll be willing to start their own ventures. When we went out with the first application in late 1999, we figured we'd get about 50 applications for 25 slots. We had 350 applications.

CBIA: Were there other filtering criteria? Did you start by thinking only about life sciences, or only about particular regions?

AM: We did look at the regional aspect of it, and we did not look at the industry sectors. We were agnostic for industry sectors. We underestimated the value of the life science area. It wasn't what we were thinking about. We started realizing there is [a large group of] women in the life science space. They needed the most money and the most attention.

CBIA: What did you learn about service delivery as you were going through that first cohort?

AM: I learned that we couldn't do this as a for-profit business. It's not scalable in that way if you really want to get focused on the needs of individuals. The model always was very intensive

on relationships and the specific needs of each company that we felt we could help. Other accelerators have different models. Some are real estate models. Some are transactional models. This was basically a way to help specific companies that we could add value to. Over the years, it's been about 600 businesses.

CBIA: In those early cohorts, how many companies were you cycling through each year? Did you have that kind of annual format? How did you know when it was time for a company to graduate?

AM: Nobody ever graduates. We always say we're like the Hotel California – you can check out, but you can never leave. We do track the companies, but it's really about the talent of the entrepreneur. Our model in the beginning was to partner with local organizations that could manage local connections. We would provide additional connections through the network. Around the 2006 mark, we decided that, instead of (partnering with local groups), we did it ourselves. We realized that the major value of what we were doing was in the alumna base. We pursued building stronger relations with entrepreneurs who had gone through the program. Our expanded network of advisors became our real secret sauce.

CBIA: You were global while you were executing these programs. Did that require you to get on airplanes?

AM: In 2007, we did our first program with 10 Israeli companies. The two global programs are Israel and Australia. They do require some touch point, although we do have our people on the ground. The most important thing we learned from this is the value of the network and the resources in the states. In countries like Israel, you must move to another market in order to scale. If they have a way to get into the U.S. market using our network, they can expand a little more quickly.

CBIA: Are you still optimistic about the state of venture creation?

AM: There's so much opportunity. It's hard to map. I harken back to something Michael Milken said about 20 years ago. He said, "It's all about the democratization of capital. If you can really disrupt that process, you will open it up to people that haven't had access before. It changes everything." I believe it.

CBIA: We see the acceleration model proliferating in every direction. What advice would you give to people getting into acceleration, the first-time accelerator professional?

AM: There are so many different ways to be effective in this area. There's not one answer. There's not one right way—one perfect way to do this. For Springboard, it's a cradle-to-grave network of experts that you can constantly tap into. Building a business is not something that you do and then say, "Okay, now I don't need any more support or connections after three or four months of going through a program." You're going to need it for the lifetime of your business. Then, of course, you want to become an investor. Then you can be supportive of somebody else.

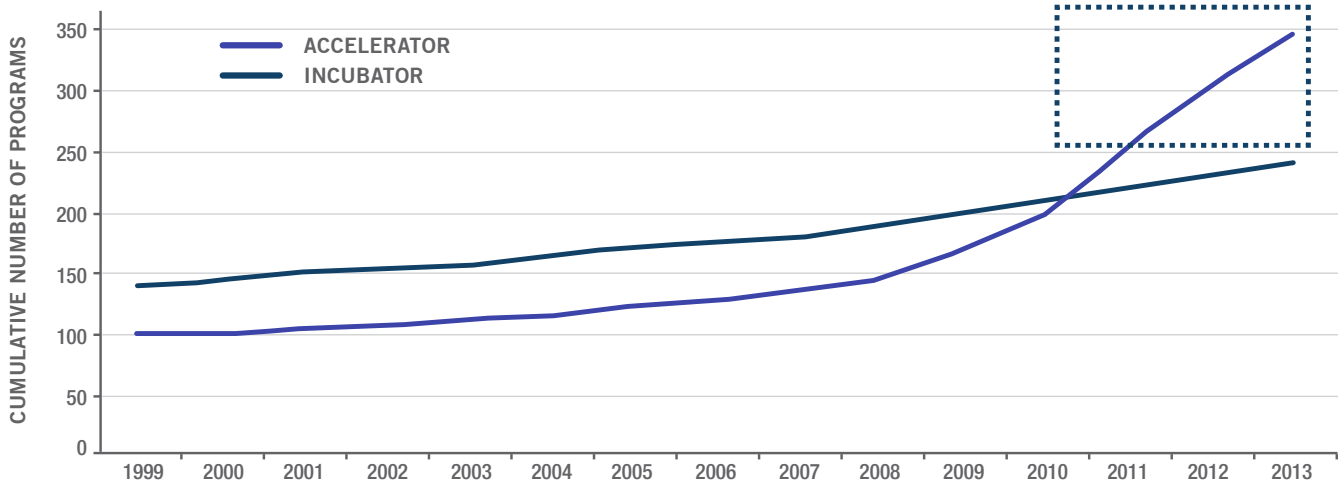
Landscape Research

By any definition, the number of accelerators available in the United States has risen dramatically since the recovery from the global financial crisis. A sustained window for initial public offerings, the replenishment of venture coffers, and other factors have spun off a generation of accelerator captains, as well as mentors and angel investors. Without all these influences, there would be insufficient demand for more startups in more industries.

As identified in Figure 1a, the dramatic rise in accelerators reached a point of crossover around 2010. It was then that accelerators outnumbered incubators for the first time.

Figure 1a: Number of Incubators and Accelerators in the United States, 1999-2013

Source: Signals Intelligence Group

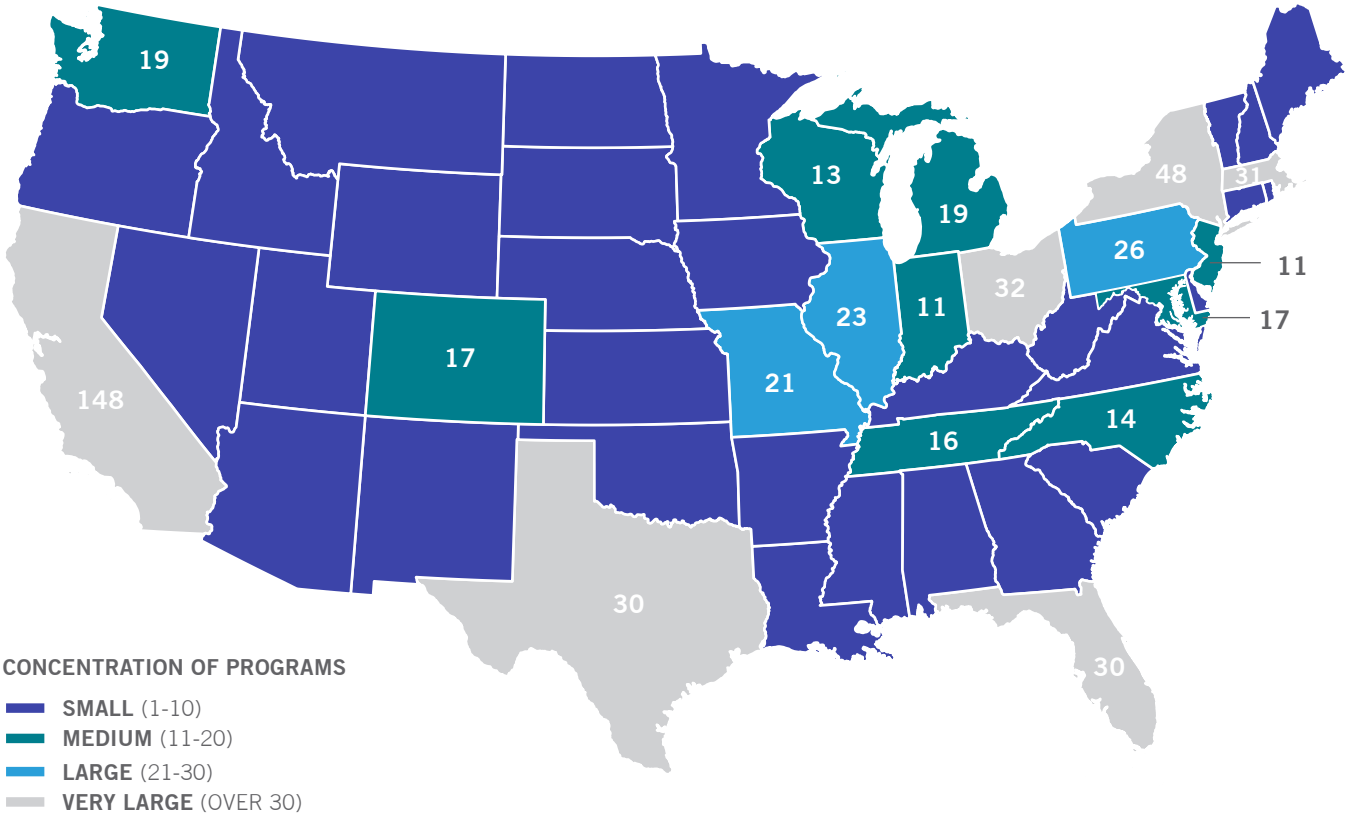


The accelerator phenomenon has been global, as noted by the AngelList and F6S data. In the United States, New York and California remain the most concentrated states for incubator and accelerator activity (Figure 1b).

Other states with significant incubator and accelerator populations include Ohio, Massachusetts, Florida, Texas, Pennsylvania, Illinois, and Missouri. These nine states represent 74 percent of the incubator and accelerator population.

Figure 1b: Map Representation of Incubators and Accelerators in the United States

Source: Signals Intelligence Group

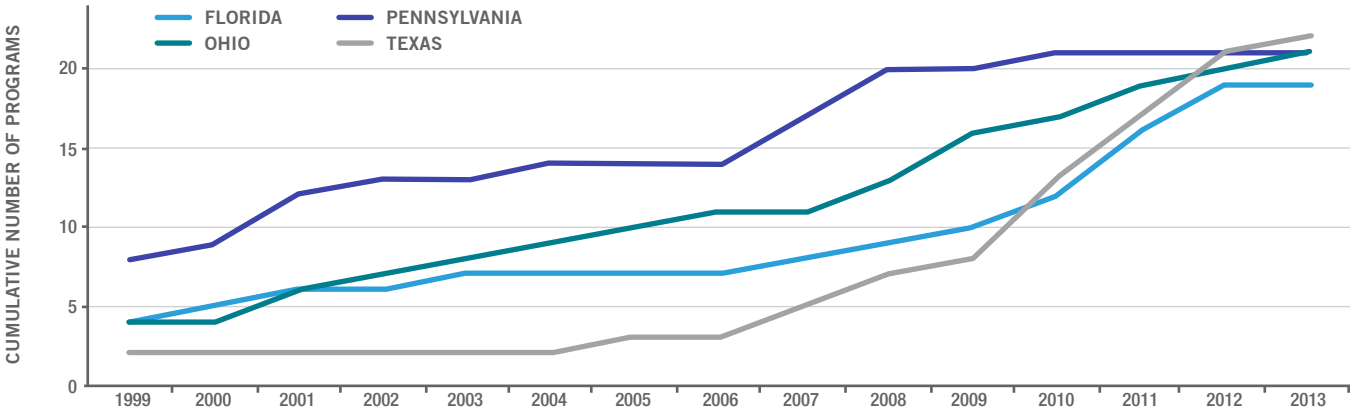


Outside of California and New York, the increase in programs in other leading states has been gradual (Figure 2). Texas has experienced the most pronounced rise, especially during the period 2006-2012. While this occurred during the global financial crisis, it is consistent with increasing investments in both incubation and acceleration in other leading regions of innovation across the United States, even during the most recent recession.

A recent article by Ian Hathaway in the Harvard Business Review highlighted the typical features of an accelerator. Building on the work of Susan Cohen and Yael Hochberg, Hathaway wrote, "Startup accelerators support early-stage, growth-driven companies through education, mentorship, and financing. [Accelerators] are fixed-term, cohort-based, and mentorship-driven, and they culminate in a graduation or demo day."

Figure 2: Growth in States Other Than California & New York

Source: Signals Intelligence Group

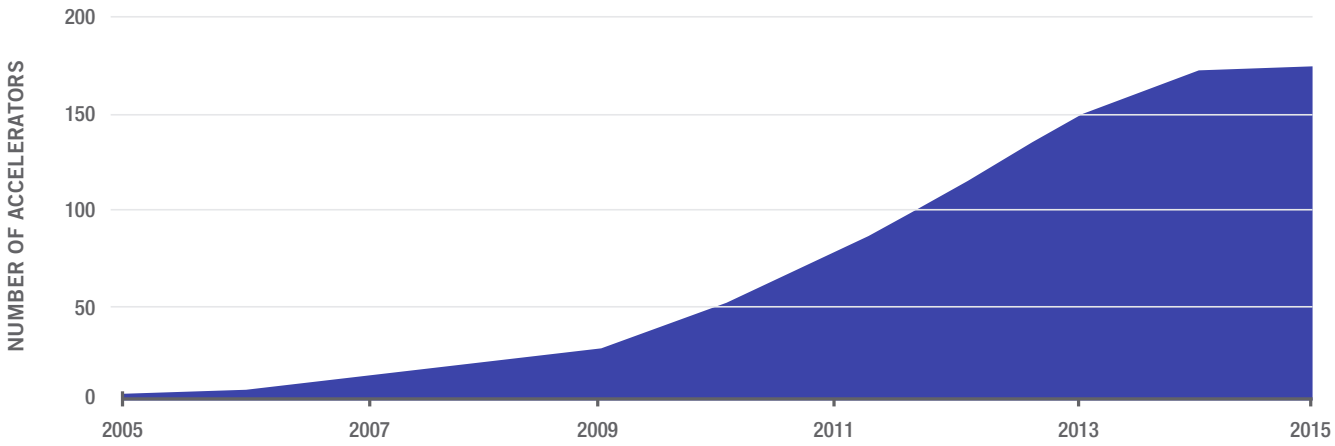


Hathaway's research identified a U.S. universe of accelerators surpassing 150 in total number around 2012-2013 (Figure 2).

Original research conducted by Signals Intelligence Group for this study identified that the universe of accelerators surpassed 300 as early as 2012 (Figure 1a). While Hathaway's finding of a smaller universe was partly based on a tighter definition, it also speaks to the persistent problems of defining distinctions in these categories of early-stage entrepreneurial support.

Figure 3: Number of Accelerators in the United States, 2005-2015

Source: Hathaway, https://hbr.org/2016/03/what-startup-accelerators-really-do?



What is an Accelerator?

There doesn't seem to be an agreement as to what distinguishes an incubator from an accelerator, even among those who are steeped in their activities. Two experienced open innovation professionals at a recent conference faced a question from the audience: "What's the difference between an incubator and an accelerator?"

"I look at it from a time standpoint. I look at acceleration kind of early on, and then incubation kind of later on," said one person.

"I think of incubators usually working with ground-up technologies, versus accelerators that may be accelerating something that's already established," said the other. "There's a little bit of a grey line."

Another persistent challenge is linking the success of a startup with causality based on that startup's affiliation with an accelerator.

"We're seeing companies going from accelerator to accelerator to accelerator," said one venture capitalist from Los Angeles. Indeed, CBIA research for this project included interviews with multiple startups that had participated in accelerators almost in a serial manner, without interruption.

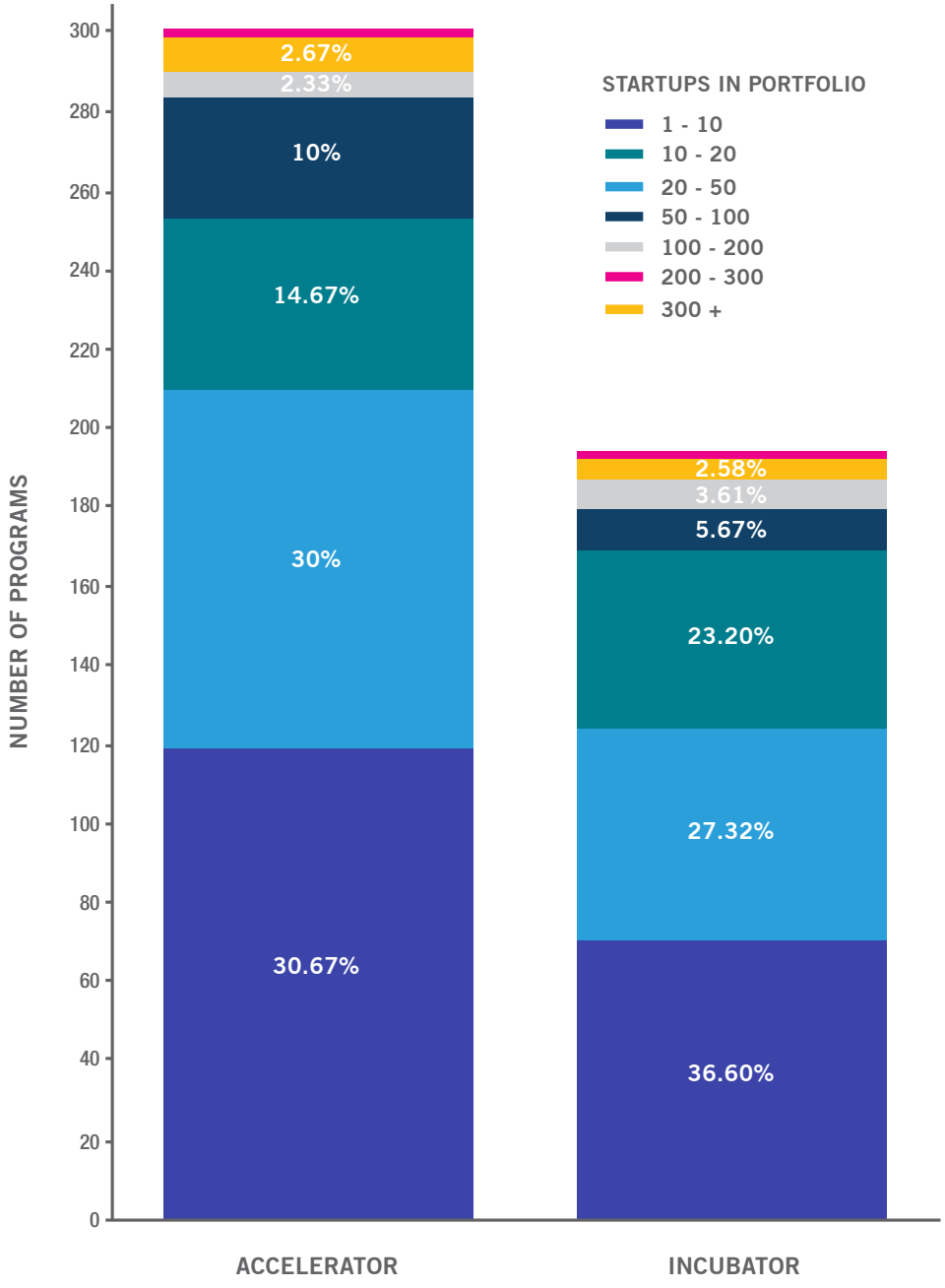
Could any venture capital raised by such a startup be attributed directly to any of its accelerators? Yes, and Section Four of this study measures capital raised by graduated companies. This, however, does not resolve the problem of how to establish causality.

Both incubators and accelerators approach portfolios of startups in a similar fashion. The portfolios of incubators and accelerators reflect similar ranges of size (Figure 3), from programs supporting up to 10 companies in their portfolio (39.7 percent percent of U.S. accelerators versus 36.6 percent percent of incubators), to large programs with more than 300 startups in their portfolio (2.67 percent percent of accelerators versus 2.58 percent percent of incubators).

Managing a portfolio of hundreds of startups suggests multiple bandwidth and resource challenges, especially from the perspective of an entrepreneur. Section Two of this report attempts to establish a framework for understanding the resource intensity of any given incubator or accelerator.

Figure 4: Number of Startups in Portfolio

Source: Signals Intelligence Group



Industry Focus

The proliferation of programs has also led to increasing diversity of industry focus among these programs (Figures 5 and 6). Whether this is representative of programs attempting to differentiate themselves or investors directing resources are narrowly targeted industry niches is impossible to determine.

The net result is an increasing diversity of programs available to startups from almost any industry, ranging from the primary economy to manufacturing to the service economy.

The proliferation of programs in software and digital sales is, at least in part, based on relatively low barriers to entry. Industries, such as advanced manufacturing, life sciences, and microelectronics, have barriers to entry for startups and incubators alike.

Because of these barriers to entry, the proportionality of accelerators to incubators reflects the relative ease of entry into fields like software and digital marketing (Figure 6). Two-thirds of the programs in digital marketing, and nearly two-thirds in software, are identified as accelerators.

These definitions, however, remain problematic. SOS Ventures has taken its template from Hax and other acceleration programs and built a wet lab life sciences accelerator. Indie Bio offers the temporary use of wet lab facilities and some of the kinds of shared equipment life sciences startups need.

Figure 5: Number of U.S. Programs by Industry Investment Focus

Source: Signals Intelligence Group

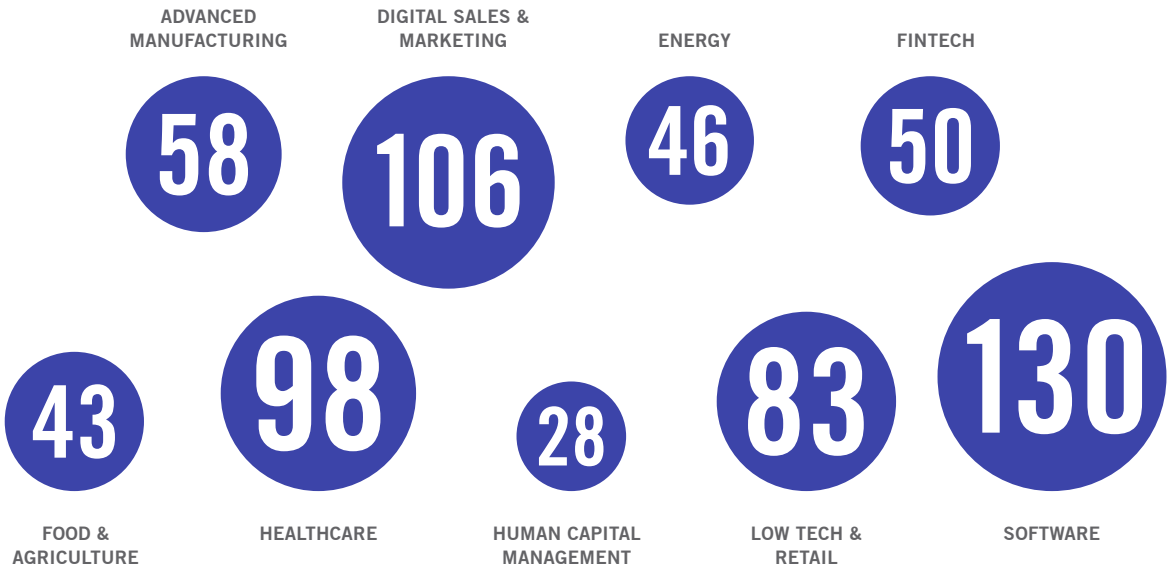
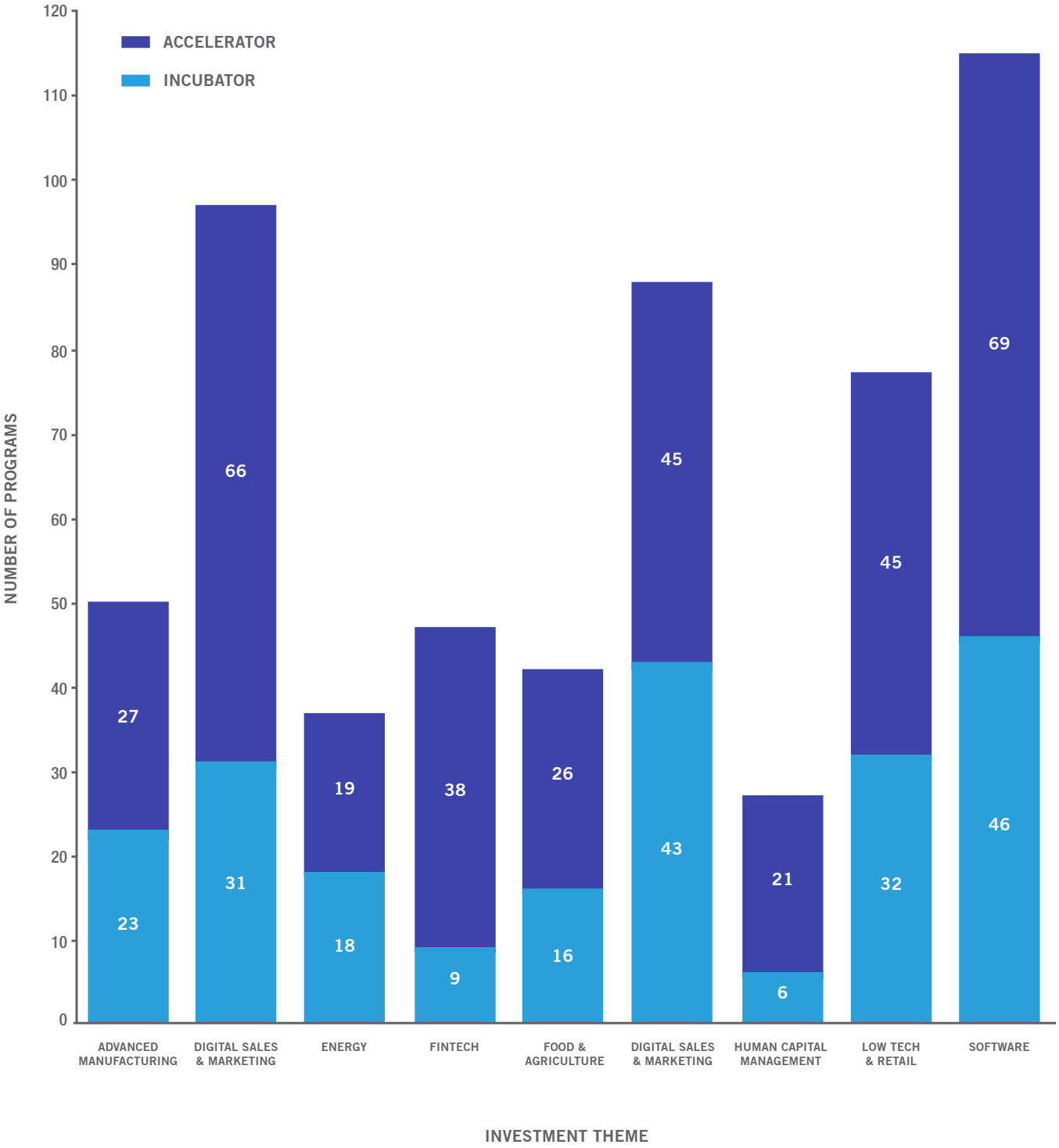


Figure 6: Program Type by Investment Focus

Source: Signals Intelligence Group

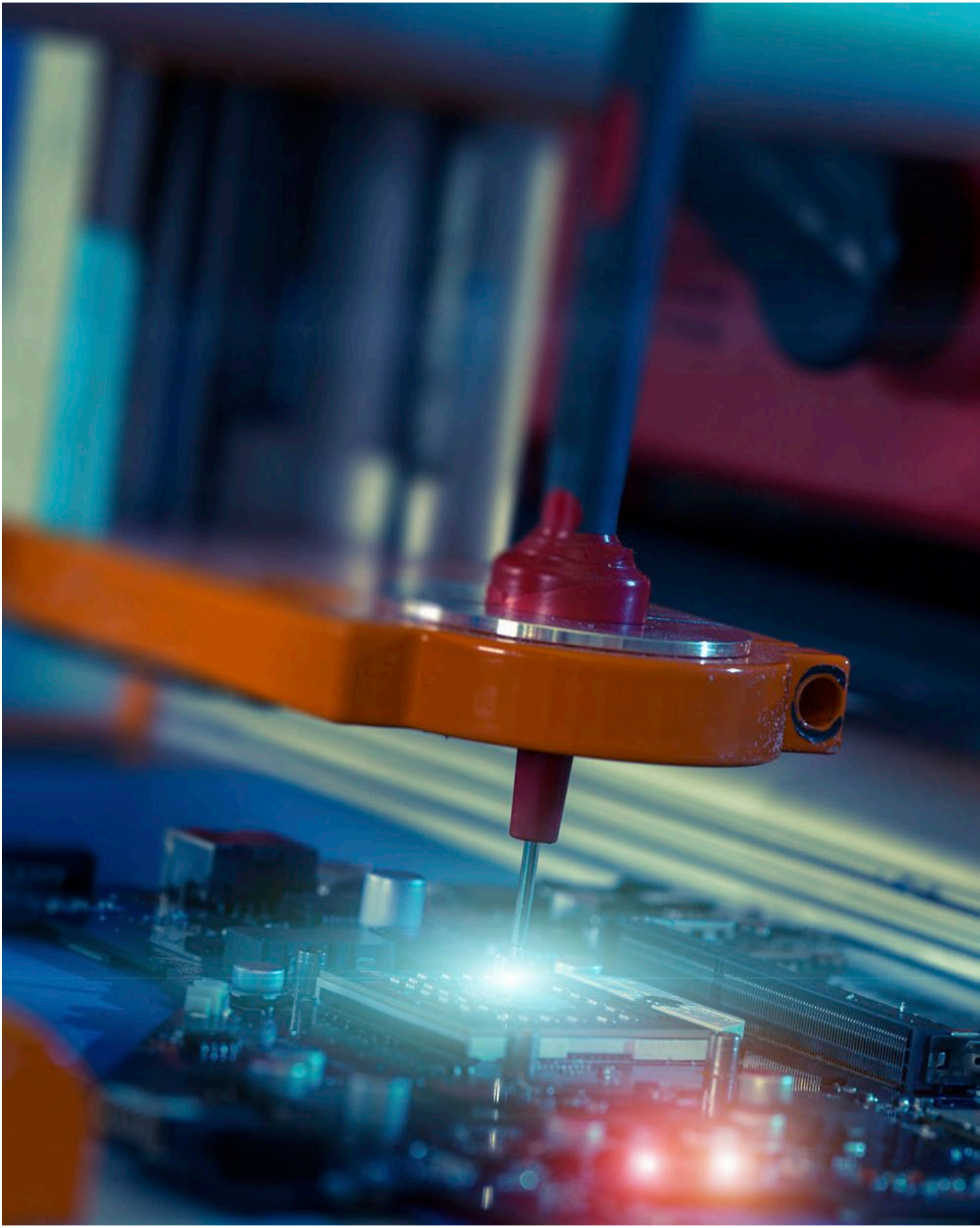


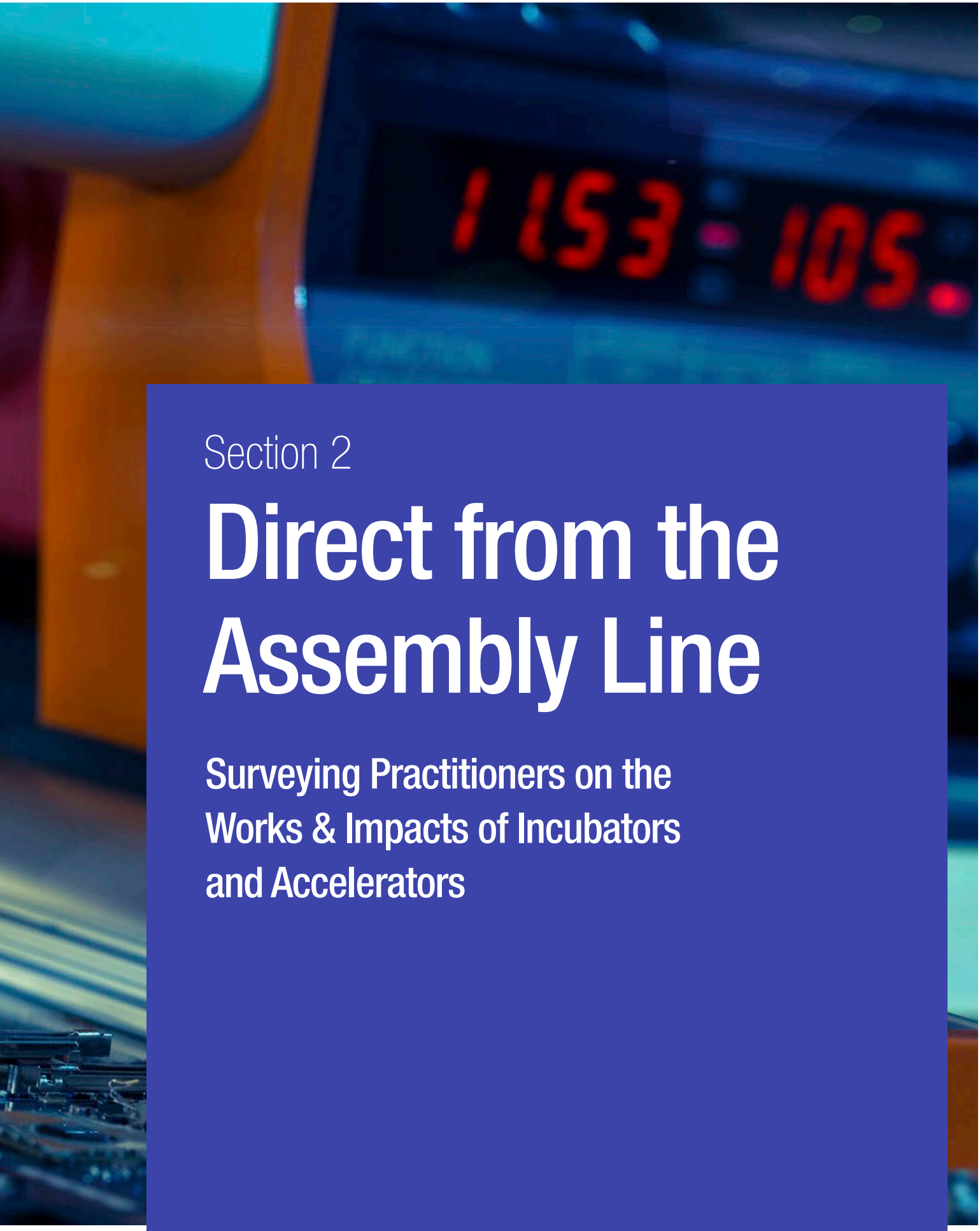
Summary

A sustained window of initial public offerings, the replenishment of venture coffers, and other factors have spun off a generation of accelerator captains, as well as mentors and angel investors. This has led to a direct rise in investment in some incubators, but in particular in accelerators, especially in industries with lower barriers to entry.

Some aspects of these accelerators defy definition, including the distinction, at times, between an incubator and an accelerator.

Overall, the increased investment in such programs has made a far greater number of opportunities available to entrepreneurs from almost any industry to find potential support, mentorship, and investment.





Section 2

Direct from the Assembly Line

Surveying Practitioners on the Works & Impacts of Incubators and Accelerators

Collected Works and Impacts

Over the course of 2015, the authors conducted more than 50 interviews with incubator and accelerator professionals representing all types of startup programs and industries.

Interviews focused on the forms of support that programs provide to entrepreneurs, as well as additional information about how programs attempt to assess success and measure outcomes of their portfolio companies.

Of responses from program managers, 66 percent indicated they invest in the companies they select (Figure 7). While many accelerators invest cash in the companies they select, there is not a direct correlation between programs calling themselves accelerators and the provision of capital.

Among the 34 percent of respondents indicating they do not provide capital, roughly 21 percent indicated that they charge a fee, including some equity in companies selected for their program. Two-thirds required both a fee and equity. All of those charging equity, or a combination of fees and equity, were for-profit entities.

Among those surveyed, 46 percent responded that there were fixed dates associated with participating in their offerings (Figure 8). Fixed dates are a hallmark of the classic, sprint-based, mentor-driven accelerator model.

Some accelerators, however, continue to offer mentoring, prototyping, operations, and market access beyond a defined graduation date. Increasingly, as identified by Amy Millman, accelerators are finding value in ongoing participation by graduated companies.

Another accelerator chief answered, "We're not a three-month program. It's not like people go through a program and 'goodbye.' People need space, products, marketing, and teams. We hold meetings and events. Instead of being a three-month program, it's [as if it were] a two- or three-year program, which is the time its going to require to fulfill our goal of getting companies to a profit."

The majority of programs are associated with a physical space for startups, even if it is short-term and flexible space (Figure 9). Among those surveyed, 73 percent offered some form of office space, whether relocated headquarters or temporary company housing for participating startups.

Among participating programs, 44 percent offered some combination of shared equipment, prototyping, support with experimentation, and labs (Figure 10). For industries with high barriers to entry, including life sciences, electronics, aerospace, and others, these facilities can provide shared resources that would otherwise be totally inaccessible to startups.

The costs of research equipment for startups in biotechnology, Internet-of-Things, or transportation technologies, among other resource-heavy industries, can represent insurmountable and unaffordable conditions of product development absent an incubator to bear the expense.

Incubators and accelerators generally keep startups focused on their development of products. Most do not provide the ancillary services that will help a startup develop its corporate infrastructure. Among participants surveyed, 32 percent also provided some form of legal, accounting, or human resources either directly or through a structured partnership (Figure 11).

Others provided introductions to sponsors and other service providers, though no services were included among the benefits of admission into the program.

Informal access to these services is a near-universal feature of incubators and accelerators alike. Among those surveyed, 94 percent provide some combination of mentors and expert speakers. While this type of mentoring is usually a major emphasis of accelerators, its inclusion in the formats of many incubators may be representative of the incubator business model adapting to remain competitive.

Figure 7: Percent of Programs Investing in Companies They Select

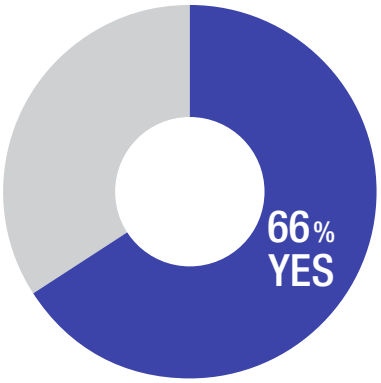


Figure 8: Percent of Programs with Fixed Dates for Participating Startups

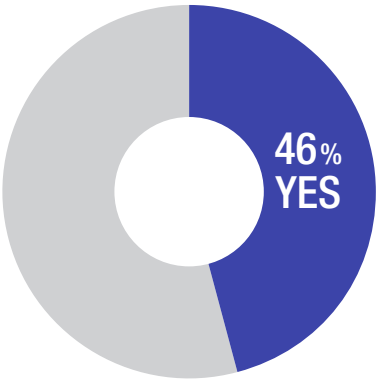


Figure 9: Percent of Programs with Associated Physical Space

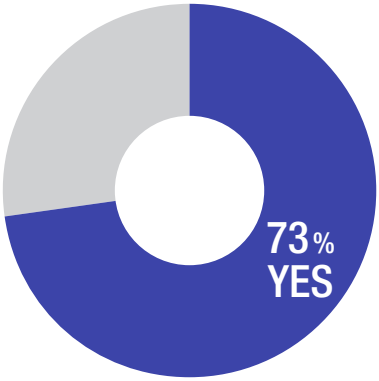


Figure 10: Access to Shared Equipment

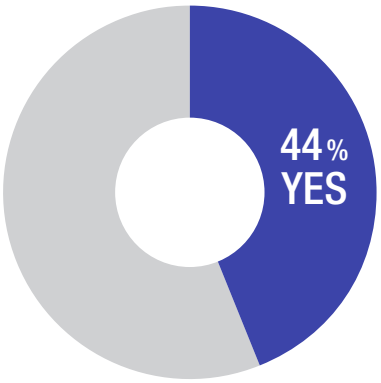
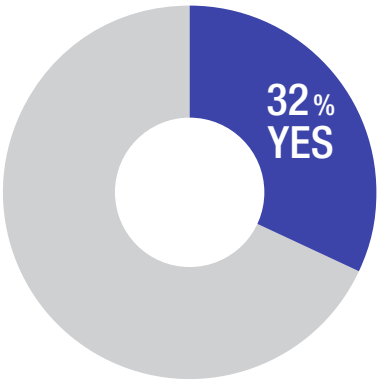


Figure 11: Access to Corporate Services



Source: CBIA research, interviews, surveys.

Investment Concentration

The universe of available incubators and product development test beds remain relatively small in comparison to the population of software accelerators. Industries defined by lower barriers also benefit from the greatest amount of deal activity.

In mobile technology, the top 10 programs range from 14 investments to 191 investments made in the last five years (Table 12). This represents the most populous industry segment among those assessed. In other words, more investing activity is occurring in mobile technology than any other single industry segment.

Figure 12: Top 10 California Incubators and Accelerators in Mobile (By # of investments last 5 years)

Source: Pitchbook, CB Insights, SeedDB, CBIA research.

RANK			
1	500 Startups 191 INVESTMENTS	6	StartX 21 INVESTMENTS
2	Y Combinator 144 INVESTMENTS	7	Tandem Capital 18 INVESTMENTS
3	Plug and Play Ventures 47 INVESTMENTS	8	Pritzker Group Venture Capital 17 INVESTMENTS
4	AngelPad 27 INVESTMENTS	9	Founders Den 16 INVESTMENTS
5	Rock Health 23 INVESTMENTS	10	Alchemist Accelerator 14 INVESTMENTS

Figure 13: Top 5 California Incubators and Accelerators in E-Commerce (By # of investments last 5 years)

Source: Pitchbook, CB Insights, SeedDB, CBIA research.

RANK	
1	500 Startups 90 INVESTMENTS
2	Y Combinator 53 INVESTMENTS
3	Plug and Play Ventures 27 INVESTMENTS
4	Rocket Internet (RKET) 22 INVESTMENTS
5	AngelPad 14 INVESTMENTS

The second largest concentration of investing activity over the last five years was in e-commerce. The top five investors in e-commerce ranged from 14 to 90 investments made (Table 13).

It is also noteworthy that in raw volume, 500 Startups and Y Combinator topped the ranks for California programs in number of investments made over the last five years.

Among emerging industries, Big Data represents one segment with measurable investment activity. Though not as deep a market for programs relative to e-commerce and mobile, Big Data still garnered more than 20 deals for each of the top two programs (Table 14).

In the emerging field of education technology, or EdTech, again the top two programs each made more than 20 investments over the last five years (Table 15). Though EdTech has the characteristics of the software industry, product life cycles are much longer and entrenched competitors can make market penetration much more difficult. These resemble the traits of a high-barrier industry, such as life

sciences, and the long-term performance of EdTech companies may more closely resemble life sciences portfolios than software portfolios.

Investing activity in advanced manufacturing resembles the levels in emerging industries like EdTech and Big Data (Table 16). New players are represented, however, including Hax, one of SOS Ventures' programs, and Highway1, the accelerator platform of PCH International.

Figure 14: Top 5 California Incubators and Accelerators in Big Data (By # of investments last 5 years)

Source: Pitchbook, CB Insights, SeedDB, CBIA research.

RANK		
1	Y Combinator	22 INVESTMENTS
2	500 Startups	21 INVESTMENTS
3	Plug and Play Ventures	10 INVESTMENTS
4	Pritzker Group Venture Capital	6 INVESTMENTS
5	Acceleprise	4 INVESTMENTS

Figure 15: Top 5 California Incubators and Accelerators in Education Technology (By # of investments last 5 years)

Source: Pitchbook, CB Insights, SeedDB, CBIA research.

RANK		
1	500 Startups	28 INVESTMENTS
2	Imagine K12	23 INVESTMENTS
3	Y Combinator	12 INVESTMENTS
4	StartX	8 INVESTMENTS
5	Wasabi Ventures	4 INVESTMENTS

Although California remains one of the leading regions of life sciences innovation worldwide, the amount of investment activity via incubators and accelerators over the last five years has not matched other emerging industries. Leaders with major infrastructure to provide to startups, including JLabs (Johnson & Johnson) and Illumina, are among the most active in the life sciences (Table 17).

Figure 16: Top 5 California Incubators and Accelerators in Advanced Manufacturing & 3D Printing (By # of investments last 5 years)

Source: Pitchbook, CB Insights, SeedDB, CBIA research.

RANK		
1	Y Combinator	20 INVESTMENTS
2	HAX	13 INVESTMENTS
3	500 Startups	8 INVESTMENTS
4	Highway1	6 INVESTMENTS
5	Founder.org	5 INVESTMENTS

Figure 17: Top 5 California Incubators and Accelerators in Life Sciences (By # of investments last 5 years)

Source: Pitchbook, CB Insights, SeedDB, CBIA research.

RANK		
1	JLabs	14 INVESTMENTS
2	Rock Health	11 INVESTMENTS
3	Illumina (ILMN)	10 INVESTMENTS
4	Sandbox Industries	10 INVESTMENTS
5	StartX	9 INVESTMENTS
	Y Combinator	9 INVESTMENTS

Performance of Portfolio Companies

Perhaps the most important indicator of success of a program from the perspective of entrepreneurs is the ability to raise funds or make exits, whether through some form of public offering, sale of the company, or merger.

Y Combinator and 500 Startups have been the most active California incubators and accelerators in terms of the the total number of lifetime financings made by portfolio companies(Table 18). No other programs come close in terms of the total number of deals made in the history of their programs.

The most active portfolios on an average annual basis track closely with the most active portfolios in sum total (Table 19).

Figure 18: Top 20 California Incubator and Accelerator Portfolios (By total deals made by portfolio companies)

Source: Pitchbook, SeedDB, CBIA research and calculations.

RANK			
1	Y Combinator 2,002 CUMULATIVE DEALS	11	Blackbox 65 INVESTMENTS
2	500 Startups 1,080 CUMULATIVE DEALS	12	Idealab 60 INVESTMENTS
3	Plug and Play Ventures 327 CUMULATIVE DEALS	13	Imagine K12 59 INVESTMENTS
4	Founder Institute 186 CUMULATIVE DEALS	14	Runway 56 INVESTMENTS
5	Alchemist 168 INVESTMENTS	15	K5 52 INVESTMENTS
6	StartX 159 INVESTMENTS	16	Amplify.LA 51 INVESTMENTS
7	All SOS Ventures Program 135 INVESTMENTS	17	Upwest Labs 50 INVESTMENTS
8	AngelPad 112 INVESTMENTS	18	Mucker Lab 48 INVESTMENTS
9	Rock Health 92 INVESTMENTS	19	Launchpad LA 42 INVESTMENTS
10	EvoNexus 70 INVESTMENTS	20	Start Engine 41 INVESTMENTS

Figure 19: 17 Most Active California Incubator and Accelerator Portfolios by Average Year (By deals made by portfolio companies in average year)

Source: Pitchbook, SeedDB, CBIA research and calculations.

INCUBATOR / ACCELERATOR	DEALS PER YEAR	YEARS MEASURED
Y Combinator	182.00	11
500 Startups	120.00	9
Alchemist	33.60	5
Plug and Play	32.70	10
Founder Institute	26.57	7
All SOS Ventures Programs	22.50	6
AngelPad	18.67	6
Rock Health	18.40	5
StartX	17.67	9
Highway1	13.33	3
Blackbox	13.00	5
Amplify.LA	12.75	4
Imagine K12	11.80	5
Runway	11.20	5
K5	10.40	5
Start Engine	10.25	4
EvoNexus	10.00	7

Total lifespan of a program is a factor that cannot be filtered out. Measuring total cumulative deals over the life of a portfolio could have mounting impact as a portfolio matures. Companies that graduated from an accelerator more than five years ago could have been through multiple private rounds of financing and an IPO, whereas companies graduated from an accelerator that began operation just two years ago are unlikely to have experienced multiple financing rounds.

Entrepreneurs may again want to know more than mere deal volume. To startups, amount of capital raised may be more than the accumulation of transactions. When measured by capital raised on a per deal basis, the top ten performers include a more diverse set of programs (Table 20).

One extraordinary transaction spoiled the data. The association of RocketSpace with Spotify produced an outlier transaction of $526 million in 2015, of a total $612 million attributed to RocketSpace. The Spotify financing has been filtered out for this ranking.

The tallies of total capital raised by all portfolio companies from a program reflect a significant economic impact. That the combined financings of the portfolios of several accelerators surpass $1 billion (Table 21) is remarkable considering the recency of this phenomenon.

Figure 20: Top 10 Incubator and Accelerator Portfolios by Dollars per Deal

Source: Pitchbook, SeedDB, CBIA research and calculations.

INCUBATOR / ACCELERATOR	AVERAGE RAISED PER DEAL
Idealab	$7.3 mil
Y Combinator	$6.0 mil
Flex Lab IX	$3.9 mil
K5	$3.8 mil
RocketSpace w/o Spotify	$3.6 mil
Rock Health	$3.3 mil
AngelPad	$2.1 mil
All SOS Ventures Programs	$1.7 mil
Mucker Lab	$1.6 mil
Astia	$1.5 mil

Figure 21: Top 20 Incubator and Accelerator Portfolios by Total Fundraising

Source: Pitchbook, SeedDB, CBIA research and calculations.

INCUBATOR / ACCELERATOR	AVERAGE RAISED PER DEAL
Y Combinator	$11,990.0 mil
500 Startups	$1,510.0 mil
RocketSpace	$611.7 mil
Idealab	$439.8 mil
Rock Health	$302.3 mil
All SOS Ventures Programs	$234.7 mil
AngelPad	$233.8 mil
StartX	$229.3 mil
Alchemist	$197.8 mil
K5	$196.2 mil
Plug and Play	$171.9 mil
RocketSpace w/o Spotify	$85.7 mil
Mucker Lab	$75.8 mil
Runway	$64.6 mil
Amplify.LA	$54.9 mil
Founder Institute	$51.2 mil
Launchpad LA	$47.6 mil
Flex Lab IX	$46.8 mil
Astia	$43.4 mil
Imagine K12	$40.0 mil

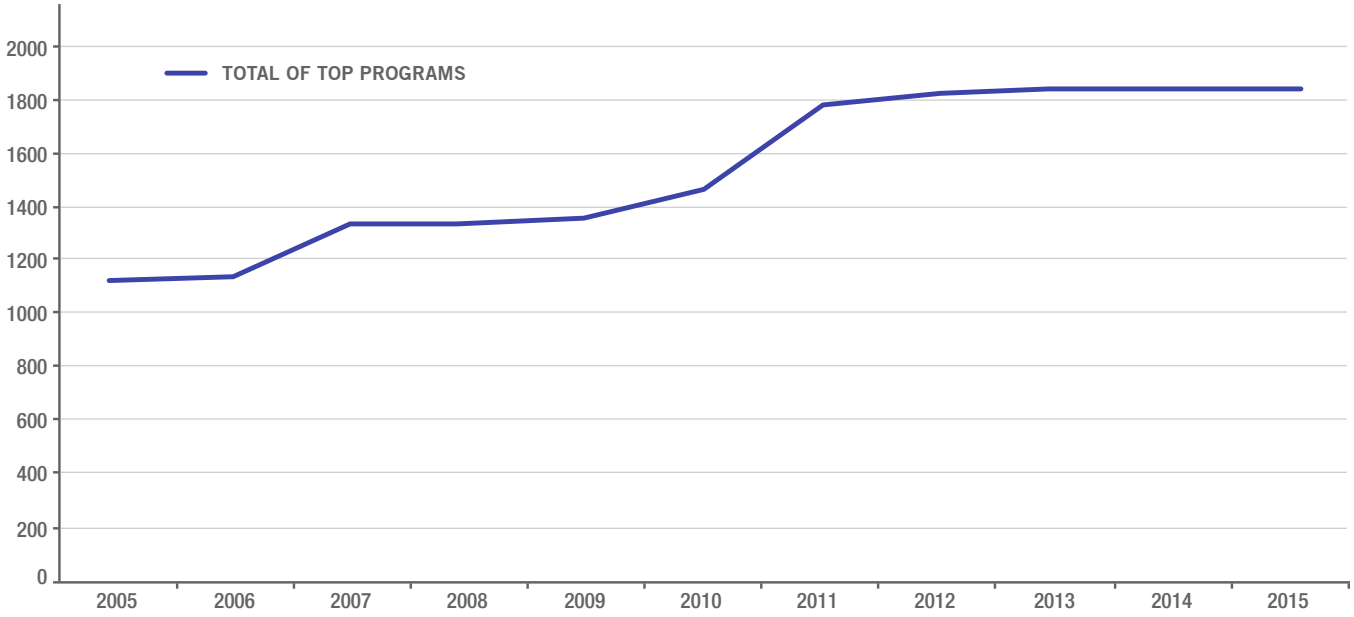
It is perhaps less surprising that legacy programs like Idealab turn up on this list of top performers. Idealab has been turning out company after company from its Pasadena home since its founding in 1996. It has served as a model of how to build companies, as well as how to provide shared services to develop a company's identity.

Without question, the portfolios of top programs are raising money. The average total amount of money raised per year has been greater than $1.8 billion since 2012 (Figure 22). This represents growth of more than 50 percent from the $1.1 billion raised in 2005. In part, this corresponds with the explosive growth in accelerator programs. More than half of the programs included in Figure 22 have measurable investments for portfolio companies dating back only to 2011.

The proliferation of the accelerator model has occurred globally, not just in California.

Figure 22: Cumulative Funding by Portfolio Companies of 44 Selected California Programs Based on Average Year Since 2004 ($ millions)

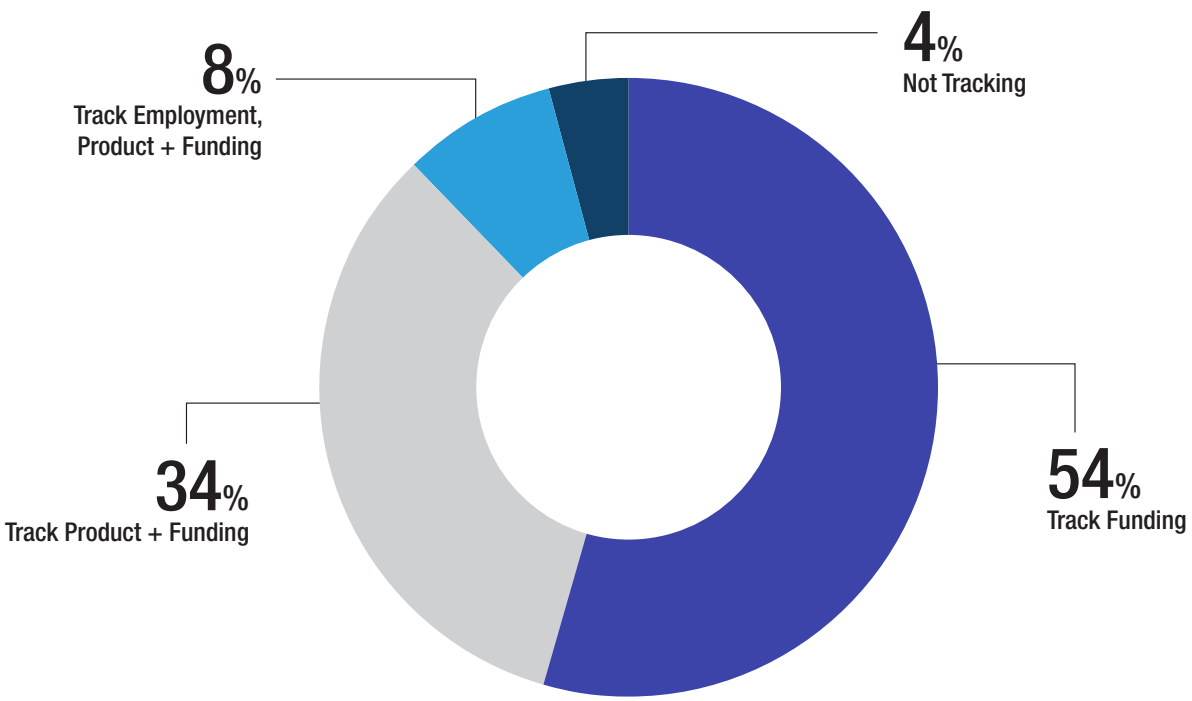
Source: PitchBook, SeedDB, CBIA research and calculations



"Helping entrepreneurs to get their projects through the lines is a very local process. There is a whole connective tissue. Everywhere people are actually doing the same things to support entrepeneurs," one accelerator director responded. "The accelerator model exploding everywhere is kind of the natural consequence of that. It's primarily a good thing. There is no doubt that a company is better off doing an accelerator than not because of mentorship support, meeting peers, and stuff like that."

Figure 23: Success Tracking by Incubators and Accelerators

(By portion of those surveyed measuring portfolio company success indicators)



There are compelling reasons why so many new entrants have developed accelerator programs. "Great companies like DropBox and AirBNB come out of Y Combinator," another accelerator director answered. "Then other great companies like SendGrid and TaskRabbit come out of other accelerators like TechStars and 500 Startups.

"Folks have realized it costs less than ever to create a tech company. By putting out a little bit of capital, you can help bright people who are driven create a company. That company, whether it's started in Ohio, or San Francisco, or in France, has just as much chance at becoming a big company. These companies can start anywhere."

Multiple practitioners in the industry responded with long-term concerns about the sustainability of the accelerator model. "We are seeing a proliferation," said one accelerator professional. "I don't think that all accelerators will survive. We're certainly creating a lot of companies that will not be sustainable, but I don't think that it's obvious at the early stages of many companies to know [which] will not make it."

Several insiders expressed a similar sense of saturation, though without a concern that the model had reached an endpoint. "Yes, there are a ton of accelerators," said a corporate accelerator professional. "Not all of them will survive, but we will continue to see more as people refine the model."

Another accelerator professional in a program backed by a venture group echoed the sentiment.

"Accelerators can be game-changing themselves. They can provide value beyond mentorship, actually provide distribution and other support that will help entrepreneurs."

Funding is only one measure of the success of startup portfolios. Participating companies make other kinds of measurable progress. Some programs track product milestones, employment changes, new markets entered, and more (Figure 23). Almost all responding programs affirmed that they track funding events of portfolio companies, and many go further.

Some 54 percent reported they track funding, and 33 percent track product milestones as well as funding. Eight percent reported that they track both of those for successful graduated companies, as well as the growth or change in headcount of portfolio companies. Only 4 percent indicated that they are not tracking successes of graduated companies.

Accelerator management acknowledged seeing variances regarding their own portfolio outcomes in public datasets and said often they were inaccurate. When prompted for ideas on how to develop consistent data reported routinely by accelerators, one accelerator representative said,

"Just ask us directly."

The response rates to the series of surveys and interviews conducted for this report throughout 2015 averaged between 30 and 40 percent.

Aside from the inconsistency of measurement and the lack of standard metrics in use in the field, the principle concern about outcomes raised by participants was the relationship between graduating from a program and closing a financial transaction. They are not necessarily causal.

One entrepreneur who had recently graduated from a top ten program said, "Did I raise this money because I participated in [this accelerator]? No."

To explore the causal relationship with accelerators and financings, the California Business Incubation Alliance interviewed approximately three dozen startup founders who had graduated from accelerator programs.

Some founders expressed skepticism about the state of the market in acceleration.

"I personally am a bit leery of how accelerators seem to be setting up," reported one founder who notably had positive feedback on his own accelerator experience. "You have to pay to play, either with cash or with equity. It seems to be more set up for the investor than it is for the entrepreneur."

Entrepreneurs also expressed a cautionary tone about the curriculum offered by some programs. "I don't know that all accelerators are that well-structured," said one entrepreneur. "I don't think they're all created equal. To the degree that they're action-oriented, they can be really good things."

Beyond that skepticism, almost every entrepreneur cited their own positive experience. One entrepreneur answered with specifics about the growth in his startup as a direct result of an accelerator.

"My experience was a really good one. We more or less entered with a concept, but that was about it. By the end, what we had was a compelling pile of customer validation that helped us understand exactly what problem we were trying to solve, and exactly how we could do that. For us, it was great. It was a way we could make a lot of progress in a structured way in a short period of time."

One founder of a business-to-business software startup expressed a similar benefit. "It was a great experience," said the founder. "I can safely say that we wouldn't be where we are today. The folks behind our accelerator are amazing, the mentors there are amazing. They really helped us focus on the important aspects of our business and growing a business."

Many founders specifically connected their positive outcomes with the discipline involved with the accelerator process and the value of going through it with peers. "You can always learn a lot from a cohort," said the founder of a financial technology startup. "That just speaks to the importance of network effect.

"That's one of the things we got from [our program] – great networking and exposure to diverse thinking and other innovations. We definitely were able to learn from our peers. Not only in terms of learning what other technologies are out there, but also better understanding clients and customers by listening to the other people in our cohort."

Some accelerator alumni offered advice to entrepreneurs who may consider applying to accelerators. "There are some accelerators who seem to tout their networks a lot and create a lot

of interesting dinners and speaker series," offered one consumer product startup. "It takes time away from the entrepreneur and his or her ability to focus on building the business."

Another East Coast entrepreneur suggested careful due diligence. "First and foremost, entrepreneurs need to look at the people behind the accelerator," the entrepreneur said.

"It's really important to look at the people that have founded that incubator or accelerator, the kind of people they are, how they operate, as well as understanding some of the people you're going to be interacting with on a day-to-day basis, and, of course, their past portfolio. What sorts of companies have they invested in and how are those companies doing now?"

One entrepreneur who recently moved to the Bay Area focused on mentor networks. "A great mentor in one of these programs can make all the difference because they can really help you understand the problems your product can solve," the entrepreneur said. "It's often understated. When you have mentors who can really help you with introductions and value-added services, it provides that [market] context. It really helps you understand your customer and grow the business. That was certainly something we got out of our experience."

Mentor networks are one of the hallmarks of the standard accelerator, though they are often not part of the fabric of services and support provided by incubators.

Direct Impact

"Folks have realized it costs less than ever to create a tech company. By putting out a little bit of capital, you can help bright people create a company."

– Accelerator director in San Francisco

Incubators and accelerators also drive economic activity by their own direct investments. Operating any of these programs requires space, personnel, and often the kind of capital equipment that is beyond the reach of typical startups.

To assess direct investments made by programs, the California Business Incubation Alliance surveyed approximately 50 programs regarding their annual spending activities.

Among respondents, the average for annual spending on staff, space, equipment, and consumables totaled $439,000. Many represented small businesses themselves, with an average of ten employees.

One incubator executive responded outside the survey regarding a biotechnology incubator in Silicon Valley. The executive reported anecdotally that more than $50 million in research equipment had been donated or acquired on a deeply discounted basis from companies making changes or closing. Impacts such as these, representing the strength and connectivity of an entire ecosystem, were beyond measure.

Summary

Two-thirds of incubator and accelerator programs invested directly in the companies they accepted. Nearly three-quarters of programs are associated with a physical space, though move-in options for participating startups vary widely. Almost half of programs provide access to shared equipment, and nearly one-third provide access to additional corporate services to aid in startup development.

The investment thesis of many accelerators is oriented toward industries with low barriers to entry, including software, mobile, and e-commerce. Correspondingly, accelerators in those industries are more likely to have high volumes of startup throughput and deals. In more capital-intensive industries, such as advanced manufacturing and life sciences, the most active programs tend to specialize in those industries.

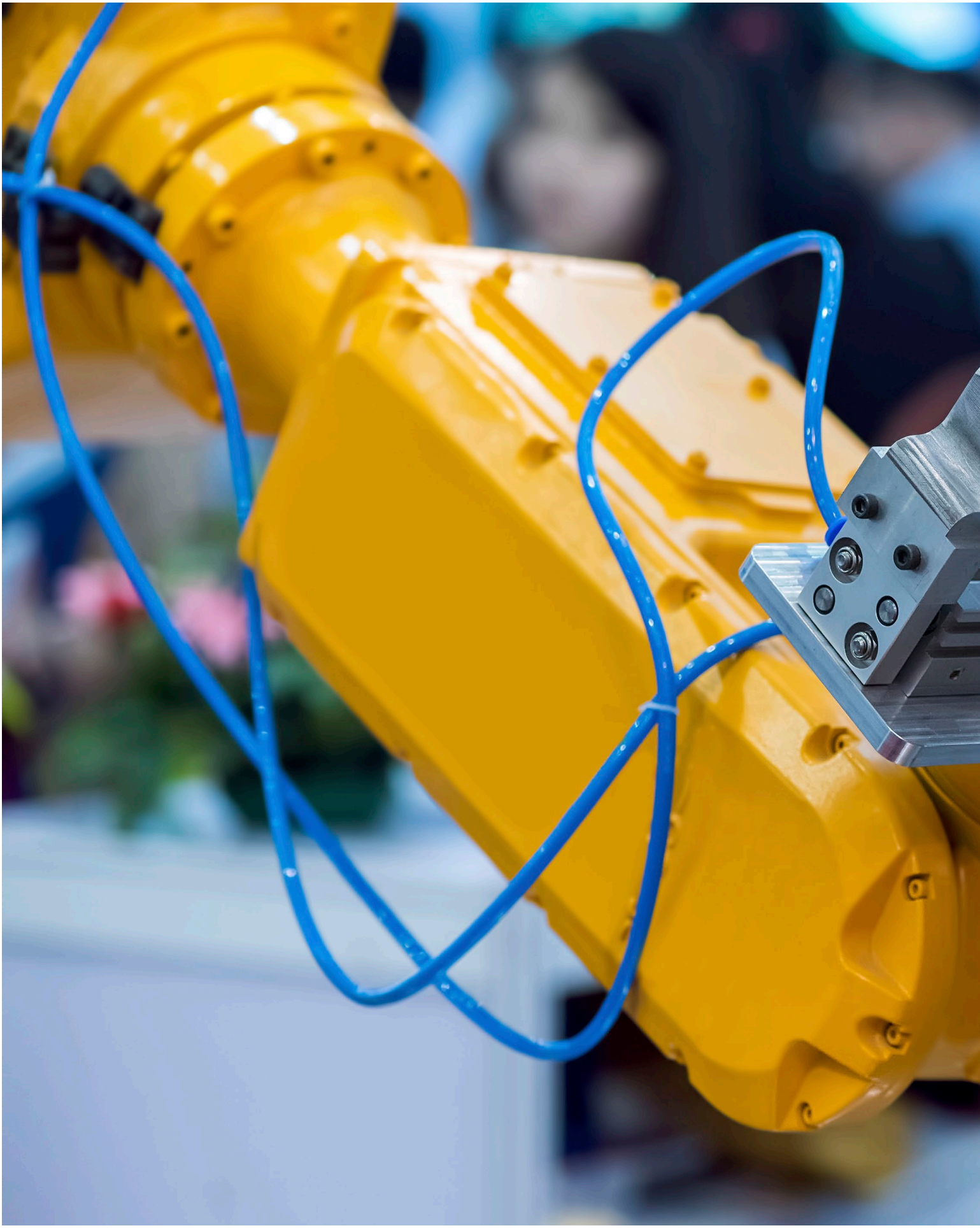
Portfolio companies from the top 44 incubator and accelerator programs in California have raised $16.9 billion since 2004. The spending resulting from that total capital injection was not confined to California, or even to the United States. Those companies expanded, some to additional U.S. markets, and others globally.

The average amount of fundraising per year has been greater than $1.8 billion since 2012, representing growth of more than 50 percent since 2005.

The track record of these programs is short, and very little about the dynamics of the programs has been measured since inception. Many programs have been operating for less than five years.

Classic models of economic impact might measure payroll, effects on gross state product, and taxes generated for local and state government. They might also consider direct, indirect, and induced employment effects, property and other capital investments, and more.

More than three-quarters of all programs track funding and product milestones for companies that have graduated. Other data on programs, employment and capital investments, and wider economic tracking of graduated companies are lacking in the industry.



Section 3

The Innovation Industry Renews Itself

Shortcomings in the Model

The International Business Innovation Association, formerly known as the National Business Incubation Association, is the global professional society for incubator professionals. CBIA is formally affiliated with INBIA. INBIA recommends regular tracking of programs for economic impact. It suggests incubators gather data on the following metrics:

- Number of current clients
- Total number of graduates since program inception
- Number of graduate firms still in business or merged or acquired
- Number of people currently employed full-time by client firms
- Number of people currently employed part-time by client firms
- Current monthly salaries and wages paid by client firms
- Amount of debt capital raised in most recent full year by client firms
- Amount of equity capital raised in most recent full year by client firms
- Amount of grant funds raised in most recent full year by client firms.

None of the programs assessed for this project tracked all ten of these measures, or even the majority of them.

Even so, these metrics would fail to capture the economic impact in California of the mass proliferation of accelerators. As the cost to launch a new software startup has approached zero, the number of accelerator programs has grown rapidly. While using INBIA's recommended data points to capture the sector's economic impact would generate a more complete picture of the startup universe participating in these programs, it would not capture the direct investment in real estate, payroll, and consumption these programs make themselves.

Measuring payroll presents interesting challenges regarding economic impact. Mentor-driven accelerators augment their full-time equivalent staffing with mentors. Often, mentors are expected to work with resident startups for a limited period with no compensation. This external network of venture partners, experts, and consultants would not be reflected in payroll data generated by accelerator programs.

Though they are not accounted for in any tangible value or metric, entrepreneurs directly reported that development of mentor networks are among the greatest benefits of participating in any accelerator.

Limitations of a Skunkworks

In part, the arrival in California of an increasing number of corporate accelerators has driven the increase in the number of these programs. The new players go well beyond traditional technology and innovation investors. They include automotive giants, retailers, food, and advanced materials companies. In fact, virtually every industry is represented in this group of recent entrants.

Accelerators with corporate affiliations offer upside to company administrators in several ways. The costs of developing new technology can sometimes be pushed onto partners or into distinct entities not on the corporate balance sheet. The planning and technology scouting functions of a multinational corporation can be reinvigorated by the injection of new ideas from an accelerator. The product and market insights can influence existing corporate products and plans. And occasionally, a windfall can result from a very successful investment.

Champions of these programs vary from corporate heads of research to corporate development and finance. Mixed missions sometimes result from conflicting reporting lines and strategic accountability between financial and technological objectives.

By any measure, most corporate programs have become part of evolving open innovation strategies in large companies looking for novel ways to identify the next great leap forward. In some ways, this direct corporate participation may have replaced fractions of strategic participation in private equity, as the accelerator model can serve corporate goals in closer view of promising technology and with more immediate accountability.

However, corporate sponsors have already demonstrated a shortage of patience when it comes to waiting for outcomes by graduates. Practitioners in the interviews conducted for this report frequently cited questionable durability of corporate programs.

In the past three years alone, Silicon Valley accelerators run by Coca Cola, Time Warner, Nike, and Citrix have ceased operations. These programs have been interrupted because of corporate finance, market factors, or changes in company strategy. (Some of these programs are captured in the appendix.)

Whatever the rationale, these corporate accelerator programs appeared unable to convert their resources and infrastructure into more lasting or sustainable startup support practices.

Financing and the Causal Link

"Did I raise this money because I participated in [this accelerator]? No."

– Startup founder after accelerator graduation in Northern California

Portfolio companies from top incubator and accelerator programs surveyed for this report have raised $16.9 billion since 2004. While this capital infusion would be significant by any definition, there are several flaws in linking it directly to the performance of accelerators.

First, there is a tone of resentment from entrepreneurs commenting for this research that they raised venture capital to support their growth because of the excellence of their companies, as opposed to the funds resulting from anything that occurred at or because of the accelerator in which they participated.

Second, and unlike recommendations from INBIA suggesting measurement in the most recent year, there is no time limit placed on graduation from an accelerator and immediate fundraising success. This financial data measures all fundraising since program participation. Third, and related to that time limit, this data measures funds raised for any and all fundraising rounds since program participation.

The link between a startup graduating from an accelerator in 2005 and participating in an initial public offering in 2015 is tenuous at best. Attributing the influx of capital from that IPO to the company's participation in an accelerator ten years before is perhaps irresponsible, even if the company's survival in early years cannot be made distinct from the accelerator.

While it would be inappropriate to assert that the accelerator caused that startup to raise all those subsequent dollars, the industry has no standard practice for measuring funds raised by recent participants within a time limit, or establishing a separation from the time of graduation and later fundraising events.

Self-Assessment and Renewal

Accelerator professionals have not found an accepted practice for assessing the marginal improvement made by their programs in the survival rate of startups. In fact, only a few respondents indicated that they routinely tracked survival rates.

Why aren't more programs measuring the survival of their alumni? While a direct answer did not present itself from the data and interviews compiled for this report, one entrepreneur gave a unique perspective. "It seems to be more set up for the investor than it is for the entrepreneur," the startup founder said.

In the long run, a potential threat to the sustainability of the accelerator model is the misalignment of interests. The worst of the entrepreneurial feedback gathered from these interviews reflected deep skepticism of these programs. In brief, entrepreneurs expressed concern over attending three months of pitch school to leave with a better presentation and at the cost of a 6 percent equity stake in their companies.

Taken to its extreme, this model for the worst-case accelerator might involve accepting more startups than any program manager could reasonably support, providing as little time as possible to any one startup, replacing direct time with volunteer (and free) time from mentors, and maximizing the number of startups a program can support by removing the issue of real estate. According to the entrepreneurial interviews collected for this report, this accelerator program already exists and is a literal interpretation of a startup factory.

"Yes, there are a ton of accelerators. Not all of them will survive, but we will continue to see more as people refine the model."

– Corporate accelerator representative in San Francisco

It could be argued that, even in that worst-case scenario, the interests of founder and investor remain aligned. The accelerator cannot realize the value of its equity unless that startup captures real value in the open market.

Entrepreneurs expressed concern that these programs might not be worth their time. Some accelerators fill their curriculum with programming extraneous to building a business. "It takes time away from the entrepreneur," one founder responded.

The value of that time and the alignment of interests come down to the same considerations. Non-diluted shares representing 6 percent of Facebook were worth more than $6 billion at its initial public offering.

As more founders get further removed from their accelerator experience, and as dialogue between founders and investors advances, it is likely that stakeholders will find that capital to be more expensive than alternatives in debt and other forms of equity.

Key Findings

The combined surveys, interviews, and research compiled for this report can be summarized in the following key findings:

- Accelerators have become more prevalent than incubators since 2010
- About half of all programs have come into existence since 2010
- Investment professionals and accelerator managers are concerned about the sustainability of this volume of accelerators and the very model of accelerators
- Corporate sponsors of incubators and accelerators bring greater resources to bear, but their commitment to acceleration may change at any time due to factors outside the influence of the program. This kind of change often interrupts the operation of accelerators and their associated networks
- The process of creating and building a startup has been commoditized to the point that there are low barriers to establishing a new accelerator
- On the other hand, a generation of electronics, hardware, and life sciences incubators represent a very different level of investment and economic impact
- The average accelerator injects more than $400,000 annually into its local economy
- The typical hardware or life sciences incubator requires millions in equipment, in addition to real estate and personnel, to commence operations
- Venture investment in the clientele of incubators and accelerators has been consistent at the multi-billion dollar level in California since 2012
- Portfolio companies from top incubator and accelerator programs in California have raised $16.9 billion since 2004
- A total of 87 percent of programs surveyed responded that they track financial and product milestones of participating portfolio companies
- Some 8 percent of programs track employment change at portfolio companies
- More than 4 percent of programs are not tracking any performance metrics of their portfolio companies
- There is a backlash rising among entrepreneurs, concerned about the real value offered by some accelerators, and the perception that the accelerator model serves investors more than startups
- Even the most fundamental questions, e.g. what is the difference between an “incubator” and an “accelerator” were met with deeply inconsistent responses, even from very experienced innovation professionals
- A lack of consensus among practitioners presents multiple challenges to improving the practice of incubator and accelerator management
- A lack of consensus among practitioners on the need for and expectation of mutual accountability makes a case for peer pressure to participate in measurement
- The lack of standard measurement should serve as a caution to entrepreneurs to be thoughtful about choosing an accelerator or incubator and the need to ask tough questions regarding track record and performance

Policy Considerations

The investments resulting from incubators and accelerators, and the wider economic impacts of those programs and their networks of client companies represent important considerations for policymakers considering innovation strategies around the world. While most policymakers and economic developers prioritize the attraction of innovative companies, the importance of incubator and accelerator facilities within an ecosystem may depend on overall context.

Policymakers need to consider:

- Whether any form of incentive or intervention is warranted by the typical light investment of the average software-oriented accelerator
- Whether incubators or accelerators are preferred forms of investment of public resources
- Whether any particular industry focus is important in a regional innovation cluster
- Whether the investment to create new incubator or accelerator programs fits into the overall context of the larger economic development strategy, academic investments, R&D investments, commercialization efforts, and related factors
- Whether linking to corporate open innovation strategies and corporately-funded accelerators represents any short- or long-term advantage over independent acceleration strategies
- Whether the volume of regional entrepreneurship will be sufficient to capitalize on new programs
- Whether the resulting economic activity will produce the desired effects

However policymakers evaluate the importance of incubators and accelerators, there is no doubt that the volume of these programs has grown explosively in the last five years.

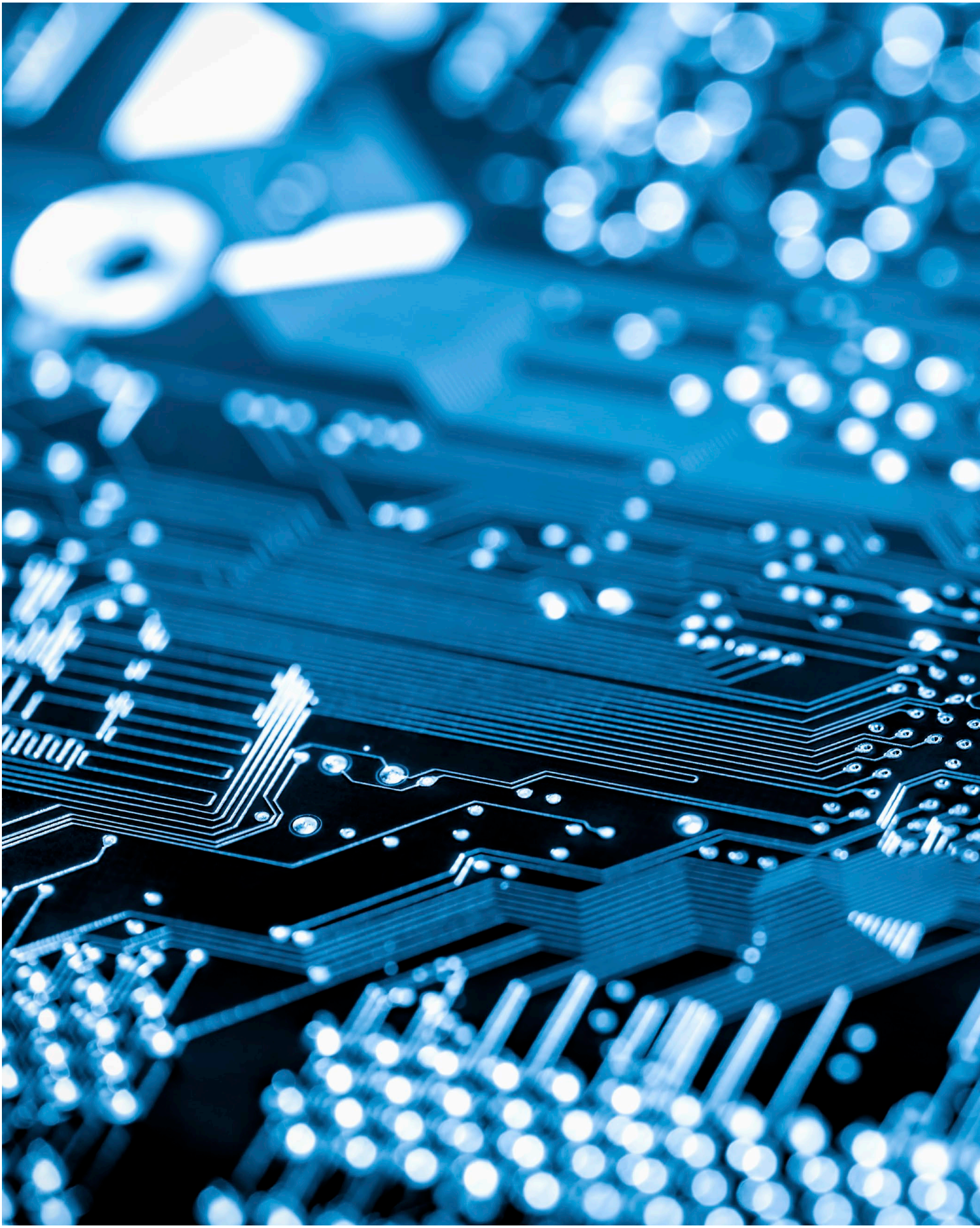
While stakeholders around the world evaluate whether and how to replicate and adapt aspects of these programs for their regional innovation clusters, practitioners inside California's cauldron of innovation go on with a continuous process of evaluation, iteration, and improvement of the incubator and accelerator model.

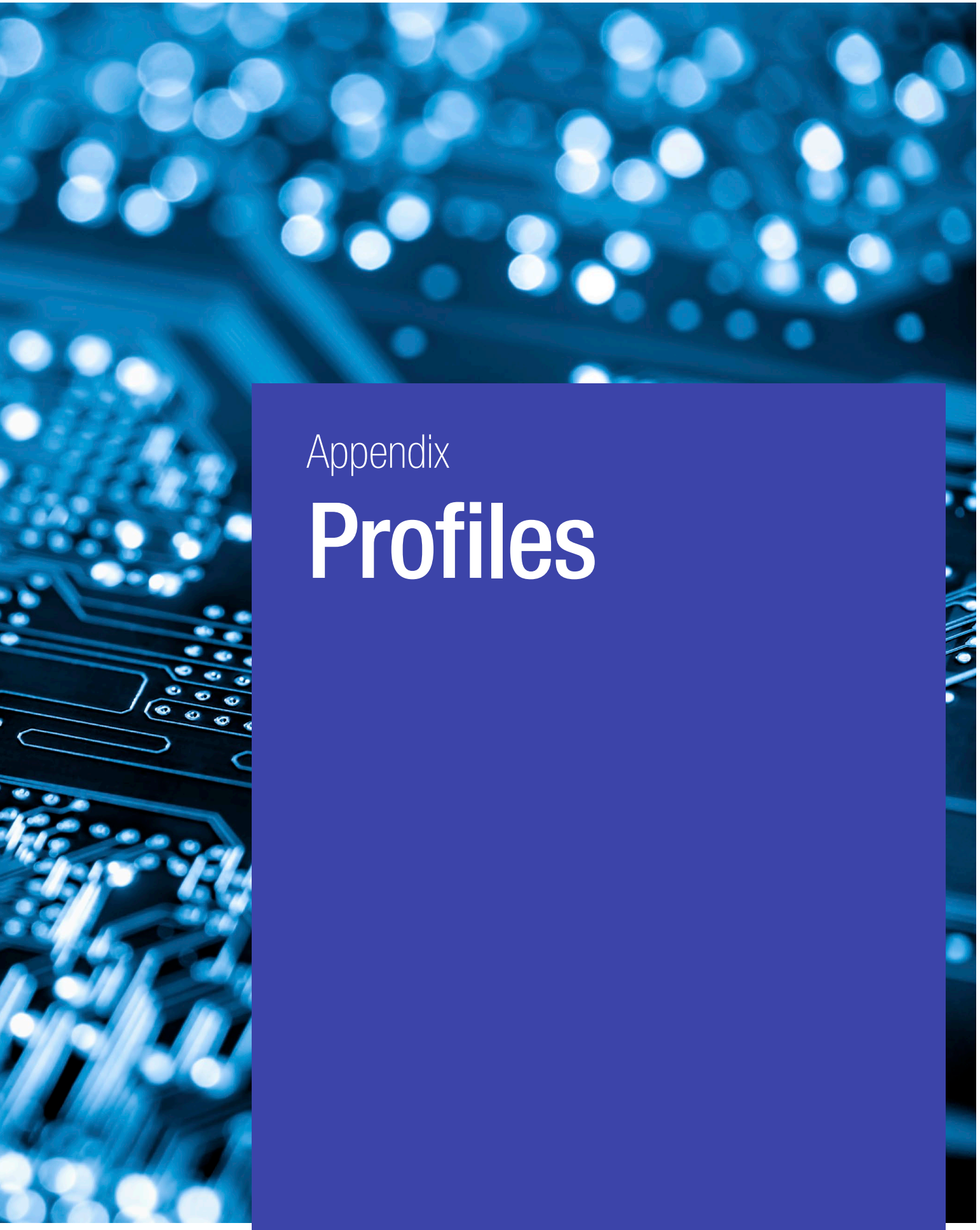
Conclusions

More than three-quarters of all programs track funding and product milestones for companies that have graduated. Other data on programs, employment and capital investments, and wider economic tracking of graduated companies are lacking in the industry. Whether they are tracked by program managers or not, industry leaders should establish clear expectations among peers that collective investments will be best served by improved measurement.

This generation of entrepreneurial support organizations requires updated methods of measuring impact. It may be insufficient to use methods established for publicly-financed incubators operating with public or academic mandates.

Apart from the interests of accelerators, the interests of entrepreneurs will best be served by improved and standardized measurement of incubator and accelerator programs in California.





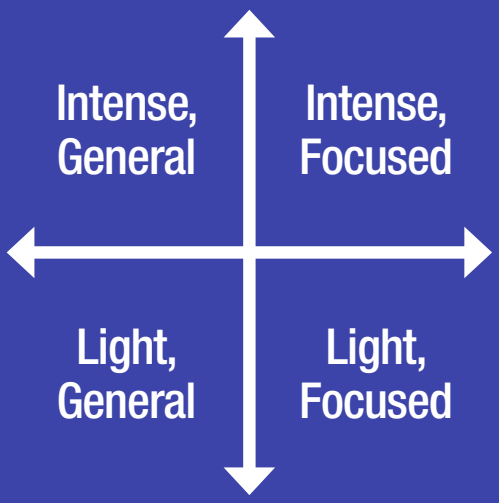
Appendix

Profiles

How to Use This Appendix

This collection of profiles is intended to provide a cross section of incubators and accelerators by type, industry focus, and services provided to startups. It is not intended to be comprehensive. Instead, it is intended to convey the range of offerings, industries, forms of investment, and services provided. No two incubators or accelerators are alike, and many defy definition.

The profiles included here also contain a small number of accelerators that have ceased operations in order to convey some of the practical challenges of measuring a dynamic ecosystem that constantly fluctuates.



The Gardner-Hamaoui Matrix is a means of typing incubators and accelerators according to how specific their focus is (X axis) and the richness of their resources (Y axis). Short cohort accelerators providing support to any kind of startup while emphasizing no physical space in favor of a mentor-driven model would fall into the bottom left quadrant as the most general and least resource-intensive programs. Wet lab incubators supporting therapeutic biotechnology companies would fall into the top right quadrant of the most specific, most resource-intensive type of startup support offerings.

In an attempt to classify accelerators by focus and resource intensity, the matrix provides one possible approach to comparing and contrasting incubators and accelerators.

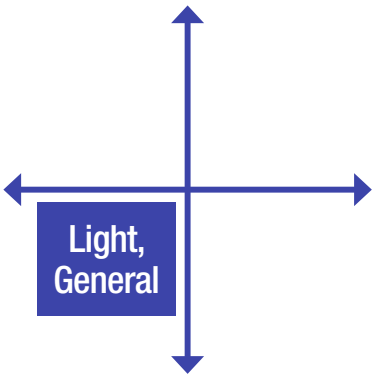
Covered incubator and accelerator programs include five main types. While these types do not strictly correspond to the sponsor of that program, they do provide indicators of the source and strategic direction of that program. Types of programs assessed in this appendix include:

- Corporate
- University
- International
- Independent
- Venture capital affiliated

The structure of these programs is described in a format true to the manner in which proponents themselves describe their offerings. This appendix makes no effort to discern details or alter self-reported information provided by these programs. For example, there are accelerators with residency and other services resembling support commonly found in incubators.

Profiles of Select Incubators and Accelerators

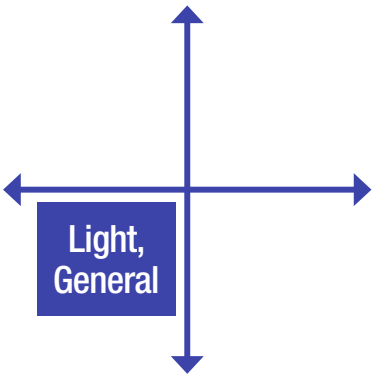
Alchemist Accelerator



- **Founded:** 2012
- **Structure:** Independent Accelerator
- **Location:** San Francisco
- **Website:** alchemistaccelerator.com
- **Graduate Universe:** 113
- **Description:** Designed to be exclusively for startups whose customers are enterprises rather than consumers. Focused on enterprise seed startups that are both B2B and B2B2C with a distinguished and noted technically strong team of two or three people. The accelerator provides a small amount of capital to each company (approximately $36,000), as well as two office locations for workspace for the duration of the program in exchange for X% of the company.

  Select Portfolio Companies: Cambrian Genomics, MightyHive, MobileSpan, Selligy, SocialPandas, Tylr Mobile, Wies.io, Assemblage, Oomnitza, Matternet, Waygum, and Frontleaf

AngelPad

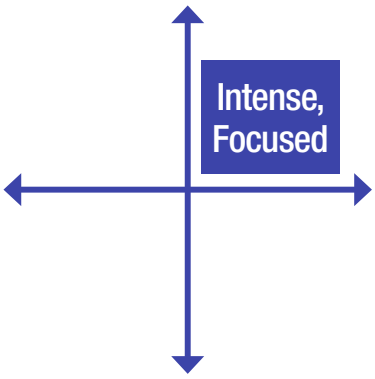


- **Founded:** September 2010
- **Structure:** Independent Incubator
- **Location:** New York and San Francisco
- **Website:** angelpad.org
- **Graduate Universe:** 115
- **Description:** Husband and wife team of angel investors who work with approximately 12 teams of startups every six months. They then spend three months with the groups in an intense and focused period of collaboration that includes two intensive 10-week mentoring sessions finishing with a demo day. Programs take place in the AngelPad office and mentors actively help companies with their fundraising.

  Select Portfolio Companies: Postmates, Buffer, Mopub, Vungle, Crittercism, and Coverhound

continued

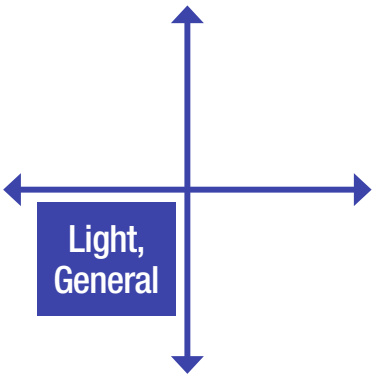
Bayer CoLaborator



- **Founded:** 2011
- **Structure:** Corporate Incubator
- **Location:** San Francisco and Germany
- **Website:** colaborator.bayer.com
- **Graduate Universe:** N/A
- **Description:** Incubator for medical science startups (that may align with Bayer interests) in lab spaces that are intended to bring researches together for collaboration. The San Francisco location features both laboratory and office space, open floor plans, conference rooms, shared state of the art lab equipment, storage areas including refrigeration or freezers, hazmat permits and handling abilities, 24/7 security, and confidentiality agreements with Bayer and clients.

  Select Portfolio Companies: Cambrian Aronora, Inc, Cairn Biosciences, ProLynx LLC, Singular BIO Inc, Xcell Biosciences

Blackbox

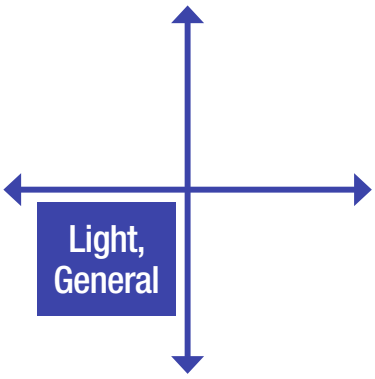


- **Founded:** October 2011
- **Structure:** International Accelerator
- **Location**: Palo Alto, CA
- **Website:** blackbox.vc
- **Graduate Universe:** 200
- **Description:** Brings business founders from all around the world to Silicon Valley to connect and receive mentoring by established and successful entrepreneurs. Startups take part in a two-week residential immersion program that connects them to the expanded network of mentors and attempt to grow the company globally. They do have a strict set of criteria, requiring the founder to be extremely proficient in English and to be the founder of the company in attendance. Blackbox does offer lifelong support however, after the two week program has ended.

  Select Portfolio Companies: 1Drop Diagnostics, Cozify, Eyeread, FastFingers, HangaarLab, IronScales, Next Automated Robots, NonMovingInventory, Prollster, RationalPixels, SafeBeyond, and WCCF Tech

continued

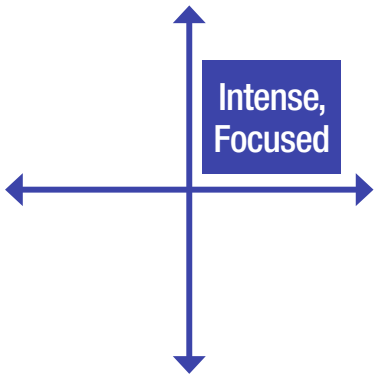
Bootstrap Labs



- **Founded:** June 2008
- **Structure:** International Accelerator
- **Location**: San Francisco
- **Website:** bootstraplabs.com
- **Graduate Universe:** N/A
- **Description:** Accelerator highly focused on small startup tech firms in South Asia, especially South Korea, and bringing them in to Silicon Valley. In Silicon Valley, the company offers lead investing, shared office space, and best practice sharing. Also offers many areas of assistance that a startup company would require (legal help, fundraising, etc.).

  Select Portfolio Companies: Audidraft, Prezi, Zerply, ZtGem, Witsbits, SV In.Fusion, Smartsy, Coworks, Chubble, Common Tribes, Mobile Backstage

Breakout Labs

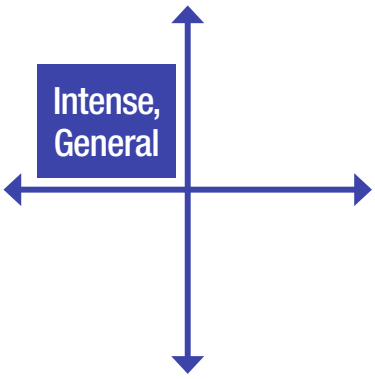


- **Founded:** 2012
- **Structure:** VC Affiliated
- **Location:** San Francisco
- **Website:** breakoutlabs.org
- **Graduate Universe:** 25
- **Description:** A stand apart from the traditional incubator or accelerator, Breakout Labs offers up to a $350,000 grant for startups, especially in the biosciences, that are too far away from being able to raise funds from for-profit groups and too niche for traditional fundraising. Also offers a two-year program of networking in the industry, exposure to potential industry partners, and strong press team to assist in generating press and publicity for startups.

  Select Portfolio Companies: C2Sense, CyteGen, Maxterial, nanoGriptech, Ion DX, Neumitra, E3XBio, EpiBone, G-Tech, Pareto Biotechnologies, AVEtec, General Genomics, Siva Therapeutics, Entopsis, Longevity Biotech, Positron Dynamics and Arigo Biomedical

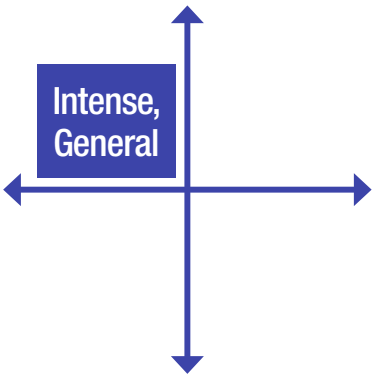
continued

Citrix Startup Accelerator (CLOSED)



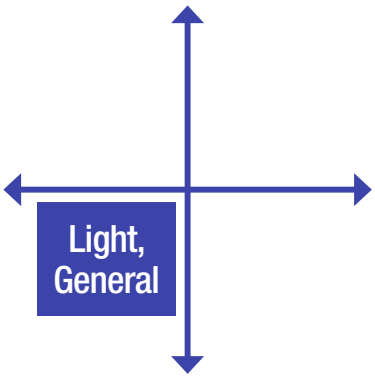
- **Founded:** 2010
- **Structure:** Corporate Accelerator
- **Location**: Santa Clara, Santa Barbara and Raleigh
- **Website:** startupaccelerator.vc
- **Graduate Universe:** At least 70
- **Description:** Tech accelerator that provided funding, "The Innovators Program" (three-month program running with multiple partners around the world for the necessary experience in fast-tracking them towards launch), as well as providing them with the "Venture Toolkit," which the accelerator claims contains the answers to how to create the innovative initiatives they are striving towards.
  Select Portfolio Companies: Whoknows, ThreeTenEight, Apakau, Tuebora, AppEnsure Inc., Iron.io, Graymatics, TidalScale, incoming, Wise.io, ScriptRock, gridcentric, and Nukona

Coca Cola Accelerator



- **Founded:** 2013
- **Structure:** Corporate Accelerator
- **Location**: Atlanta (SF location no longer operational)
- **Website:** coca-colafounders.com
- **Graduate Universe:** 200
- **Description:** Partners with experienced entrepreneurs around the world and immerses them in the world of Coca-Cola business power–relationships, resources, and reach—before they create a startup. Together it focuses on big problems lots of people have. The idea of the model is to create a win-win for everyone. Founders are given an advantage and Coca-Cola gets early access to new, fast-growing markets and solutions.
  Select Portfolio Companies: Winnin, Wonolo, OneWeb, Twistilled, Savasti, Home eat Home, Truu Mobile, iHydrate, and Tobuy

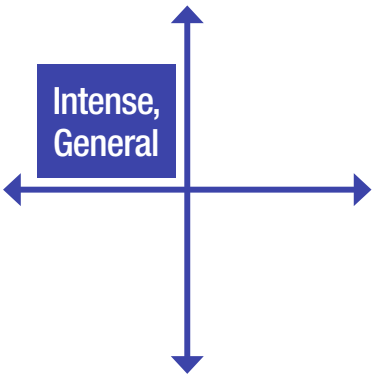
Code for America (CLOSED)



- **Founded:** 2012
- **Structure:** Independent Accelerator
- **Location:** San Francisco
- **Website:** codeforamerica.org
- **Graduate Universe:** 21
- **Description:** Offers financial support, as well as operational and strategic support, to companies in the early stages of the startup process. Involves a four month, face-to-face program that includes more than 200 hours of direct contact that ranges from networking to sales leads.

  Select Portfolio Companies: AmigoCloud, MuniRent, ProductBio, SeamlessDocs, Trailhead Labs, Postcode.io, ArchiveSocial, Family Assessment From, OpenCounter, SmartProcure.us, StreetCred, CivicInsight, LocalData, Textizen, Aunt Bertha, Captricity, LearnSprout, Measured Voice, MindMixer, Recovers, Revelstone

Co.Lab

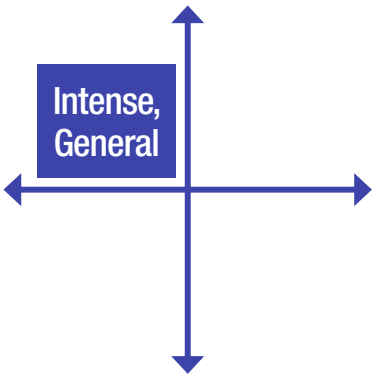


- **Founded:** 2013
- **Structure:** Independent Accelerator
- **Location**: San Francisco
- **Website:** playcolab.com
- **Graduate Universe:** 25
- **Description:** Works with startups that leverage digital games to enhance and improve PK-12 education. Four month process that enhances and scales the products from the startups. Companies receive a stipend of up to $50,000, desk space in co.lab's offices, and access to tools, best practices, and hands-on advisory and mentorship from best-in-class game industry professionals, entrepreneurs, educators, and venture capitalists.

  Select Portfolio Companies: Pixel Press, codeSpark, Story Toys, nearpad, NBA Math Hoops, LAB4U, PIPER, Montessorium, MindBlown Labs, Mathbreakers, kizoom, econauts, codemonkey, BrainQuake, Kid Bunch, kiko labs, Pixowl, TiMBUKTU, Tiny Tap, edcast, Pluto Media, motion math, Edmodo, Locomotive Labs, and kidaptive

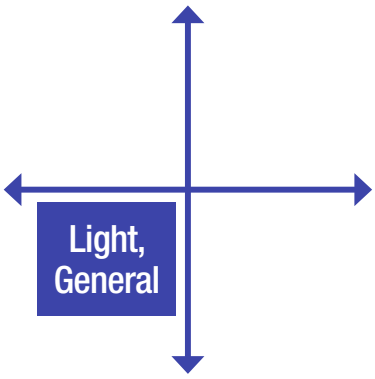
continued

CrossCoin Ventures



- **Founded:** 2014
- **Structure:** Independent Accelerator
- **Location:** San Francisco
- **Website:** crosscoinventures.com
- **Graduate Universe:** 5
- **Description:** Funds technologists and entrepreneurs looking into using the Ripple protocol, a real-time gross settlement system, to make a difference in the world of payments, transactions, and currency markets. Some of the particular areas it focuses on include remittance, transactions, and micro-payments.
  Select Portfolio Companies: Libra Services, Saldo, Tide, Digital Trading Solutions, and Coinist

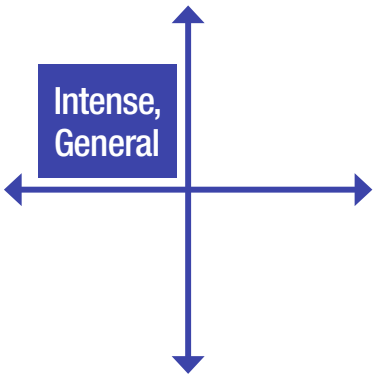
Disney



- **Founded:** February 2014
- **Structure:** Corporate Accelerator
- **Location:** Los Angeles
- **Website:** disneyaccelerator.com
- **Graduate Universe:** 20
- **Description:** Approximately a 10-company program (either for early or venture-backed startups) and provides between $100,000 and $200,000, as well as resources and networking in exchange for a 6.0 percent stake in the startup.
  Select Portfolio Companies: Decisive, Emotiv, FEM inc., HYP3R, imperson, Littlstar, MakieLab, Open Bionics, Pundit, and StatMuse

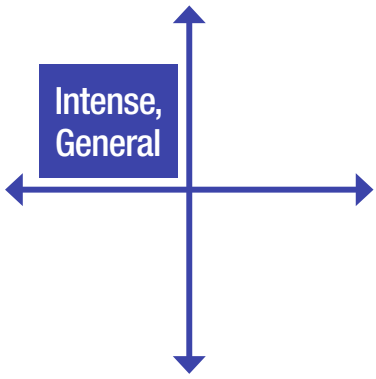
continued

EvoNexus



- **Founded:** 2009
- **Structure:** Independent Incubator
- **Location:** La Jolla, San Diego, and Irvine
- **Website:** evonexus.org
- **Graduate Universe:** 124
- **Description:** Non-profit technology incubator that serves as a hub for Southern California. EvoNexus, provides a strong focus for incubating startups that will benefit the community. Does not seek equity in the program startups.
  Select Portfolio Companies: Edico Genome, FatSkunk, and ecoATM

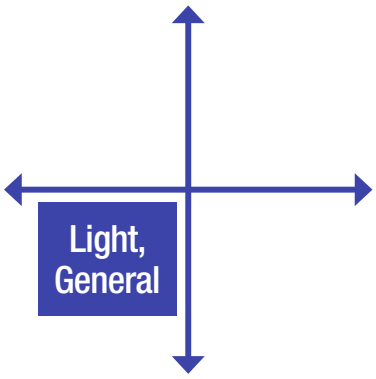
Fast Forward



- **Founded:** 2014
- **Structure:** Independent Accelerator
- **Location:** San Francisco
- **Website:** ffwd.org
- **Graduate Universe:** 14
- **Description:** Fast Forward looks for product-driven nonprofits that leverage open source software, mobile devices, open APIs, and web infrastructure to solve education, environmental, health, and human rights issues. Organizations receive a $25,000 grant, 13 weeks of training, and connections to 100 high-caliber mentors.
  Select Portfolio Companies: Medic Mobile, Moneythink, Noora Health, One Degree, SIRUM, #IGottaMakeIt, CareerVillage, Feeding Foward, Nexleaf, Project Callisto, Quill, Stellar, TalkingPoints, and WattTime

continued

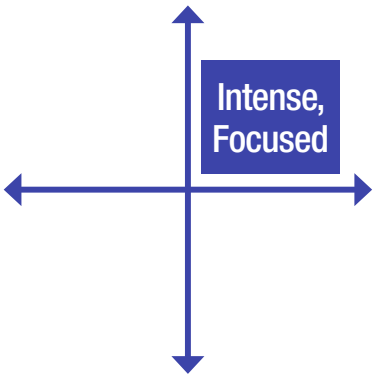
500 Startups



- **Founded:** April 2010
- **Structure:** Independent Accelerator
- **Location:** Silicon Valley, Mountain View, Miami, and San Francisco
- **Website:** 500.co
- **Graduate Universe:** 1500+
- **Description:** Four-month program with mentorship, hands on programs with startup experts and shared/collaborative office spaces. Investment is $100,000 net of fees for 5 percent of company. Seed/Series A investments range from $50,000 to $500,000, as well as the rest of the perks that the accelerator offers.

  Select Portfolio Companies: PicCollage, Mayvenn, Toutapp, Applauze, ContaAzul, Intercom, Viki, Wildfire Interactive, Makerbot, Twillo, Credit Karma, and SendGrid

Flex Lab IX

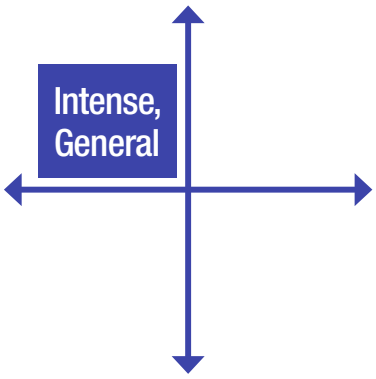


- **Founded:** July 2013
- **Structure:** Corporate Incubator
- **Location:** San Jose
- **Website:** flextronicslabix.com
- **Graduate Universe:** At least 20
- **Description:** Program that offers access to Flextronics' global end-to-end supply chain solutions and industry leading expertise in hardware design, manufacturing, and logistics. Offers laboratory, manufacturing, and tech space, as well as workers that know the processes involved in getting from concept to mass production. Also offers capital funding as seed funding or venture funding.

  Select Portfolio Companies: amiigo, atheer labs, Central Standard Timing, EDYN, emberlight, GALmedics biotech, GBatteries, GrabIT, hiku, HMicro, IMPRINT energy, interaxon, Keyssa, Knightscope, Matternet, Median, nextinput, OMsignal, Thync, and Velo3D

continued

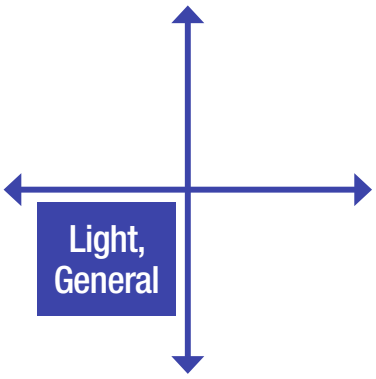
Food System 6



- **Founded:** 2014
- **Structure:** Independent Accelerator
- **Location:** Menlo Park
- **Website:** foodsystem6.org
- **Graduate Universe:** None yet
- **Description:** FS6 offers a comprehensive, 15-week program that combines business and organizational development skills with a broad education of the food system. FS6 offers access to domain experts, committed mentors, investors, capital, researchers, customers throughout the supply chain, and community perspectives. FS6 operates two cohorts per year composed of a mix of nine to 12 for-profit and non-profit innovators. There's no cost for non-profit companies; 3 percent of stock cost applies to for-profit companies.

  Select Portfolio Companies: None Yet

Forward Accelerator

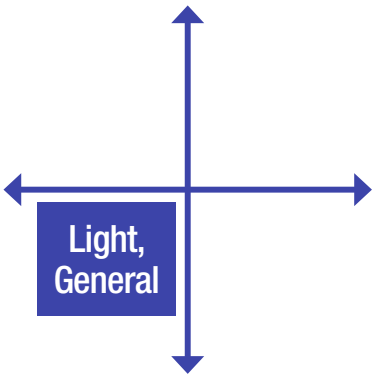


- **Founded:** 2006
- **Structure:** Independent Accelerator
- **Location:** Livermore
- **Website:** forwardaccelerator.com
- **Graduate Universe:** N/A
- **Description:** Each month, Forward Accelerator accepts a team of five, early-stage, web-based companies into its six-month FASTtrack accelerator program. Through intense coaching and mentoring, it guides founders from the formation of their companies through the close of their angel investments. It facilitates fundraising through introductions to investors and by leading the rounds for select startups through its own fund. By the end of the program, every team should have developed its market leadership position, refined its pitch, built investor relationships, and closed its angel investments.

  Select Portfolio Companies: NextPrinciples, SeenTh.at, PROsimity – Smarter Business Networking, and SlimBooks

continued

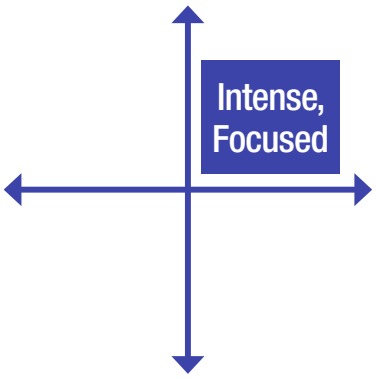
Founder Institute



- **Founded:** April 2009
- **Structure:** Independent Accelerator
- **Location:** San Francisco
- **Website:** fi.co
- **Graduate Universe:** 2,100
- **Description:** The Founder Institute provides a rigorous, comprehensive company-building curriculum to guide startups through validating their ideas, performing customer development, building a team, preparing for funding, and more. Founder Institutes charges a $50 application fee, $1,950 course fee, and then for an optional extra 45 days, asks companies to grant a warrant for 3.5 percent of its stock to a shared liquid pool. It also asks companies to pay a tuition fee of $4,500 for any financing of more than $50,000 by a third party.

  Select Portfolio Companies: iCarsclub, PetHub, shopalize, udemy, Gridblaze, and retailigence

The Foundry

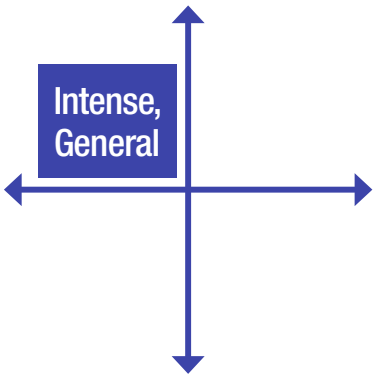


- **Founded:** 1998
- **Structure:** VC Affiliated Incubator
- **Location:** Menlo Park
- **Website:** thefoundry.com
- **Graduate Universe:** 15
- **Description:** Uses hands-on development, prototyping support, leadership, guidance, and entrepreneurial nurturing to consistently and expeditiously select the most promising new medical device companies. The Foundry funds its business through its extensive network of venture and private equity capital firms. Its experience can help secure seed capital and prepare for larger venture capital financing by building and presenting a cohesive funding strategy.

  Select Portfolio Companies: Ardian Inc., Cabochan Aesthetics, Inc., Concentric Medical, Inc., Cotera, Emphasys Medical, Inc., Evalve, Inc., First to File, Inc., ForSight Labs LLC, ForSight VISION2, Holaira, Miramar Labs, Satiety, Inc., Transcend Medical, Inc., Twelve, Inc., and Xtent, Inc.

continued

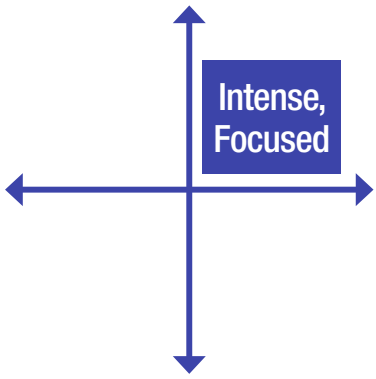
GSV Labs



- **Founded:** September 2012
- **Structure:** International Incubator
- **Location:** Redwood City
- **Website:** gsvlabs.com
- **Graduate Universe:** 150+
- **Description:** Multiple styles of incubators and accelerators, each using different timeframes, costs, and focuses. EdTech, Sustainability, Mobile, and Big Data are among the different areas of focus.

  Select Portfolio Companies: xTV, Core Learning Exchange, Green Thumb, Yactraq Online, and RecCheck

HardTech Labs

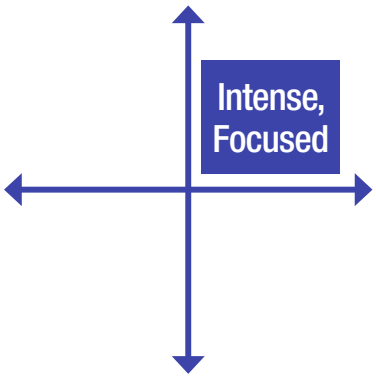


- **Founded:** February 2014
- **Structure:** Independent Accelerator
- **Location:** La Jolla
- **Website:** hardtechlabs.com
- **Graduate Universe:** N/A
- **Description:** In this six-month to one-year, San Diego-based program, startups will have exclusive access to extensive data repositories, biotech development platforms, HIPAA compliant data collection and analysis software platforms, premier wet labs and hardware prototyping spaces, advisors and mentors preeminent in their fields, partnered with the world renowned La Jolla Institute for Allergy and Immunology (LJI). This provides startups with intensive support to enable a solid, science-based foundation that will maximize their success when they shift to market growth, as well as up to $250,000 in initial financing with potential follow-on investment.

  Select Portfolio Companies: Unpublished

continued

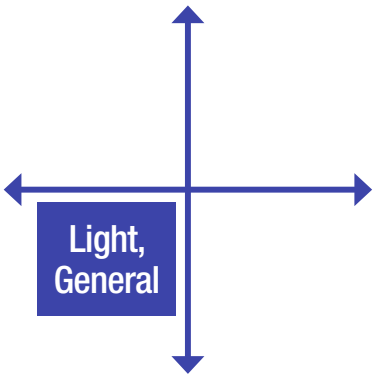
Highway1



- **Founded:** June 2013
- **Structure:** Corporate Incubator
- **Location:** San Francisco
- **Website:** highway1.io
- **Graduate Universe:** 58
- **Description:** Up to $100,000 per team for 8 percent equity or $50,000 per team for 5 percent. It offers on-site and visiting manufacturing engineers, 24/7 access to shared workspace and prototyping labs, 10-day factory-facing visit to Shenzhen. Provide startups opportunity to develop their story and network with hardware investors in a four-month timeframe.

  Select Portfolio Companies: OTO, Cinder, Podo, Sensilk, Flic, Lumo, Switch Embassy, Keyboardio, Shadowman Sports, Peeple, Lagoon, Moxxly, Jewelbots, Mashgin, Cargo, CoolChip, Switchmate, Looksee, Loop, and Modbot

HiveLab

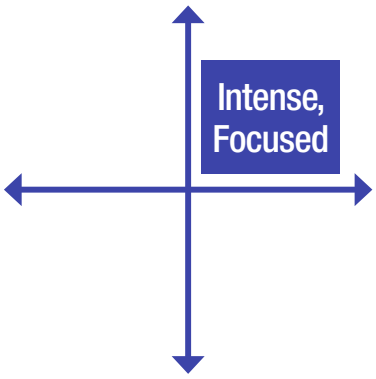


- **Founded:** 2012
- **Structure:** International Accelerator
- **Location**: San Francisco
- **Website:** hivelab.co
- **Graduate Universe:** 270+
- **Description:** The program is ten weeks long with four optional eight hour workshops; 80 hours of classroom experience, plus mentoring and, in the case a startup enrolls at the workshops, an extra 32 hours of hands-on experience. Tuition is set independently by each Hivelab and it varies by country and region. Enrollees will obtain an accredited Service Designer certification.

  Select Portfolio Companies: Fellow Work, Fans: A love-hate relationship, The Urban Artist, Let's, Argonauta, Papum, MisFits, What's it like?, Blue Box, OnBird, Remusique, Talentismo, Read!, Bord, Blu!, Stamina, Oxygen, UrbTeller, Meraki, Multiply, Projeta, The Lab Social, and Tuog

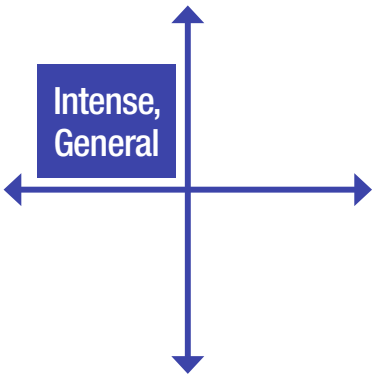
continued

Honda Xcelerator



Founded: July 2015
Structure: Corporate Accelerator
Location: Mountain View
Website: xcelerator.hondasvl.com
Graduate Universe: N/A
Description: A three to six month program that results in a built prototype without any equity claimed by Honda. It provides non-recurring engineering funding assistance to develop a rapid prototype, access to unique collaboration workspace in Silicon Valley with state-of-the-art tools provided by Honda, access to Xcelerator vehicles, and vehicle data to develop, test, and refine the prototype. All Xcelerator companies are paired with its network of Honda Mentors and mentors share their knowledge and help guide prototype development.
Select Portfolio Companies: Unpublished

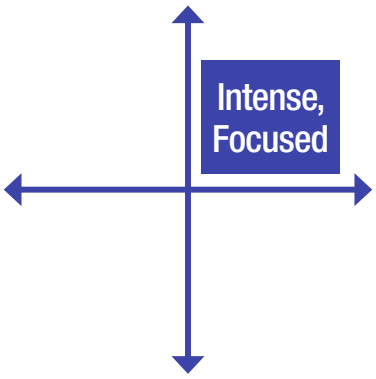
Idealab



Founded: 1996
Structure: Independent Incubator
Location: Pasadena
Website: idealab.com
Graduate Universe: 125+
Description: Idealab employs about 55 people who provide support to startup companies. In addition to capital, Idealab provides a full range of resources to infuse startups with the support they need to rapidly introduce innovative products and services. Resources include office space and the accompanying office services, development and technology, product and graphic design, marketing, financial advice, human resources, competitive research, legal, accounting, and business development support and services.
Select Portfolio Companies: CitySearch, eToys, Overture Services, Evolution Robotics, Desktop Factory, and Energy Innovations

continued

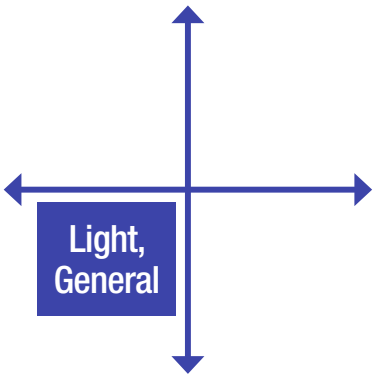
Illumina Accelerator



- **Founded:** February 2014
- **Structure:** Corporate Accelerator
- **Location:** San Francisco
- **Website:** illumina.com/science/accelerator.html
- **Graduate Universe:** 3
- **Description:** Financial support, including $100,000 instrument access and sequencing reagents, 20 percent research assistant time, $100,000 convertible notes, and a equity line of $20,000; accelerator lab space; Validation of concept, technology, market, or application; Pitch preparation and access to customers and venture network; Partner support including financial modeling, forecasting, legal, recruiting, licensing, go-to market strategy, and technical expertise; Workshops on industry trends, business models and building companies led by experienced entrepreneurs; Potential non-exclusive rights to Illumina IP.

  Select Portfolio Companies: Encoded Genomics, Inc., EpiBiome, Inc., and Xcell Biosciences, Inc.

I/O Ventures

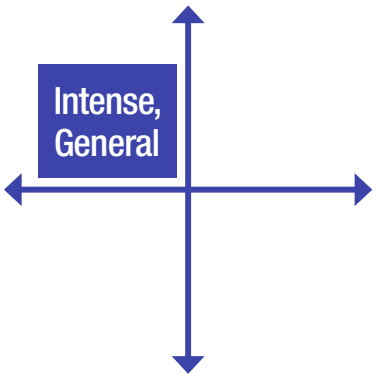


- **Founded:** 2010
- **Structure:** Independent Accelerator
- **Location:** San Francisco
- **Website:** ventures.io
- **Graduate Universe:** 8+
- **Description:** I/O Ventures works closely with founders from product launch through the next stage of company development, sharing what has proven to work for product scaling, revenue growth, and fund raising. Partners and mentors have started and run some of the top Internet companies. They want startups to take advantage of their experience leading teams, building products, raising money, negotiating mergers and acquisitions, and scaling infrastructure, all with the hope that it improves a startups execution and time-to-market. I/O's team members take pride in their roles both as founders and operators, every one of them have recently, or is currently running a technology company.

  Select Portfolio Companies: Appstore, Anomaly Innovations, Cozy, Touch of Modern, Pieceable, CodeEval, damntheradio, and vidIQ

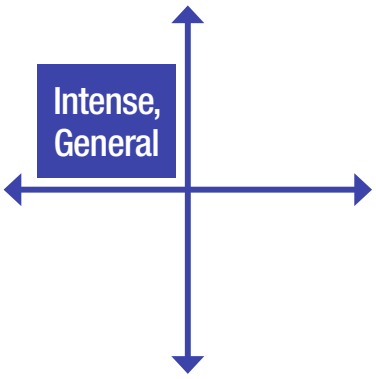
continued

Imagine H20



- **Founded:** 2007
- **Structure:** Independent Accelerator
- **Location:** San Francisco
- **Website:** imagineh2o.org
- **Graduate Universe:** 550+
- **Description:** H20 is an accelerator for water startups. H20 runs admissions as a challenge. Accepted startups receive $50,000 in cash, introductions to leading investors, utility partners and beta customers; and exposure.
  Select Portfolio Companies: Valor Water Analytics, NIine Energy, mOasis, Fruition Sciences, Nexus eWater, WaterSmart Software, OxyMEM, CSS, drinkwell, PrecisionHawk, bevi, dropcountr, TerrAvion, LeakAlert Defense, Aquarius Spectrum, Natel Energy, WatrHub, BioGill, LucidEnergy, WelIntel, PaverGuide, FL Watch, Infimet, Puralytics, lumense, New Sky, OptiEnz sensors, ARB Source, dloHaiti, AtlantisTechnologies, FogBusters, SilverBullet, Pave Drain, and MBio

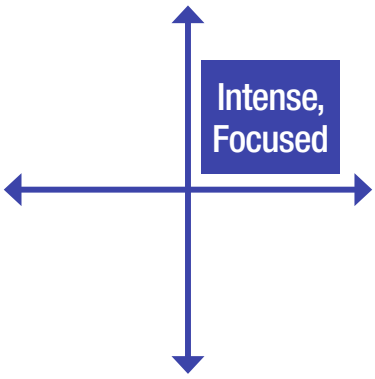
Imagine K12



- **Founded:** March 2011
- **Structure:** Independent Accelerator
- **Location:** Redwood City
- **Website:** imaginek12.com
- **Graduate Universe:** 81
- **Description:** Provides a three month, on-site program. Imagine K12 joined forces with Y Combinator as the Y Combinator edTech vertical. Its program matches Y Combinator's program.
  Select Portfolio Companies: Panorama Education, ClassDojo, noredink, remind, socrative, BloomBoard, LearnSprout, raise.me, Kaymbu, EDpuzzle, Hapara, CodeHS, goAlbook, SchoolMint, securly://, showbie, edshelf, kodable, Front Row, Kaizena, and TeachBoost

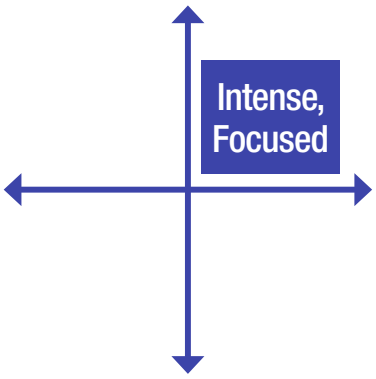
continued

Indie Bio



- **Founded:** 2014
- **Structure:** VC Affiliated Accelerator
- **Location:** San Francisco
- **Website:** sf.indiebio.co
- **Graduate Universe:** 14
- **Description:** cash investment of $50,000 for 8 percent equity in biotech startups followed by a $150,000 convertible note at a 20 percent discount for a total of $250,000 in funding. The five-month program operates in a fully-equipped BSL-1 and BSL-2 lab in downtown San Francisco, the birthplace of the biotechnology industry.
  Select Portfolio Companies: Amino Labs, Circularis, Gelzen, Genesis DNA, Girihlet, Indee, Koniku, Memphis Meats, MYi Diagnostics, NERD Skincare, New Wave Foods, Truust Neuroimaging, V-Sense Medical, and Vali Nanomedical

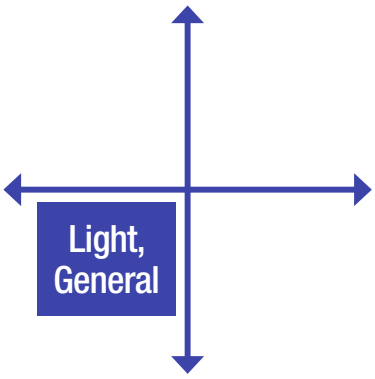
Lab360



- **Founded:** 2015
- **Structure:** Corporate Incubator
- **Location:** Sunnyvale and San Francisco
- **Website:** lab360.com
- **Graduate Universe:** N/A
- **Description:** Lab360 features a 50-person dedicated team based in Shenzhen to help source, review, and assist in engaging contract manufacturers, material suppliers, and logistics. Lab360 invests from seed to late stages. An experienced investment team helps prepare and assist future fundraising. Operates a 3,700 square-foot incubator facility in Sunnyvale with an open plan office, lab space and conference rooms. Shared equipment forelectrical, mechanical, and design prototyping.
  Select Portfolio Companies: Kali Care, Paqet Systems Corp, Surdoc Corp, Yono, Vertical, WaterBit, Life Detection Technologies, LucidCam, Dovetail, Ario, Pushmote, and Cleverpet

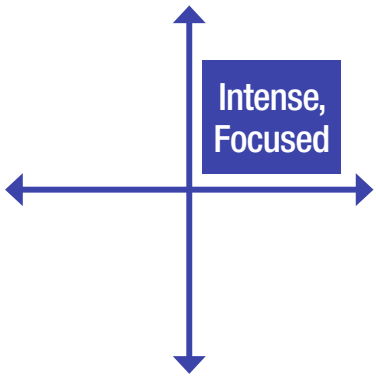
continued

LaunchPad LA



- **Founded:** 2009
- **Structure:** Independent Accelerator
- **Location**: Santa Monica
- **Website:** launchpad.la
- **Graduate Universe:** 18 as an Accelerator, 23 including Mentorship program
- **Description:** Four months of free office space, mentorship, $25K - $100K, “killer perks”, network of advisors and investors; first $50K investment requires approx. 6 percent common stock, second $50K (optional) is offered as a convertible note with a maximum valuation cap.
  Select Portfolio Companies: cojoin, Fitzroy toys, Focus: Trainr, Monospace, Parachute, Prospectwise, and Vessix

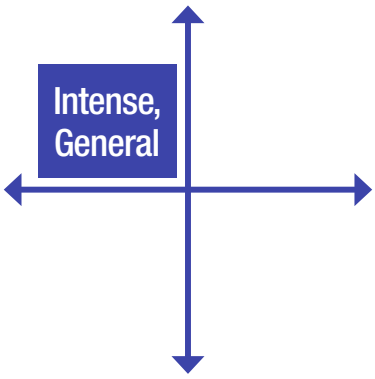
Lemnos Labs



- **Founded:** 2011
- **Structure:** Independent Incubator
- **Location:** San Francisco
- **Website:** lemnoslabs.com
- **Graduate Universe:** 17
- **Description:** Variable length (6 – 15 months), early stage incubator focusing on hardware startups, the program builds your engineering, logistics, marketing, and go-to-market expertise, offers dedicated space and access to our workshop, deep connections to mentors, engineers, suppliers, contract manufacturers, and marketing resources, and most importantly, 24/7 access to the Lemnos partners, invest in just 8 – 12 companies per year for the program, $250K - $1M initial funding.
  Select Portfolio Companies: Teforia, spire, 6sensor Labs, Airware, MatterFab, swift Navigation, AquaCloud, Blossom Coffee, Ceres Imaging, Compology, Enview, Local Motion, Momentum Machines, Pantry, Revolve Robotics, Sproutling, and VIRES Aeronautics

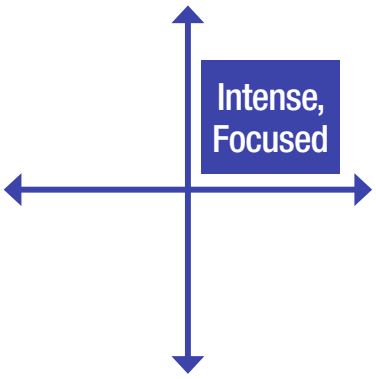
continued

Los Angeles Dodgers



- **Founded:** 2015
- **Structure:** Corporate Accelerator
- **Location:** Los Angeles
- **Website:** dodgersaccelerator.com
- **Graduate Universe:** 10
- **Description:** A sports-minded accelerator that provides an initial investment of $120,000. It features co-workspace facilities in Los Angeles, more than 80 mentors from the Dodgers, R/GA, and their respective networks, partnership, distribution, The Dodgers organization, strategic support and R/GA provide design, development, and branding services. The program runs two months.
  Select Portfolio Companies: Appetize, DoorStat, FieldLevel, FocusMotion, Juke, Kinduct, LeagueAps, ProDay, SidePrize, and Swish Analytics

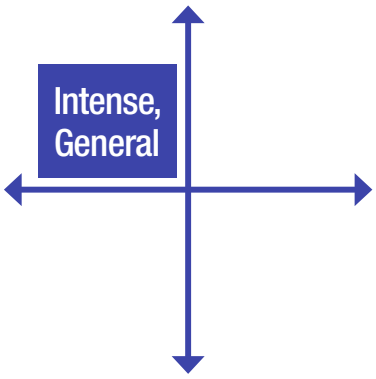
Make in LA



- **Founded:** August 2015
- **Structure:** Independent Accelerator
- **Location:** Chatsworth
- **Website:** makeinla.com
- **Graduate Universe:** 8
- **Description:** Features a four-month, on-site program and a $75,000 initial investment in exchange for a 7.5 percent stake. A second round of $75,000 is granted based on what a company's valuation is at the end of program, access to various business tools, resources, and engineers, as well as the NEO Tech (electronics contract manufacturer) and Hexlab (makerspace) ecosystems, with all the tools necessary to help design develop, prototype, and manufacture product.
  Select Portfolio Companies: Canviz, Emerge, Luma Legacy, Rufus labs, RideBlock, Fitguard, Plobot, and Sentio

continued

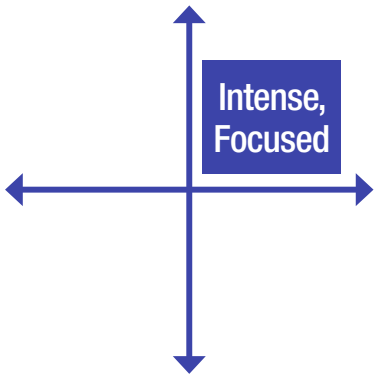
Matter Ventures



- **Founded:** December 2012
- **Structure:** Independent Accelerator
- **Location:** San Francisco
- **Website:** matter.vc
- **Graduate Universe:** 34
- **Description:** Media-focused accelerator, provides a $50,000 initial investment with exposure to both the San Francisco and New York media environments. A 20-week course, broken down into boot camps, office hours with mentors, and designs/reviews intended to cause ideas that won't be successful to fail fast in order to eliminate what does not work. The accelerator attempts to change media for the good of society.

  Select Portfolio Companies: GoPop, The History Project, Stringr, Louder, and Hearken

Molecular Medicine Research Institute

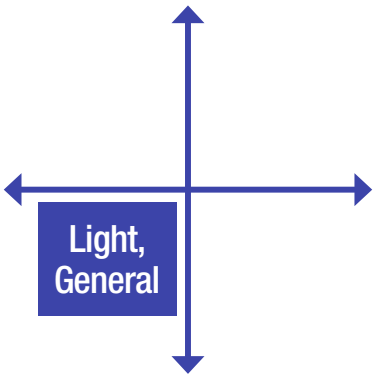


- **Founded:** 1995
- **Structure:** Independent Incubator
- **Location:** Sunnyvale
- **Website:** mmrx.org
- **Graduate Universe:** 60+
- **Description:** A laboratory incubator specializing in medicinal research. It provides a modern facility capable of supporting efforts in molecular biology, immunology, cell biology, synthetic organic chemistry, and has a complete analytical chemistry laboratory. Its affiliate research program supports entrepreneurial scientists with promising, early-stage, innovative projects at the forefront of medical inquiry.

  Select Portfolio Companies: Abmaxis – Merck, Raven-MacroGenics, and Threshold Pharmaceuticals

continued

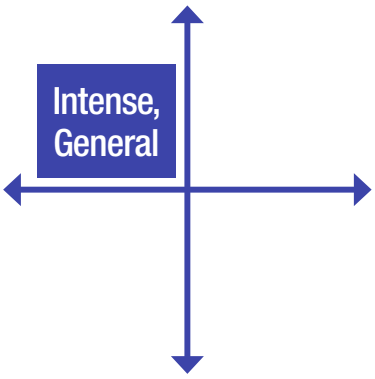
MuckerLab



- **Founded:** 2011
- **Structure:** VC Affiliated Accelerator
- **Location:** Santa Monica
- **Website:** muckercapital.com/muckerlab
- **Graduate Universe:** 42
- **Description:** Invests $21,000 to $150,000 in exchange for seven to 15 percent equity. It works with six to 10 companies every nine to 12 months. MuckerLab helps entrepreneurs take their products to market, assists them in finding the right customer/ user segments, and helps implement the right business model to generate revenue, grow users, develop scalable/profitable distribution channels, and augment their teams with complementary skills. When appropriate, MuckerLab raises venture capital from investors for Accelerator companies.

  Select Portfolio Companies: The Black Tux, MarkedUp, Surf Air, Panjo, and Rocksbox

MyStartupXX

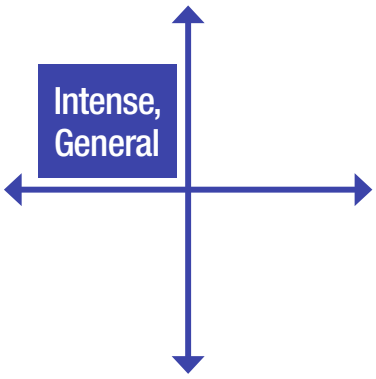


- **Founded:** 2003
- **Structure:** University Accelerator
- **Location:** La Jolla
- **Website:** rady.ucsd.edu/ciid/mystartupxx/
- **Graduate Universe:** 17
- **Description:** Accelerator focused on startups with women in roles of leadership. Its workshops are focused on various aspects of launching startups, such as team building, leadership, performing a market assessment, obtaining customers' feedback, creating a value proposition, validating business models, and understanding financing strategies. It works with up to 10 teams per year in its program. It offers pre-seed funding and prototype development support, co-working space, networking events, one–on-one coaching, and membership in the MyStartupXX alumni organization.

  Select Portfolio Companies: allMarina, AWhere, EnsightVR, HealthGnome, Hydrostasis, La Jolla Research, MaTech, Nanome, Responsiblr, ZymeKey, AccuStick, Ayah!, Bystanders to Upstanders, Cereus, CodexMed, CyanoStat, and Meego

continued

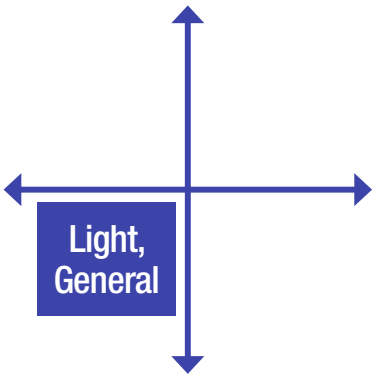
NASA LAUNCH Accelerator



- **Founded:** 2010
- **Structure:** Government Accelerator
- **Location:** National / Virtual
- **Website:** launch.org
- **Graduate Universe:** Unpublished
- **Description:** The NASA Launch Accelerator operates a six-month program custom designed for each innovator to harvest and act on the connections, ideas, and opportunities that surface during the Launch Forum. The accelerator provides development of communications collateral, follow-up with Launch council member suggestions or concerns, and pro-bono sessions with Launch resource partners.

  Select Portfolio Companies: Unpublished

Nike (CLOSED)

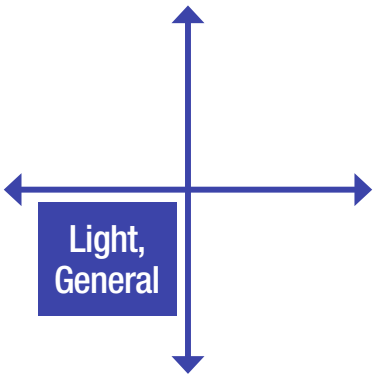


- **Founded:** 2012
- **Structure:** Corporate Accelerator
- **Location:** Portland and San Francisco
- **Website:** nikefuellab.com
- **Graduate Universe:** 10
- **Description:** A three-month accelerator program focused on fitness, active, and healthy lifestyle startups.

  Select Portfolio Companies: Chroma, coachbase, FitCause, FitDeck, Geo Palz, GoRecess, highfive, nextstep.io, sprout, and Totem

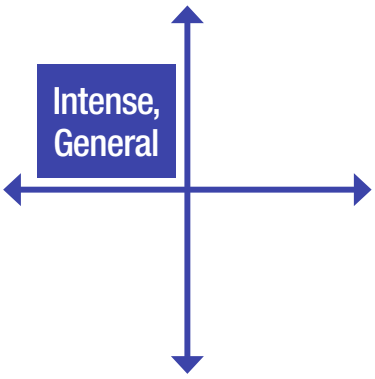
continued

OCTANe



- **Founded:** 2002
- **Structure:** Independent Accelerator
- **Location:** Aliso Viejo
- **Website:** octaneoc.org
- **Graduate Universe:** 4,000+
- **Description:** OCTANe LaunchPad is a comprehensive program involving an initial consultation, panel evaluation, data analysis and consulting. Entrepreneurs work with OCTANe-appointed advisors on business planning. LaunchPad then introduces participants to potential investors. It takes no stake in a company.
  Select Portfolio Companies: Unpublished

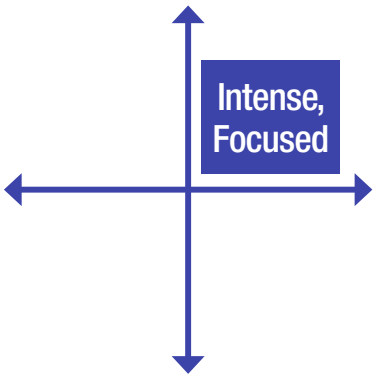
Orange Fab



- **Founded:** March 2013
- **Structure:** International Accelerator
- **Location:** San Francisco
- **Website:** orangefab.com
- **Graduate Universe:** 41
- **Description:** Orange Fab is a three-month accelerator program that offers telecommunication solutions for U.S.-based startups. To join Orange Fab, startups must present an existing product, be in advanced beta phase, or have already launched. Startups that join the program will have access to mentoring sessions from notable Silicon Valley entrepreneurs, world-class engineers, and experienced designers. They will also be paired-up with and advised by Orange executives located in Silicon Valley, Europe, Africa, and the Middle East. Investment ranges from $10,000 to $25,000. Orange takes a $20,000 convertible note.
  Select Portfolio Companies: Edyn, Emberlight, and TrackR

continued

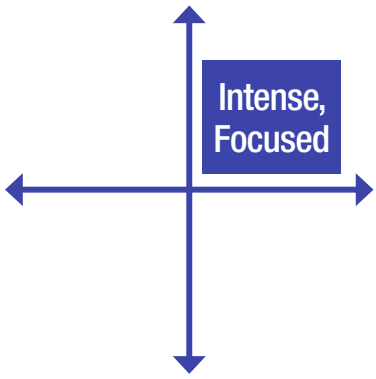
Powerhouse



- **Founded:** January 2013
- **Structure:** Independent Incubator
- **Location:** Oakland
- **Website:** powerhouse.solar/#accelerator
- **Graduate Universe:** 26 between the Incubator and Accelerator
- **Description:** Powerhouse is an accelerator/incubator for solar software companies. It accelerates the success of solar entrepreneurs by building an ecosystem for solar startups. The incubator makes startup office space available to solar software and finance entrepreneurs. The accelerator is a nine-month program that provides $10,000 cash, free office space, pro bono business services, and connections to customers and capital for five percent equity.

  Select Portfolio Companies: BrightCurrent, My Mosambi, PVComplete, Ra Power Management, Standard Microgrid, UtilityAPI, Avalon Battery Co., Bright Power Inc., Extensible Energy, OnGrid Solar, Powerhive, Pretty Visible, Mosaic, Shinbone, SolarNexus, Voltaiq, Savenia Labs, 38 North Solutions, Center for Sustainable Energy, i3 Connect, More than Smart, PPG Ventures, Solar Action Network, Solar-OverSight, and Impress Labs

Prospect Silicon Valley

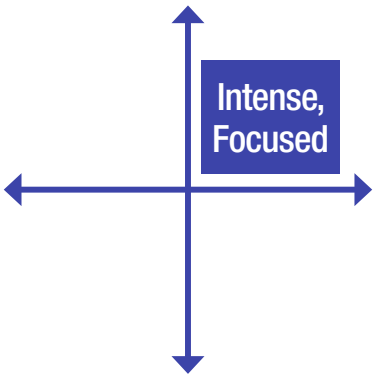


- **Founded:** 2013
- **Structure:** Independent Accelerator
- **Location:** San Jose
- **Website:** prospectsv.org
- **Graduate Universe:** 19
- **Description:** Prospect Silicon Valley (ProspectSV) is the first nonprofit, Silicon Valley-based commercialization catalyst to accelerate the next generation of technology benefiting cities everywhere. ProspectSV provides support to emerging technology companies, including its headquarters, a 23,000 sq. ft. Technology Demonstration Center with working space, labs, specialized equipment, meeting rooms, and a suite of commercialization assistance.

  Select Portfolio Companies: Altitude, AutoGrid, Arborlight, ConnectMyEV, EASCOR, Geli, Juicebox, MetroTech, Mogol, Quanergy, RealAug, Reylabs, RSM, Signal Labs, Swiftmile, Thomson Power, Viking Cold Solutions, WaterSource Technologies, and ZERE Energy and Biofuels

continued

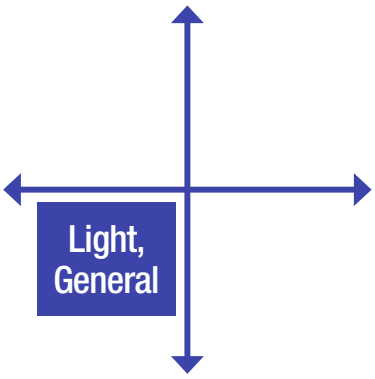
QB3



- **Founded:** 2000
- **Structure:** University Incubator
- **Location:** San Francisco
- **Website:** qb3.org
- **Graduate Universe:** 80+ resident companies, none listed as graduated
- **Description:** $300 per year membership program with very strict membership guidelines: must be Northern CA based, received LESS than $5 million in funding, be pre-commercial AND have 12 or fewer employees; access to the collective purchasing power of the world's largest life science cluster; services tailored to startup operations; exclusive executive and peer networking opportunities; industry-academic partnerships; discounted conferences and events; team-based coaching and advice; a density of innovators in related areas; introductions to UC researchers for collaborations; a broad range of core facilities that QB3 and UC provide to outside users for modest fees; seminars and symposia; entrepreneurial networking services

  Select Portfolio Companies: Unpublished

Runway

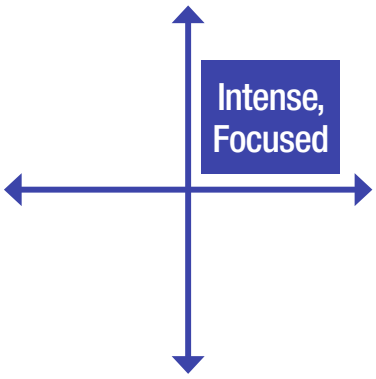


- **Founded:** 2013
- **Structure:** Independent Incubator
- **Location:** San Francisco
- **Website:** runway.is
- **Graduate Universe:** 33
- **Description:** Incubator that does Seed investments to support education, finance, IoT/robotics, and AI entrepreneurs; strategically located in the Twitter Building; 30,000 sq ft and dedicated staff; workshops, pitch competitions, hackathons, and expert panels; 24/7 access to the space, conference rooms, educational events, fast internet (1gbps), in-house cafe, zen area, and individual stations.

  Select Portfolio Companies: Colingo, Cover, Instapanel, FiCentive, Assemblage, and sparrow

continued

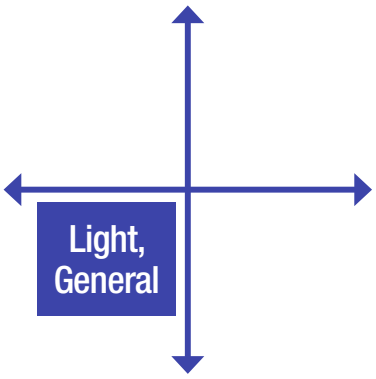
Shifamed



- **Founded:** 2008
- **Structure:** Independent Incubator
- **Location:** Campbell
- **Website:** shifamed.com
- **Graduate Universe:** 3+
- **Description:** Medical technology incubator focused on developing new medical products from concept to commercial release with engineering expertise, proven results, and rapid return; offers a centralized team and dedicated state-of-the-art facility creating a highly productive work environment with increased ideation, concept cross-pollination, concurrent work paths, faster decision-making and ultimately, superior products; also offers contract work for companies.

  Select Portfolio Companies: Embolic Protection, Inc., Sadra Medical, and Maya Medical

Singularity University Labs

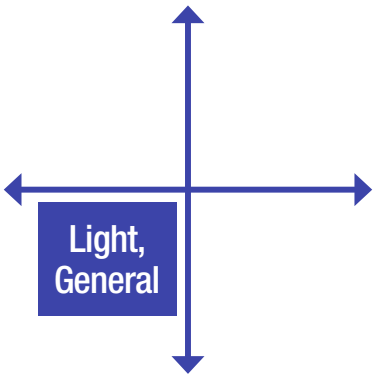


- **Founded:** September 2008
- **Structure:** University Accelerator
- **Location:** Mountain View
- **Website:** startup.singularityu.org
- **Graduate Universe:** 29
- **Description:** Accelerator designed specifically for startups tackling humanity's grand challenges leveraging exponential technology; unparalleled access to global Fortune 500 companies, $100K in seed capital, an 8 week on-campus program which prepares product/service and company for scale and impact; for profit companies/startups require 7 – 10% equity in company, non-profits are provided $50k grants unrestricted.

  Select Portfolio Companies: Authentise, Be My Eyes, Be-novative, BlueOak Resources, Calorie Cloud, Eat Limmo, Escape Dynamics, Evolutionary Solutions, Fellow Robots, Field Ready, Focus@ Will, FREDsense, Genome Compiler, Getaround, Hypercubes, Made In Space, Inc., Matternet, Miroculus, Modern Meadow, Nativoo, Nexleaf Analytics, Organ Preservation, Pullapproach, Radiomaze, Semtive, Sentrian Inc., Swift Tram, Inc., Totus Power, and X2AI

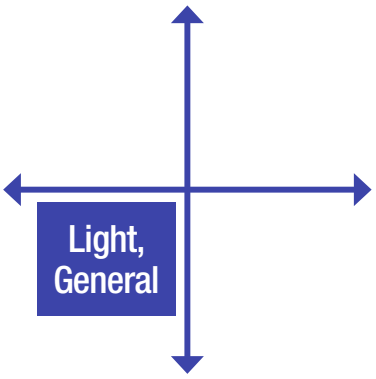
continued

SkyDeck



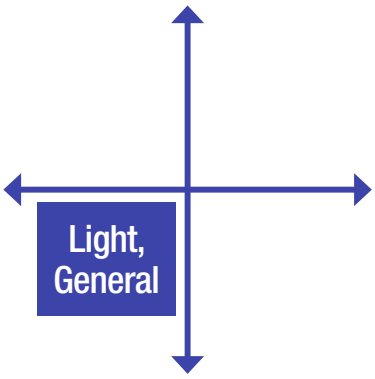
- **Founded:** 2012
- **Structure:** University Accelerator
- **Location:** Berkeley
- **Website:** skydeck.berkeley.edu
- **Graduate Universe:** 52
- **Description:** No equity, no fee accelerator; a six-month program to accelerate startups towards a position of strength for growth and survival in their market; a practical, experience-based program designed by serial entrepreneurs, VCs, and thought leaders informed by the discipline of entrepreneurship at UC Berkeley; offers two application tracks: Cohort Track - for application into the full SkyDeck program, with an application window offered twice per year in the Fall and Spring AND Hot-Desking - this track is open all year accepting companies that are likely SkyDeck candidates when space is available
  Select Portfolio Companies: AdsNative, Go Overseas, HoneIt, Privail, Ava, AxleHire, Hooktheory, Remeeting, and Jadoo Technologies

StartX



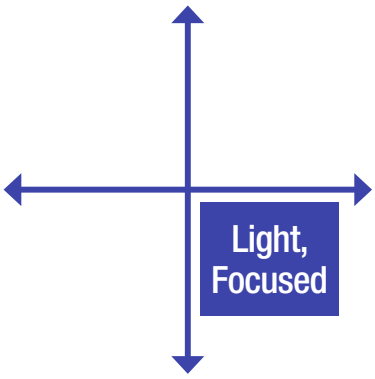
- **Founded:** 2009
- **Structure:** University Accelerator
- **Location:** Palo Alto
- **Website:** startx.com
- **Graduate Universe:** 249
- **Description:** StartX is open to companies that have at least one founder with an affiliation with Stanford University. It takes no equity or fees. The accelerator features a community of top entrepreneurs in a wide range of industries including consumer and enterprise IT, medical and hardware. Resources provided include more than $400,000 in value from partners, including cloud computing and storage credits, developer platforms, and payroll software in addition to drop-in office space and legal advice.
  Select Portfolio Companies: analyticsMD, Beyond the Box, BioTX, BitBuilder, Chatous, MedWhat, FlameStower, Spire, SoniTrack Systems, and Docmunch

Tandem Capital



- **Founded:** 2007
- **Structure:** VC Affiliated Accelerator
- **Location:** Burlingame
- **Website:** tandemcap.com
- **Graduate Universe:** 29
- **Description:** Marketing, Mobile, Software, Software Development, Web, Mobile Application, Mobile Communication, Mobile Marketing, Mobile Software Accelerator that operates a 6 month program; up to $500K initial investment funding; on-site collaboration; 10% equity stake cost.
  Select Portfolio Companies: Bash Gaming, pHin, Shoe Lovers, Upsight, ZumoDrive, and Tile

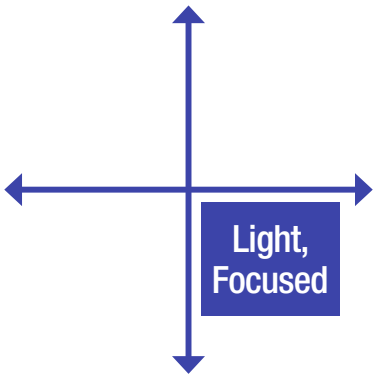
Turner MediaCamp (CLOSED)



- **Founded:** 2012
- **Structure:** Corporate Accelerator
- **Location:** San Francisco
- **Website:** mediacamp.com
- **Graduate Universe:** 27
- **Description:** Media Camp is an accelerator program that educates entrepreneurs and enables them to build media businesses; comprehensive 12 week accelerator program that educates entrepreneurs and enables them to build innovative media businesses; presentations and workshops focused on media technology, formal mentorship from media industry experts, community events and knowledge sharing, as well as direct investments including partnerships and vendor relationships; up to $20K funding; no set equity, just an open note – potential for commercial agreements later in the program.
  Select Portfolio Companies: Chute, Cinemacraft, and Meograph

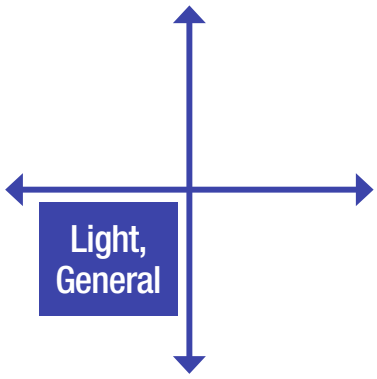
continued

Wells Fargo



- **Founded:** 2014
- **Structure:** Corporate Accelerator
- **Location:** San Francisco
- **Website:** accelerator.wellsfargo.com
- **Graduate Universe:** 9
- **Description:** Wells Fargo Startup Accelerator focuses on fintech and enterprise startups. Its program runs for six months. The accelerator will invest up to $500,000, which gives Wells Fargo a minority equity stake in the company. It provides connections with industry leading experts, mentors, executives, and venture capitalists.
  Select Portfolio Companies: EyeVerify, Kasist, Zumigo, Bracket Computing, Context360, MotionSavvy, Gridspace, Roostify, and Splice Machine

Y Combinator



- **Founded:** 2005
- **Structure:** Independent Accelerator
- **Location:** Mountain View
- **Website:** ycombinator.com
- **Graduate Universe:** 1,000+
- **Description:** $120K investment for 7% equity; 3 month program on site; especially interested in web/mobile applications; teaching founders how to pitch their startups to investors, and how to close a deal once they've generated interest; introduce founders to lawyers who will often agree to defer payment for legal work; expected to move to the Bay Area for the duration of the three month cycle; culminates in an event called Demo Day, at which the startups present to an audience that now includes most of the world's top startup investors.
  Select Portfolio Companies: Stripe, Vidyard, Optimizely, Checkr, Coinbase, PlanGrid, Weebly, Gusto, DoorDash, Clever, LendUp, Dropbox, Teespring, Mixpanel, Machine Zone, Segment, CoreOS, Twitch, Reddit, FiveStars, Genius, Tilt, Docker, Matterport, Airbnb, PagerDuty, Memebox, Heroku, WePay, and Instacart

Resources

Angel List incubator directory **https://angel.co/incubators**

Angel List accelerator directory **https://angel.co/accelerator-4**

Arizona Commerce Authority, Incubator and Accelerator Survey Results, August 2015 **http://www.azincubators.org/blog/arizona-commerce-authority-releases-incubator-accelerator-survey**

CB Insights **https://www.cbinsights.com/reports**

Cohen and Hochberg, Accelerating Startups: The Seed Accelerator Phenomenon, March 2014 **http://www.seedrankings.com/pdf/seed-accelerator-phenomenon.pdf**

CrunchBase **https://www.crunchbase.com**

Deering, Luke, Accelerate: Founder Insights into Accelerator Programs, FG Press, 2014.

Economic and Fiscal Impacts of Incubators in Maryland, Maryland Business Incubation Alliance, February 2016 **http://incubatemaryland.org/news/press-release-study-finds-business-incubators-in-maryland-have-significant-impact-on-states-economy/**

F6S Global Accelerator Directory **https://www.f6s.com/accelerators**

Hathaway, Ian, What Startup Accelerators Really Do, Harvard Business Review, March 2016 **https://hbr.org/2016/03/what-startup-accelerators-really-do**
PitchBook https://pitchbook.com/news/reports

Seed Accelerator Rankings Project **http://www.seedrankings.com/**

Seed Database Accelerator Directory **http://www.seed-db.com/accelerators/all**

California Business Incubation Alliance

5001 Great America Parkway
Suite #210
Santa Clara, CA 95054
(844) JOIN-CTC