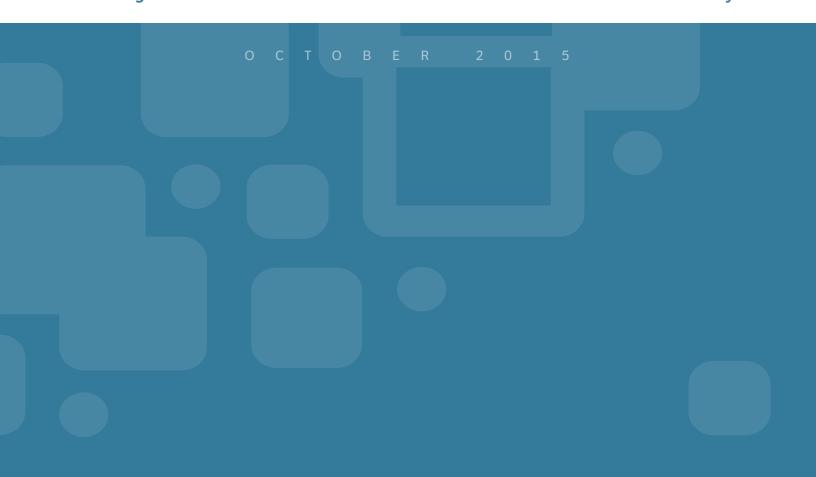


# A LYNCHPIN IN CANADA'S ECONOMIC FUTURE:

Accelerating Growth and Innovation with a World-Class Business Acceleration Ecosystem





#### **About the Business Acceleration Project**

The DEEP Centre's investigation of business accelerators and business incubators (BABI) seeks to answer a series of questions related to the role, effectiveness, and outcomes associated with these publicly and privately funded intermediaries. The project will build a body of evidence around the economic impact of business accelerators and incubators, with an eye towards creating best practice guidelines and actionable recommendations for stakeholders. The key research questions for the project include, but are not limited to, the following:

- Do incubators and accelerators produce viable companies? Increase innovation? Create jobs? Produce windfalls for their founders and investors? Elicit greater private investment in start-ups?
- What objectives are appropriate for the Government of Canada's business incubation and acceleration activities in relation to enterprise growth, technology commercialization, internationalization, and global competitiveness?
- To what extent are business incubators and accelerators advancing these objectives, and what framework should be used to evaluate their activities?
- To what extent do incubators and accelerators effectively leverage other elements of the innovation and entrepreneur support ecosystem—both within Canada and abroad—and how could collaboration within the ecosystem be improved?
- To what degree should the incubation and acceleration system in Canada evolve to better facilitate the growth of high-potential small and medium-sized enterprises (SMEs), and how should incubators and accelerators structure such alumni support systems?

This report presents the final synthesis of a five-part investigation of business accelerators and incubators (BABIs) in Canada. Part I of the project provides a taxonomy for understanding the diversity of support organizations, including key differences in their structures and programming. It also provides a performance measurement framework and a wish list of key metrics with which to judge the effectiveness of these programs.

Part II looks beyond Canada's borders to the network of Canadian Technology Accelerators (CTA), operated by the Trade Commissioner Service of the Department of Foreign Affairs, Trade and Development. Operating in 12 sites in 4 countries, the CTAs play an important role in helping Canadian start-ups establish a foothold in international markets.



Part III provides an in-depth analysis of the Canadian innovation and entrepreneurship support ecosystem, including a 360-degree analysis of 26 Canadian accelerators and incubators. The qualitative component of the research consisted of interviews with organizational leaders, venture capital investors, and alumni and participant firms. This provides the basis for an in-depth understanding of how these organizations are evolving, the value they provide start-up firms, as well as the gaps and challenges that remain. Qualitative research was supplemented by an analysis of data on job creation and follow-on investment associated with the start-up support services offered by Canadian BABIs.

Part IV provides a comparative look at the international business acceleration landscape and includes an in-depth analysis of the evolution and performance of 16 top international accelerators, as well as the policy environments shaping start-up ecosystems in six jurisdictions that are broadly comparable to Canada.

This final report, Part V, builds on the preceding reports to summarize key insights from the investigation and provides an action plan consisting of key recommendations and initiatives to address the weaknesses in Canada's entrepreneurial support system. Wherever possible, the recommendations point to comparable initiatives in other institutions or organizations that could provide a template for progress in Canada. Ultimately this report is designed to help the various stakeholders involved in Canada's BABI ecosystem identify appropriate roles and responsibilities for their organizations in a necessarily collaborative effort to give Canadian start-ups a leg up in an increasingly competitive global economy.

The project is supported by Industry Canada, the Business Development Bank of Canada, the Department of Foreign Affairs, Trade and Development, and the Government of Ontario's Ministry of Economic Development, Employment and Infrastructure. Additional project partners include the Canadian Association of Business Incubators and the National Research Council.

#### **The DEEP Centre**

The Centre for Digital Entrepreneurship and Economic Performance (DEEP Centre) is a Canadian economic policy think-tank based in Waterloo, Ontario. Founded in 2012 as a non-partisan research firm, the DEEP Centre's work shapes how jurisdictions build fertile environments for launching, nurturing, and scaling companies that will thrive in an increasingly connected world. The DEEP Centre provides objective research and advice on the changing drivers of success in the global economy and the critical interconnections between technology, entrepreneurship, and long-run economic performance. Our goal is to help policy-makers identify and implement powerful new policies, programs, and services to foster innovation, growth, and employment in their jurisdictions.



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#### Introduction

In an environment of stagnant domestic growth and continued global economic uncertainty, Canada has a number of critical economic priorities to address in the months and years ahead. Among the most important are increasing employment, diversifying the sources of growth in the Canadian economy, expanding international trade and exports, and translating advanced research and technological innovation into dynamic, high-growth enterprises that compete on the world stage. Achieving these objectives, in turn, will depend in large part on the efficacy of Canada's business acceleration ecosystem in supporting the growth and competitiveness of Canadian firms emerging in high-value sectors.

In January 2015, the DEEP Centre launched a Canada-wide investigation to address a series of related questions about the evolving role and performance of BABIs in supporting growth and prosperity. More specifically, the study was designed to assess the extent to which the Canadian BABI network is being leveraged or could be leveraged to:

- produce viable, international growth companies in a variety of high-value sectors ranging from digital technology to cleantech to biotech and health IT;
- further stimulate growth in Canada's capabilities as an innovation leader through the development and adoption of disruptive technologies, innovation management skills, business culture, and the commercialization of technology;
- elicit greater private investment in start-ups, thereby providing entrepreneurs with the growth capital required to scale their ventures;
- encourage Canadian small businesses to consider international markets for their goods and services, and then create the connections that will allow them to access those markets;
- · enhance the participation of Canadian firms in global value chains;
- ensure that Canadian entrepreneurs and businesses can understand the array of government programs and services that are relevant to their business needs; and, most broadly,
- stimulate entrepreneurship within the urban and rural communities.



The evidence reviewed prior to the undertaking of this project suggests that Canada is falling short on many of these objectives and, consequently, has not yet realized its potential to establish a global leadership position in high-value sectors. While other jurisdictions are positioning their firms to compete in high-value sectors and within global value chains, Canadian companies are investing less in research and development and generating inferior patent outcomes relative to their global peers. At the same time, Canada continues to struggle to produce the type of sustainable, high-growth firms in knowledge-intensive sectors that policy-makers have identified as crucial to the country's economic future. And while the density of high-tech start-ups and entrepreneurs in Canada is among the world's highest, the creation of high-growth Canadian firms continues to lag behind.

This evidence pointing to the underperformance in Canada's innovation commercialization is frequently corroborated in the testimony and experience of Canadian business leaders. As Jim Balsillie, co-founder of arguably Canada's most successful and revolutionary technology company, wrote in a May 2015 editorial, "in the realm of generating wealth from ideas, Canada isn't equipped for global competition." He continues, "Canada's terrible record of commercializing its ideas won't change until we build proper infrastructure to help our entrepreneurs succeed on the global stage" (Balsillie 2015).

No single policy solution can fully address these challenges. Addressing key gaps in the availability of talent, capital, and infrastructure—and the efficacious coordination of support, funding, and oversight—necessarily involves a complex set of inputs that intersect with a large and rapidly expanding array of stakeholders. However, the lynchpin at the heart of this system of support is Canada's population of BABIs, which has expanded significantly over the past half-decade, both across the country and in key export markets.

Structured and managed properly, this network of support organizations is well positioned to play a leading role in improving Canada's ability to develop high-growth technology firms that can succeed at home and abroad. In this context, the DEEP Centre's evaluation of Canadian BABIs (hereafter referred to as the BABI project, or simply the project) has sought to bring evidence to bear on the development and refinement of this ecosystem of support organizations. Through a five-part series of reports, this project provides a full review of Canada's support system for start-ups, as well as a comparative analysis of the policies and programs that leading international organizations and jurisdictions are deploying to boost the growth and competitiveness of start-ups and small- and medium-sized enterprises (SMEs).

Our analysis highlights the presence of over 140 start-up assistance organizations (SAOs) from coast to coast. On aggregate, these entities have played a significant and very positive role in driving economic outcomes. Just 20 of Canada's leading accelerators and incubators have helped participant firms attract over \$1.7 billion in follow-on investment and create over 10,000 jobs.



Table 1: BABIS IN CANADA	
Organizational Type	Number
Incubators	79
Accelerators	29
Commercialization Organizations	21
Hubs	17

However, a number of important caveats are worth noting about the overall economic performance of Canada's business acceleration and incubation ecosystem. First, the performance of the Canada's 20 leading accelerators and incubators is not necessarily indicative of the performance of the other 120-odd incubators and accelerators across the country. In fact, in the absence of detailed and reliable nationwide data, it is not possible to infer much at all about the broader economic impact of SAOs in Canada, which is a fundamental weakness that requires urgent redress.

Second, there is considerable variance in economic outcomes even within the top 20, for which more detailed performance metrics have been obtained. Indeed, both the domestic analysis and the review of international comparators suggest that the potential impact of these organizations far exceeds their current contribution within Canada's entrepreneurial ecosystem. For example, in comparison to leading US-based accelerators, the likes of which have spawned recognizable tech leaders such as Reddit, Dropbox, and Airbnb, there is still a distinct lack of definitive success cases that one can point to within the Canadian ecosystem. In fact, some of Canada's top performing tech companies of late, including Hootsuite and Shopify, did not participate in a Canadian incubator or accelerator.





To be fair, it is still early days for many incubators and accelerators in Canada. Many Canadian BABIs—including a couple identified in our list of top performers—have only formed in the past couple of years. Participants across the ecosystem largely agree that it can take anywhere between three to seven years before one can make a definitive judgment on the economic performance of a cohort of firms that have participated in an incubator or accelerator.

These observations, above all, suggest that policy-makers and funding partners must not only be more vigilant in demanding transparent and systematic economic impact reporting by SAOs, but also more engaged when it comes to encouraging collaboration and fostering the adoption of best practices across the ecosystem. As a more robust body of evidence about economic outcomes accumulates, policy-makers and funding partners should also be prepared to be more selective in the funding they provide to BABIs in the years ahead, with funding going to entities that demonstrate a track record of sustained economic outcomes.

As a contribution to improving performance, our research highlights several areas where strategic and operational improvements in Canada's BABI networks would generate superior economic outcomes. Ranging from improvements in programming and performance measurement to more robust engagement with investors and coordinated supports for internationalization, this capstone report highlights the improvements that are most likely to set the stage for significant growth in the number of high-growth start-ups emanating from Canada.



# Why a World-Class Business Acceleration Ecosystem is Vital to Economic Performance

The concept of providing business assistance services to early stage companies in shared facilities first emerged in the United States in the 1950s and expanded through the 1980s as a response to perceived limitations in the prevailing economic development strategies that focused largely on industry attraction and large corporate expansions. As the potential economic value of investing in and supporting new businesses became increasingly apparent to policy-makers, communities around the world developed business incubation programs to support the growth of new ventures. Business accelerators, in contrast, are more recent incarnations, the origins of which can be traced to the creation of now globally renowned entities such as Y Combinator and TechStars. While incubators have been largely tied to universities and local economic development agencies, the early accelerators were founded by venture capitalists (VCs) who took small equity stakes in high-potential firms and ran them through a structured, time-limited process that would quickly differentiate winning ideas and teams from the rest. Like incubators, the accelerator models pioneered in the US—particularly in the San Francisco Bay area and Boulder, Colorado—have since been replicated in jurisdictions around the world.

Across both models, the impact of these support organizations can be measured by the growth in the number of would-be entrepreneurs, as well as growth in the number of start-ups in high-value sectors.

However, while laudable, this activity is insufficient to drive the economic value creation and subsequent employment growth required in jurisdictions such as Canada. In this context, policy initiatives implemented across levels of government should not be limited to the incubation and acceleration of start-ups, but rather must expand to include a stronger focus on developing the next generation of high-growth firms that will drive economic and employment growth.

The Organisation for Economic Co-operation and Development (OECD) defines such high-growth firms as those with average annualized growth (revenue or employment) of greater than 20% per year for a minimum three-year period, having begun with a minimum of 10 employees (Petersen and Ahmad 2007). And on the development of such firms, as Table 2 below highlights, Canada ranks in the middle of the pack, far behind its US and UK peers. To be sure, data lags the development of programs and initiatives, as reviewed in Part III of this project. So, while this data is not necessarily indicative of the success or failure of Canada's domestic support programs, it does highlight the relative inadequacy of the foundations upon which they build and the not insignificant deficit Canada faces on this key metric of economic performance.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Note that data for Germany and Australia are not available. Sources: Industry Canada; Swedish Ministry of Enterprise, Energy and Communication; OECD 2012 (Israel).



Table 2: RATE OF HIGH-GROWTH FIRMS (employment growth)		
Jurisdiction	Percentage of High-Growth Firms	
Canada	4.7%	
Israel	4.3%	
Sweden	4.0%	
United Kingdom	6.4%	
United States	5.9%	

Despite their small share of the total population of firms, the importance of this demographic of firms cannot be underestimated, given that they contribute upwards of 50% of net employment growth in similarly mature economies. A subsequent focus on better enabling start-ups to scale into these high-growth firms is quickly taking hold across jurisdictions. In 2015, a commission established by the United Kingdom's Digital Economy Council published the Scale-Up Report on UK Economic Growth (Coutu 2015). The report urges a significant redeployment and increase of resources towards scale-ups, as opposed to just start-ups. This focus on more mature, high-potential firms is congruent with the findings presented in both Parts III and IV of this project, and is particularly visible among leading business accelerators and incubators seeking to satisfy both the demands of their funding partners and investors and their own internal drive to achieve long-term financial sustainability.

# An Action Plan for Fostering a World-Class Business Acceleration Ecosystem in Canada

The question remains, however, as to how best to support and amplify the role that BABIs play in facilitating the development of high-growth firms that will succeed on the global stage. In doing so, the more effective and efficient development of such firms will help meet a number of the key economic priorities listed earlier by creating jobs, commercializing innovation and advanced research, expanding trade, and helping to diversify the sources of growth in Canada's economy.

Across all of the research conducted for this project, several key themes emerge consistently as requiring attention. We have identified six priority areas for immediate action that will be critical to better serve Canada's start-up community:



- 1. Focus on high-potential firms and scaling up.
- 2. Improve performance measurement and data collection.
- 3. Better engage corporate Canada.
- 4. Create an executive mentorship network for high-potential firms.
- 5. Upgrade internationalization programming.
- 6. Develop a formalized investor engagement model.

This capstone reports reviews each of these in turn. The analysis provided here is meant to jumpstart the conversation about how a variety of stakeholders can help transform and upgrade Canada's BABI system. For more in-depth analyses of both the Canadian and international accelerator and incubator ecosystems, the library of reports that accompany this project should be consulted.

#### Focus on High-Potential Firms and Scaling Up

While a broad focus on entrepreneurship is necessary to stimulate the development of a growing funnel of entrepreneurs and companies, it is increasingly clear that greater attention and resources must be devoted to firms possessing a high potential for growth. As shown in Parts III and IV of this project, leading accelerators and jurisdictions are increasingly focused on "the art of scale," and are exploring ways to better identify and channel support towards a select subset of high-potential firms. While this raises questions about what resources will remain for broader entrepreneurial support initiatives, these targeted efforts offer a far more direct path to achieving long-run economic growth.

Such efforts will benefit from increased specialization among accelerator and incubator organizations. While the majority of both international and Canadian BABIs remain sector agnostic or broadly positioned in the area of information and communications technology (ICT), leading accelerators are increasingly moving to support specific sectors. This heightened specificity allows for more focused and appropriate mentorship and programming, and ultimately facilitates the development of more robust supply chain and investor connections. Moreover, specialization allows jurisdictions and regions to more adeptly build upon domestic comparative advantages, notably those related to energy, education, or targeted towards specific demographic populations.

As organizations segment themselves by stage or sector, building robust relationships and networks across organizations will become increasingly critical. In particular, creating links and partnerships between organizations that deal primarily with early stage companies or longer-term incubation efforts, and organizations that offer short-term acceleration services focused on later stage companies will become a necessary component of a more finely tuned ecosystem that provides specialized support services for firms throughout the various stages



of their development. Building strong network partnerships is thus a requisite first step towards the establishment of a collaborative pipeline that allows specialized entities to focus on specific stages of firm growth and/ or regional or sector-specific assets, while at the same time ensuring that organizations are not penalized by a lack of brand or less intense mentorship capabilities across these various areas of specialization.

Enabling the evolution of the system towards a collaborative network model will require the development of a dynamic and user-friendly ecosystem map that displays BABI facilities across Canada, including key characteristics and program offerings. This product will offer significant value to firms seeking support, as well as to existing organizations seeking to build complementary partnerships and to those seeking to direct firms to appropriate support organizations. Given the rapidly changing landscape of BABIs in Canada, this product should be an open platform that allows stakeholders from across the ecosystem to contribute data.

Part and parcel with this need for specialization is a greater willingness to "cull" or divert firms that show less potential. The University of Toronto's Creative Destruction Lab's (CDL's) monthly competition, for example, facilitates the gradual concentration of resources on a small cohort of high-potential firms. In just 36 months, CDL has attracted over \$180 million in equity value creation. Their success in attracting follow-on funding will not necessarily be replicable, but is nonetheless a model to emulate among organizations dealing with more mature firms.<sup>2</sup> Others interesting models include the Communitech Rev program focused on revenue generation for later stage start-ups, and Execution Labs' "finishing school" model. In addition, a greater focus on scaling up requires the introduction of more formal alumni services to ensure both ongoing support for former accelerator and incubator participant firms and to engage them more actively in the mentorship and support of current cohorts.

While a focus on high-growth firms within accelerators and incubators is a necessary next step, so too is the development of a nationwide focus on cultivating a new generation of corporate champions. The Future Fifty program, administered by Tech City UK, provides an instructive template. Developed in 2013 and funded by the UK government's Department for Business, Innovation and Skills, the Future Fifty program provides 50 of the country's highest growth potential firms with customized programming and networking opportunities designed to help them scale. In order to be eligible, firms must classify as high-growth firms using the OECD definition of average annualized growth (revenue or employment) of greater than 20% per year for a minimum three-year period. Participants are chosen by a 17-member independent advisory panel of industry experts, investors, and successful entrepreneurs. The program, which acts as a nationwide high-growth accelerator, is one that Canadian accelerator and incubator stakeholders should endeavour to develop immediately. Such a program could be positioned as a logical extension of the existing Canadian Accelerator and Incubator Program (CAIP), administered by the National Research Council. CAIP's funding agreements with 15 accelerators and incubators across Canada could be broadened to include a hosting agreement for the organization that produces the best outcomes over a two- to three-year period. This hosting would focus on programming, mentorship, and supply chain development for Canada's top 50.

<sup>&</sup>lt;sup>2</sup> For a full analysis of Canadian BABIs, see the DEEP Centre's report, Accelerating Canada's Start-Up Ecosystem: A Review of Canadian Business Accelerators and Business Incubators, published as Part III of this project.



#### Improve Performance Management and Data Collection

Going forward, data transparency and reporting by Canadian business incubators and accelerators is one area where significant improvement is required. Currently, determining the impact of these organizations and the subsequent return on public investments is rendered difficult—and, in some cases, nearly impossible—given the paucity of data released by these predominantly publicly funded bodies. Moreover, the lack of standardized definitions for job creation, firm survival rates, and other activity and outcome metrics make comparisons across Canada's network of accelerators and incubators both cumbersome and unreliable.

While competition for resources and investment drives some organizations to eschew robust data reporting, the de facto standard should be to publish annual reports that conform to a Canada-wide performance measurement standard for business incubators and accelerators. Standardized annual reporting would better inform firms in their search for support, provide the required transparency for public and private funders to allocate resource efficiently, and allow BABIs themselves to benchmark their own performance against their peers. SAOs would also be able to showcase their areas of comparative strength—be it by sector, stage, or connections—which could help facilitate collaboration. Simultaneously, public data reporting will allow BABIs that are underperforming in particular areas to benchmark their performance against organizational leaders, thereby helping facilitate a process of learning and continuous improvement.

The lack of robust data reporting is not just a Canadian issue. Our international research highlights that reporting practices of the majority of BABIs are either inadequate or non-existent. However, two organizations in particular highlight a gold standard. Spain-based Wayra and US-based Techstars both provide a level of granularity in their public data reporting that puts them far ahead of other comparable organizations. In both cases, the organizations release data by cohort and even by company to show ongoing progress and impacts related to funding, job creation, and eventual transactions. Wayra's public dashboard, for example, features statistics on the number of applicants to its program, admission rates, number of supported start-ups, total follow-on funding, average amount of funding per company, and the total amount of funding that Wayra has invested in start-ups. Raw data on the start-ups accelerated by Wayra is also available for download in a spreadsheet that details each start-up's country of activity, investors, status, product, industry, and online profile. This is the bar that Canadian stakeholders should expect from SAOs.

The Canadian ecosystem is further complicated by its multiplicity of funders, and a subsequent proliferation of different demands for different data. This represents a significant strain on Canadian BABIs. Sweden offers a model for centralized performance management tracking that is designed to improve comparability and minimize the strain placed on participating organizations. Its focus on data collection, both quantitative and qualitative, provides an example of how data can be tracked and collected across publicly funded entities. While incubator funding is provided at multiple levels in Sweden, the quality of the Almi Analysis database's framework has allowed other levels of government to leverage the framework in their own evaluations. As a result, standardized national data collection allows Swedish incubators to easily generate analysis and reports to meet the require-



ments of funding partners at the sub-national level, and a number of local-level agencies across the country now coordinate their requirements with the national-level reporting structure.

The Almi Analysis database—while useful for funding agencies—has become a crucial tool for benchmarking, learning, and coordination among incubators themselves. Standardization, centralization, and data transparency allows individual organizations to use the tool to identify areas of success and where improvement is required relative to peer organizations, and helps BABI leaders' identify best practices and establish partnerships and innovative programs to help foster further improvements. Moreover, Swedish incubators and their funding partners continue to look for new and innovative models. As of 2015, plans are underway to incorporate peer assessment into incubator evaluation, in an effort to foster even greater learning and cooperation among the organizations. Finally, in addition to providing a basis for measuring the success of individual organizations and facilitating informed decisions with respect to funding, this data has allowed Swedish government agencies to publish annual reports assessing the broader health of the country's incubator ecosystem.<sup>3</sup>

While a number of leading entities are already moving ahead with their own efforts to publish both annual and historical data on the evolution of their participant firms, five steps could be taken to systematically improve performance reporting and data collection across Canada, and thereby improve the ability to identify which structures and processes are most likely to lead to successful outcomes, however defined.

- 1. Forge Agreement on Standardization. The first step is to convene federal, provincial, and industry stake-holders to forge agreement on a standardized reporting framework that establishes consistent definitions for job creation, firm survival rates, and other activity and outcome-related metrics. While the framework must be flexible enough to accommodate the diversity of programming models (including diversity in sector and growth stage focus) in Canada, such standardization is a prerequisite for enabling reliable data aggregation and comparison across the ecosystem. The DEEP Centre's detailed recommendations for a standardized reporting framework are outlined in Part I of the study: Evaluating Business Acceleration and Incubation in Canada.
- 2. **Pilot Standardized Reporting With a Small Number of Organizational Leaders.** Taking advantage of the leadership of a select number of BABIs would provide an opportunity to test and refine the framework with a smaller group before rolling out it on a national basis.
- 3. Centralize Collection and Reporting. To further streamline performance measurement, annual data collection and reporting could be centralized through a single online platform managed by a national association of accelerators and incubators. The creation of a single, shared platform for publicly reporting outcomes would further ease the reporting burden on SAOs and vastly improve the ability of policy-makers, researchers, investors, firms, and other stakeholders to access and interpret the data. The association would also assume responsibility for the ongoing governance and improvement of the reporting standard.

<sup>&</sup>lt;sup>3</sup> Past reports can be found at www.almi.se/Kunskapsbank/Dokument-mallar-och-verktyg/BIG-Sweden/.



- 4. Mandate Data Sharing Through Contractual Agreements. Adding these requirements into service contracts between accelerators and supported firms is necessary to improve the ability to collect longitudinal data across the various metrics identified in the measurement framework. Likewise, Canadian funding agencies should include granular reporting and public disclosure requirements in their contracts with BABIs, and these requirements should adhere to national standards described above.
- 5. Undertake Robust Statistical Analysis in Partnership With Statistics Canada. Sourcing authoritative firm-level data on employment, revenue growth, and profitability from Stats Canada would not only boost reliability, but also help avoid the problem of double or triple counting that can occur when firms receive support from multiple entities. In addition, creating a control group of non-incubated firms would enable evaluators more definitively estimate the differential in economic performance between firms that receive support and those that don't.

#### **Better Engage Corporate Canada**

Across other jurisdictions, large corporations are playing an increasingly significant role in accelerator and incubator ecosystems, to the extent that partnerships with accelerators are now seen as a staple in any well-rounded corporate innovation program. The same cannot yet be said of large firms in Canada, and the relative lack of participation extends more broadly to the role of corporate partners writ large in Canada's start-up ecosystem. While corporate partnerships are integral to the success of leading accelerators in other jurisdictions, especially the US, the lack of comparable involvement in Canada is an area that requires significant improvement.

As highlighted in Part IV of this project, the presence of an engaged and invested corporate community provides better supply chain access and mentorship for start-ups, and may lead to better outcomes related to innovation and growth for incumbent firms. In Canada, while several support organizations host large firms in their physical spaces—for example TD Canada Trust, Manulife, Canon, and Canadian Tire at Communitech in Waterloo, Ontario—the integration of these stakeholders into BABI programming remains limited. In only two cases did we see well-developed channel partner relationships. Both of these cases were in enterprise software related spheres. Expanding such relationships into other sector-specific areas is a necessary component of delivering the connectivity to customers and investors that start-ups need to scale their businesses. The development of corporate Canada's role in the BABI ecosystem will also help address issues related to funding and organizational sustainability among Canadian accelerators and incubators. Leading international comparators are aggressively seeking to build sustainable revenue streams that invariably involve more intense corporate engagement and sponsorship. A similar level of engagement in Canada, when combined with better performance measurement and increasing focus on directing resources to high-growth firms, could lessen the business acceleration ecosystem's reliance on public funding, while increasing overall resources available to these organizations and their client firms.



In addition, while engagement with existing accelerators and incubators is one avenue for corporate Canada, the establishment of stand-alone corporate accelerators is another. While a wide range of such organizations are found across industries in the US and Europe, we see a total lack of similar investments in Canada. Take for instance, the following international examples:

**In Food and Beverage:** The Chobani Food Incubator was launched in late 2014 in New York City with a budget of US\$2 million to fund a first cohort of up to 10 companies. Chobani will provide participants with test kitchens, office space, mentorship, and access to company staff and experts. Coca-Cola Founders offers a slightly different model insofar it funds individual entrepreneurs instead of companies. By engaging them in Coke's ecosystem, the company hopes to find solutions to its and other major problems. Launched in 2013, the initiative has spawned nine companies so far.

In Financial Services: In August 2014, Wells Fargo launched its acceleration program aimed at fintech start-ups. The first cohort of three companies received up to US\$500,000 in funding with the long-term goal of becoming part of the company's supply chain. A different model in the fintech space is the Barclays Escalator program. The 13-week accelerator program is run by TechStars in New York and London, and offers 10 spots at each location. Participants receive up to USD120,000 in funding in exchange for between 6%–10% equity. TechStars takes the equity stake in the companies and offers the programming, while Barclays provides mentors and access to data and technology.

In Manufacturing and Design: Nike offers 10 companies per year the chance to participate in its Fuel Lab accelerator. The company seeks out later stage start-ups likely able to launch a product to market thanks to the 12-week program. Nike takes a 3% equity stake in participant firms. In 2012, Volkswagen launched an accelerator out of Plug and Play in the Valley aimed at transferring technology from a variety of industries into automotive. Participants receive three months of space at Plug and Play, and access to Volkswagen mentors and expertise, as well as vehicles, to help dream up the next connected car.

In High-Tech and ICT: Microsoft Ventures operates a network of accelerators in seven cities around the world. Participant firms spend 3–6 months in-market, and benefit from Microsoft mentors and technology. The technology giant doesn't take an equity stake in participant firms, but does hope to see participant firms migrate to using the Microsoft platform. Other examples includes Qualcomm's Robotics accelerator and Orange Fab, a mobile computing accelerator program run by the French Telecom giant in San Francisco, Abidjan, Paris, Seoul, Taipei, Tel Aviv, Tokyo, and Warsaw.

Across these examples, the models, incentives, and motivations vary significantly. What's consistent, however, is corporate leadership in the facilitation of sector-specific entrepreneurship and firm growth.



Corporate Canada's venture capital presence is small compared to leading international examples. Only a handful of formal corporate venture funds are active in Canada, notably those headed by BlackBerry, Cenovus, Enbridge, Rogers, and Telus. New entrants, such as the Open Text Enterprise Venture Fund, which Waterloo-based Open Text spearheaded with a CAD\$20 million contribution, are promising but lack scale compared to US initiatives. Analysis by CB Insights shows 104 active US corporate ventures funds in 2014, up from just 10 in 2010. These corporate venture funds participated in 656 deals, totalling US\$12.31 billion in 2014. And they invested in 18% of all US venture capital deals (over 3,600 of them in total). Broken down by sector, these investments include US\$2.6 billion in 119 mobile/telecom deals and US\$2 billion into 104 health care deals.

To be sure, there are green shoots of corporate activity with start-ups in Canada. For example, Power Financial recently invested \$10 million (with an option for an additional \$20 million) into WealthSimple. Magna invested in connected car start-up Zubie. BCE invested \$5 million into Hubub. And others like Suncor have invested through third-party funds, such as Emerald Technology Ventures or GlaskoSmith Kline, through their Life Sciences Innovation Fund. As well, companies including BMO Financial Group, Canadian Imperial Bank of Commerce, National Bank of Canada, RBC Royal Bank of Canada, Scotiabank, TD Bank Group, Manulife, and OpenText Corporation have each invested into the Northleaf Venture Catalyst Fund (NVCF). NVCF is the first fund-of-funds to be established under the Government of Canada's Venture Capital Action Plan. Individual corporate contributions were maxed at \$50 million per corporate contributor.

Nevertheless, the aggregate of this activity still pales in comparison to what is seen in the US, and likely contributes to the lack of deal flow and transaction activity in Canada. Given the lack of action so far, three actions are warranted:

- 1. An effort should be made to educate corporate decision makers about the value of greater engagement with domestic accelerators and incubators and the start-up ecosystem more broadly. Such an effort could promote the international best practices highlighted above and offer greater insight into the diversity of entrepreneurial activities taking place across Canada, with a focus on matching large firms to clusters of activity that are relevant to business. Chambers of Commerce and associations such as the Canadian Council of Chief Executives have a key role to play in this area.
- 2. Canadian BABIs should be more thoughtful and aggressive in structuring and marketing partnership opportunities for corporate Canada. Hubs such as Communitech and MaRS have led the way in this regard. MaRS, for example, now offers large corporations customized programming and curated access to its network of supported firms for an annual fee of \$200,000. More BABIs should follow its lead.
- 3. The development of incentives (for example, venture capital tax credits) to catalyze more corporate venture capital activity is also worth considering. Providing Canada's large corporations with a greater stake in the game—and the eventual returns—could create incentives for better start-up and SME access to large company supply chains, mentorship, and ultimately financing.



#### Create an Executive Mentorship Network for High-Potential Firms

While mentors and mentorship programs are a standard deliverable for all BABIs, the quality of associated mentors varies significantly. Across our research, we repeatedly heard that the Canadian ecosystem lacks entrepreneurs and business leaders with the experience of having grown billion-dollar technology companies. Evidently, given the paucity of Canadian tech giants, this is likely true to some extent. However, there does exist a large number of individuals with related, high-level experience. This experience should be tapped in a more formal, coordinated fashion through a network of high-level mentors that could be of service to high growth potential firms in Canada, and particularly those participating in a Future Fifty-like program, as recommended in the previous section.

Two models are worth exploring. The QG100 was established in 2010 as a private network of Quebec-based CEOs. The group operates as a private, non-profit group that gathers 100 of Quebec's most influential corporate leaders to help support "the development of global leaders and promote the sustainability of their position in the context of international competition" (QG100 2015).

Access to the group is limited to CEOs who oversee companies with the following characteristics: it has been in business for a minimum of five years, is profitable, and its strategic and operational decisions are made in Quebec; its annual revenues exceed \$25 million (depending on the industry) and the company demonstrates a sustained growth; and its number of employees exceeds 150 (depending on the industry).

Touted as a "24/7 personal GPS" for CEOs, the network holds quarterly meetings and an annual summit in addition to online knowledge exchange platforms. The rapid expansion of Quebec-based companies in international markets over the past five years, notably through aggressive acquisition strategies, has been identified as one of the benefits of this grouping of high-level corporate leaders (Dubuc 2012).

Also established in 2010, the C100 represents a grouping of Silicon Valley entrepreneurs and corporate leaders who hail from Canada. The group aims "to support the next generation of Canadian entrepreneurs and help build the next billion dollar Canadian tech company" (C100 2015). Through a regular series of events, the network provides mentorship and connections to sources of investment and supply chains. The group's flagship program is "48 Hours in the Valley," which brings a select group of Canadian start-ups to Silicon Valley for a series of mentor meetings, workshops, investor meetings, and strategic partner visits. The model was recently adopted by the Canadian technology community in the United Kingdom through the creation of the London-based C100UK.

Building a formal mentorship network for both high growth potential firms and the executives who have succeeded on these paths previously should be a top priority. This network would facilitate the exchange of best practice and lessons learned, as well as act as a conduit for supply chain introductions and investment. Unlike



conventional alumni programs, where participation is tied to one's affiliation with a given program or entity, participants in a pan-Canadian executive mentorship network should be selected on the basis of clearly defined merit-based criteria, as in the QC100. While the prioritization of some start-up leaders over others will ruffle feathers, this network should not have a static membership. Rather, 12- to 18-month terms will ensure the development of a significant number of high-potential founders and teams.

#### **Upgrade Internationalization Programming**

To achieve higher rates of growth and success, Canadian start-up firms require greater exposure to international markets than is currently provided through most BABI programs. While some accelerators provide their participants with organized tours to key markets in Silicon Valley, Boston, or New York, this is by no means the norm. Moreover, existing soft landing programs run by the Canadian Digital Media Network and the Canadian Technology Accelerator (CTA) initiative (run by DFATD's Trade Commissioner Service) are most appropriate for later stage start-ups and SMEs.

Thus, a gap exists for a significant number of firms who fall between the cracks of these existing initiatives. This gap calls for the development of strong internationalization programming for BABI participants, as well as for alumni who have graduated from a BABI but are not yet mature enough for existing CTA and CTA-like programming. Increasing international exposure opportunities for appropriately selected BABI participants will help participating firms build their understanding of potential markets and, in particular, help them to develop a better understanding of the demand dynamics in those markets in a way that can help structure future business development strategies. Developing the capacity to provide early exposure to international markets would hasten the ability of Canadian start-ups to begin exporting their products and services. It would also help build a more robust pipeline of export-ready firms that have both the appetite and capacity to enter new overseas markets and take more intensive internationalization programs like the CTA initiative.

While the benefits of internationalization are well understood among leading accelerators in Canada, the operationalization of this understanding is limited. Only a handful of Canadian accelerators have built international exposure into their accelerator programs. Internationally, leading models show that this is being accomplished through field trip style programming, partnerships, franchises, and participant exchanges. For example, with the help of a team of Israeli mentors and judges, MassChallenge (a leading US-based accelerator) identifies the highest-potential start-ups in Israel to relocate to its Boston-based headquarters for the four-month program. Meanwhile, through a partnership with the Israel Institute of Technology (or Technion), Flashpoint (a university-based accelerator in Atlanta) not only recruits Israeli firms to come to Georgia Tech, but also sends its participants to Technion to spend a month in Israel. In addition, European accelerators such as Seedcamp, Startupbootcamp, and Rockstart recognize the importance of tapping the US market as a source of customers and investment. In fact, European start-ups typically prioritize gaining traction in the US before seeking to tackle the whole of the European market with its patchwork of national regulations and languages. Start-ups participating in the



Amsterdam-based Rockstart Accelerator are given the opportunity to join three-week international programs that take place twice a year, in which start-ups visit hubs in New York and San Francisco. Eleven, based in Sofia, Bulgaria, runs its companies through a traditional three-month program and then, in the year following, organizes trips to London, Berlin, and Silicon Valley, during which companies pitch to investors and meet with potential clients and partners. Recognizing the obvious limits to scaling in the domestic Bulgarian market, this phase of the program provides firms with fast exposure to international markets.

Following some of the best practices deployed by international leaders, internationalization programming in Canada could be structured into two complementary streams.

- Internationalization Curriculum: One clear finding from the review of the CTA initiative was the need for domestic accelerators and SAOs to become much more engaged in developing export-ready firms. Among other things, this might include the development of a shared export-readiness curriculum that better prepares BABI graduates to identify and exploit international opportunities. Such a curriculum could be developed and delivered in concert with key stakeholders such as the Business Development Bank of Canada (BDC), Export Development Canada, the Industrial Research Assistance Program (IRAP), provincial and regional economic development agencies, as well as industry associations. A robust export-readiness curriculum would guide firms through the process of conducting international market research and provide guidance on tax, HR, and legal implications of operating abroad. Most importantly, it should ensure that Canadian entrepreneurs are highly strategic in selecting the specific markets, sub-sectors, and opportunities most likely to advance their company's growth. As one interviewee put it: "Closing the gap in market insight through programming offered in Canada within the domestic accelerator network would help ensure that companies are not blindly or reactively chasing internationalization opportunities, but are doing so with very clear criteria."
- Short-Term In-Market Experiences: Well-honed strategies and market insights developed through in-market experience are also necessary. Increased international exposure could be accomplished through a variety of programs that offer short-term in-market experiences geared to the needs and capabilities of early stage start-ups. The organized field trips and in-market boot camps common among leading European accelerators would work well for Canadian start-ups seeking to establish connections in the Europe and the United States. Meaningful trips to the US could be organized for as little as 48 hours, if the programming was well structured, while trips to key European hubs might require a week or more. Likewise, the expansion of international exchange partnerships, like those developed by MassChallenge and Flashpoint, within Canada would increase the two-way flow of domestic and international firms between partner organizations. Such exchange programs would bring high-potential firms to Canada, while also providing soft landing opportunities for Canadian firms looking for a longer-term engagement in promising overseas markets.



A significant additional benefit of improved international programming—both inbound and outbound—relates to the development of executive and managerial talent that accrues across the ecosystem. The greater the exposure to international markets for the validation of technologies and ideas, the greater the development of key managerial skills and aptitudes. Across Canada, the need for this skill set is pronounced, especially among high-tech firms. Encouraging the development of internationalization programmes across Canadian BABIs will not only accelerate the development of export-ready firms, it will also promote the development of a managerial and executive class with the capabilities to compete and prosper in international markets.

#### **Develop a Formalized Investor Engagement Model**

Opinions are mixed on whether Canadian entrepreneurs lack access to capital. A majority of interviewees indicated that good ideas rarely have trouble finding money, either in Canada or in the US, and that the complaints about a lack of capital come mainly from firms and BABIs that simply aren't good enough. On the other hand, numerous interviewees argued that Canada hosts a small pool of overly cautious investors and that the lack of serious VC money to scale companies—including the capital required to fund aggressive, acquisition-driven growth strategies—is a systemic disadvantage for the Canadian ecosystem. Participants tended to agree, however, that there is funding gap in the \$200,000 to \$500,000 range, including for ICT firms. While proven companies have been able to attract adequate seed and Series A financing, both public and private accelerators argued that the Canadian investment community doesn't have the risk tolerance or portfolio size required to support small investments in early stage companies.

Indeed, if there is one fundamental difference between the Canadian BABI ecosystem and that of the United States, it's the engagement and presence of venture capital and angel investors. Angel investors, in particular, play an outsized role in the US entrepreneurship ecosystem. As Y Combinator founder Paul Graham writes: "Startup funding doesn't only come from VC firms. A more important source, because it's more personal and comes earlier in the process, is money from individual angel investors. Google might never have got to the point where they could raise millions from VC funds if they hadn't first raised a hundred thousand from Andy Bechtolsheim. And he could help them because he was one of the founders of Sun [Microsystems]. This pattern is repeated constantly in startup hubs. It's this pattern that makes them startup hubs" (Graham 2006).

In Canada, angel investment could serve as a valuable source of seed capital and potentially occupy some of the space that institutional investors have vacated. However, several interviewees described the Canadian angel investor community as relatively immature and lamented the lack of coordination between individual investors who frequently bring highly variable expectations about how to structure investments deals. "Angel groups tend to present as monolithic," noted one interviewee, "but you realize it is actually clumps of individuals with no common way to structure the relationship of the company with those individuals." Another interviewee argued that the angel scene in Canada is undervalued and more effort should be made to engage them, given that angel investors bring both money and entrepreneurial experience.



Doing so would help address shortfalls in the availability of follow-on funding, in particular as it relates to specific sectors, regions, and stages of growth. At the sectoral level, organizations serving sectors such as agritech and biotech note the absence of coordinated sources of capital, be it public, venture, or angel. These gaps overlap in some cases with regional funding challenges, in particular in Atlantic Canada. The small size of graduating cohorts and an overall lack of deal flow in the region make it difficult to capture the attention of VCs and angel investors.

One means of increasing the role played by investors would be for BABIs to develop a formalized BABI engagement model that places VC partners at the table for cohort participant selection. This engagement would provide BABIs with an additional level of external validation of their cohort choices, and would help better integrate VC partners into the BABI ecosystem. While there will evidently be competition among VC groups for engagement with specific BABIs, the development of rotational schedules—preferably coordinated centrally through a facilitating organization, such as the Canadian Association of Business Incubators—could ensure equal representation.

Along with this, more must be done to enhance existing angel investment networks. Efforts should be focused on boosting levels of investment from wealthy Canadians and bringing some degree of standardization/consistency to deal making between angels and firms seeking investment. Angels remain an underutilized source of investment and entrepreneurial expertise. Their increased participation, especially in non-ICT sectors, would provide significant stimulus to BABIs and associated entrepreneurs.

Ultimately, an increased number of successful exits would be a game changer for Canada. Despite an acknowledgement of the general presence of sufficient capital in Canada, there is a clear desire across the sample for more deal flow and, in particular, more successful exits. As one stakeholder noted, "we need more exits—even small exits—as exits completely change the system and change the culture of both investment and entrepreneurialism." Addressing this will require significant increases in the size, scale, and activity of Canada's VC, angel, and corporate investment community.



#### Conclusion

Stimulating entrepreneurship and high-growth firm development is part and parcel of the Silicon Valley Consensus that frames much of the world's economic development agenda. This consensus builds on the understanding that innovation economy jobs—notably in the technology sector—have a significant multiplier effect and support up to five jobs elsewhere in the economy. As Enrico Moretti, author of The New Geography of Jobs and professor at the University of California, writes "the halo effects are large because sectors like the digital economy are labour-intensive, well-paid, and tend to cluster—amplifying the benefits for those cities with clusters of innovation jobs."

For Canada to promote its future economic prosperity through the further development of high-tech jobs, firms, and clusters, its networks of business incubators and accelerators will need to play an increasingly important role. While further testing remains necessary, existing data points to considerable benefits stemming from the current activities of Canadian BABIs, most notably the attraction of over \$1.7 billion in follow-on funding and creation of over 10,000 jobs. At the same time, assessing the overall performance of Canada's innovation support ecosystem remains difficult, owing largely to significant gaps in data collection and performance measurement.

More broadly, Canada's continued underperformance on the creation of high-growth firms and limited transactional activity within its start-up community speaks to real weaknesses in the entrepreneurial support ecosystem. On the basis of our analysis of the Canadian domestic accelerator and incubator landscape, as well as leading international comparators, this report highlights six areas of BABI activity that require immediate attention. Responsibility for these changes does not fall on any one actor. Rather, they encompass actions that must be taken by BABI leadership and the public decision makers who fund them, as well as the corporate and private investors who engage with them.

The six areas for improvement highlighted in this report are certainly not the only issues that need to be addressed. Others concerns relate to a short supply of credible mentors and the coordination of goals and funding across funding agencies. In both of these latter cases, however, the route to solving them is more long term in nature. In the short term, a focus on scaling up high-potential firms, performance management, engaging incumbent large firms, a stronger focus on internationalization, and a more structured engagement of investors are key to buttressing the foundations of Canada's innovation and entrepreneurship ecosystem.

Each actionable area is interrelated. More transparent data will lead to more refined capacity to target high-growth firms; more international exposure will help build the management talent that is required to scale start-ups into globally competitive firms; and better engagement with corporate Canada and both VC and angel investors will unleash the capital and transaction activity required to help those firms scale.



Managing these interdependencies to help firms scale will be key: without a focus on these remaining challenges, the Canadian start-up ecosystem will be unable to exploit the tremendous entrepreneurial activity that accelerators and incubators have helped to create. While entrepreneurship in and of itself is a valuable activity—especially so, given prevailing labour market trends—it remains an intermediate step towards the ultimate goal of creating sustainable high-growth firms that can drive economic and employment growth. For Canada to become a leading tech nation, and for Canadians to enjoy the prosperity that can accompany it, accelerators and incubators must transition away from just starting companies and focus on helping high growth potential companies to grow, scale, and become the significant employers of tomorrow.

#### **Summary of Recommendations**

#### **Focus on Scaling of High-Potential Firms**

- 1. Build strong network partnerships among existing organizations, with a particular focus on linkage and partnerships between organizations dealing with early and later stage companies.
- 2. Develop and maintain a dynamic, open platform, and user-friendly ecosystem map that provides information on business support services available across Canada. The map should provide key organizational details and characteristics of program offerings useful to start-ups, support organizations, and funding bodies.
- 3. Encourage greater adoption within the BABI ecosystem of innovative models focused on identifying and supporting high growth potential firms.
- 4. Introduce more formal alumni services in existing BABIs to help better engage and support alumni and participant firms.
- 5. Move to develop a nation-wide growth accelerator focused on creating the next generation of corporate champions in Canada, modelled on the United Kingdom's Future Fifty program.

# Improve Performance Management and Data Collection

- 6. Convene federal, provincial, and industry stakeholders to forge an agreement on a standardized data reporting framework to establish consistent definitions on job creation, firm survival rates, and other activity-related metrics for BABIs.
- 7. Pilot a standardized reporting structure with a small number of organizational leaders within the BABI ecosystem to test and refine the framework prior to implementation on a national basis.
- 8. Centralize data collection and reporting through a single online platform managed by a national association of accelerators and incubators.



- 9. Mandate standardized data sharing between BABIs and participant firms, as well as between BABIs and government funding agencies, through contractual agreements.
- 10. Undertake a robust statistical analysis in partnership with Statistics Canada.

#### **Better Engage Corporate Canada**

- 11. Existing stakeholders should undertake outreach to educate corporate decision makers about the value of greater engagement with domestic accelerators and incubators and with the start-up ecosystem more broadly.
- 12. Canadian BABIs should work to enhance the creation, delivery, and marketing of customized programming and partnerships with corporate Canada.
- 13. Consider developing further incentives to catalyze more venture capital activity.

#### Create an Executive Mentorship Network for High-Potential Firms

14. Build a formal mentorship network for both high growth potential firms and executives with experience in growing and scaling high-potential companies to facilitate the exchange of best practices, supply chain introductions, and investment.

# **Upgrade Internationalization Programming**

- 15. Develop a shared export-readiness curriculum to be delivered by domestic BABIs to help prepare graduates to identify and exploit potential international opportunities. Such a curriculum could be developed and delivered in concert with key stakeholders such as BDC, IRAP, provincial and regional economic development agencies, and industry associations.
- 16. Develop programs that offer short-term in-market experiences geared to the needs of early stage start-ups.

## **Develop a Formalized Investor Engagement Model**

- 17. Canadian BABIs should consider developing a formalized engagement model that encourages greater involvement from VC partners in cohort participant selection, in order to help better integrate VC partners into the BABI ecosystem.
- 18. Work to enhance existing angel investment networks through a focus on boosting levels of investment from wealthy Canadians and encouraging a degree of standardization and consistency in deal making between angels and firms.



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